



Have You Heard the News? The Effects of Exposure to News About Recent Transgender Legislation on Transgender Youth and Young Adults

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Abstract

Introduction Over the last 3 years, there has been a proliferation of legislation aimed at restricting the rights of transgender Americans, including their access to gender-affirming health care. While the health implications of not having access to gender-affirming care are well documented, there may be additional indirect harms associated with proposing this type of legislation, such as those associated with being exposed to negative messages about transgender people or having to contend with friends and family who support the legislation.

Methods This study was conducted between September and November 2021 and used a mixed-methods design to examine the implications of consuming news related to the recently proposed legislation as well as perceiving that people in one's social network support such legislation on the health and well-being of transgender youth and young adults ($n = 113$).

Results Results showed that news consumption was associated with increased rumination and physical health symptoms and that perceived support for the legislation was associated with greater rumination, depressive symptoms, physical health symptoms, and fear of disclosing one's identity. Themes from the open-ended questions further underscored that the current legislation has impacted transgender youth and young adults' access to general health care; increased experiences of discrimination and other maltreatment; and resulted in some respondents engaging in unhealthy coping responses.

Conclusions and Policy Implications Policy makers should consider these adverse consequences when responding to current, and crafting future, legislation directed at transgender Americans.

Keywords Transgender · Legislation · Gender-affirming care · Health care policy · Well-being

The last 3 years have borne witness to a string of proposed and ratified legislation aiming to restrict the rights of transgender people in the United States. Indeed, 2021 was a record-breaking year for proposed legislation that restricted the rights of LGBTQIA+ Americans, with a total of 191 bills being proposed. That number was surpassed in 2022 during which time 315 such bills were proposed, and the first two months of 2023 have already seen the proposal of 350 anti-LGBTQIA+ bills (Human Rights Campaign, 2023; Laviertes & Ramos, 2022). These bills have been

heard in virtually every state and nearly half of the bills are specifically aimed at transgender Americans (American Civil Liberties Union, 2022). Moreover, this marks a substantial increase from previous years, as demonstrated by only 41 similar bills being introduced in 2018 (Laviertes & Ramos, 2022).

Though the content of the bills has varied, many have centered around access to gender-affirming care, or health care that helps align someone's body with their gender identity such as hormone replacement therapy or gender affirming surgeries. There has been notable backlash to this form of legislation from health care, psychological, and child welfare agencies given that access to gender-affirming care is integral in shaping the experiences and well-being of transgender people. In particular, gender-affirming care can alleviate feelings of gender dysphoria, which have broad implications for transgender individuals' well-being (Sevelius, 2013), and has been directly linked to improved mental health outcomes (Davis & Meier, 2014; Meier et al., 2011; Olson et al., 2016). The passage of legislation

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restricting access to gender-affirming care can therefore exacerbate the already pervasive health disparities observed between transgender and cisgender Americans (Reisner et al., 2014; Su et al., 2016; Thoma et al., 2019).

We argue, though, that the proposed legislation has the potential to harm transgender Americans outside of just the direct implications for accessing gender-affirming care. That is, we contend that proposing legislation targeting transgender American's health care rights can do ambient harm to the transgender community. Drawing on the literature on mega-threats, we conceptualize the legislation as a mega-threat, or a negative identity-related event that is widely publicized (Leigh & Melwani, 2019), and correspondingly argue that the legislation can have widespread adverse consequences for transgender Americans, even those who are not directly affected by the content of the legislation. More specifically, we focus on the effects of news exposure related to the legislation and perceptions that people in one's social network support the legislation on indicators of health and well-being among transgender youth and young adults.

In investigating these research questions, we make three contributions to the literature and to future policy efforts. First, the current study is the first to document the implications of the proposed legislation on transgender Americans. Current efforts to respond to the bills have primarily focused on the ramifications of limiting access to gender-affirming care and have not yet emphasized the additional harm that can be done by the bills. Yet, understanding the indirect harm of the bills is critical for comprehensively evaluating the potential risks of crafting and introducing policies of this kind. Second, the current study contributes to our understanding of the correlates of health inequities based on gender identity. By focusing on state- and national-level stressors, we broaden the scope of what might drive such inequities and draw attention to the importance of also considering more macro-level stressors. Finally, this study also builds on the growing body of literature recognizing the implications of news coverage of important watershed moments. In the following sections, we begin by elaborating on the currently proposed legislation regarding gender-affirming care and then leverage theorizing on mega-threats to explicate how the legislation might impact transgender youth and young adults.

Legislation on Gender-Affirming Care

One area of focus among the many recent bills seeking to limit the rights of LGBTQIA+ Americans has been access to medical care or, more specifically, access to gender-affirming care. Gender-affirming care is a term used to describe medical care that is specific to one's gender identity and this can include puberty suppression, hormone therapy,

gender affirming surgeries, and access to mental health treatment, among others (Kimberly et al., 2018). As of the end of 2022, there were 39 bills targeting gender-affirming care introduced in 20 states, with most seeking to restrict or prohibit access to gender-affirming care among transgender youth (Freedom for All Americans, 2022). As one notable example, the Idaho House passed a bill in March 2022 that would make providing gender-affirming care to transgender youth a felony punishable by life in prison (Russell, 2022). Governor Greg Abbott similarly issued a directive in Texas in February 2022 that would categorize gender-affirming care as child abuse (Goodman, 2022). Some bills go beyond just limiting access to gender-affirming care and would also require teachers to inform parents if a minor expressed they may be transgender (House Bill 454, Ohio).

The primary impetus for bills such as those described above is the belief that gender-affirming care can have negative effects on the well-being and development of transgender adolescents. Proponents of the bills suggest that gender identity may not be fully formed at that age and that undergoing treatment to affirm one's gender identity may result in harm, particularly for treatments that have long-lasting effects (See Alabama Senate Bill 184 (2022); Arizona Senate Bill, 1138 (2022); Ohio House Bill 454 (2022), for examples). However, opponents have been quick to mobilize in response to the bills, arguing that transgender youth are being targeted because of discriminatory views of transgender people (e.g., Kraschel et al., 2022; Wyckoff, 2022). They further note that the bills do not comport with the World Professional Association for Transgender Health's (2012) standards of care guidance, which states that adolescents should be provided with gender-affirming care to minimize their experience of gender dysphoria. Finally, in contrast to the concerns that undergird the proposed restrictions on gender-affirming care, recent research demonstrates that the overwhelming majority of youth who transition continue to identify with their transgender identity 5 years later (Olson et al., 2022), demonstrating a consistency and knowledge of gender identity amongst transgender youth.

Empirical evidence also underscores the importance of access to gender-affirming care for the health and well-being of transgender youth, with access to gender-affirming care being linked to lowered gender dysphoria and improved mental health (Davis & Meier, 2014; de Vries et al., 2014; Meier et al., 2011). Indeed, transgender people who have undergone hormone replacement therapy report lower depression, anxiety, and stress, and also report a higher quality of life and greater social support as compared to transgender people who have not had access to such treatment (Meier et al., 2011). Similarly, gender-affirming care has also been linked to improved body satisfaction among transgender youth (Kuper et al., 2020). Finally, undergoing

gender-affirming care was also found to reduce the risk of depression and suicidality among transgender and non-binary youth (Tordoff et al., 2022). We have further seen ample testimony from transgender youth and transgender rights advocates that restricting access to gender-affirming care will be accompanied by an increase in suicidality among those affected (Goodman, 2022). This outcome is particularly important given the evidence showing that as many as 85% of transgender adolescents experience suicidal ideation and that transgender youth are at a substantially greater risk for attempting suicide than their cisgender counterparts (Thoma et al., 2019).

What is clear from this evidence is that restricting access to gender-affirming care among transgender youth has the potential to compromise their health and well-being and exacerbate extant health inequities. However, we argue that the uptick in legislation being proposed to restrict access to gender-affirming care may have additional harmful effects for transgender youth and young adults. To elaborate, in this paper we contend that there may not only be direct harm done by the bills in terms of their impact on accessing much needed health care, but that the bills can also do ambient or indirect harm spurred by the state- and national-level attention garnered by the legislation. Exposure to news coverage of the legislation and knowing that socially relevant others support the legislation may serve as important stressors that can invoke increased distress, health symptoms, fear, identity concealment, and other negative outcomes among transgender youth and young adults, even if the legislation is not successful. To elaborate on this point, we next turn our attention to how the bills may cause indirect harm to transgender youth and young adults.

Legislation as a Mega-threat

We draw on recent conceptual work on mega-threats to explicate how the proposed legislation seeking to restrict access to gender-affirming care can result in indirect harm to transgender youth and young adults. Mega-threats are defined as “negative, large-scale, diversity-related episodes that receive significant media attention” (Leigh & Melwani, 2019, p. 564). As such, mega-threats include events that are not personally experienced but that enter into national conversations and still impact people who share the identity that is targeted in the initial event. As some examples, mega-threats observed in the United States include highly publicized instances of Black Americans being killed by law enforcement (Bor et al., 2018), episodes of violence and discrimination targeting Asian Americans during the COVID-19 pandemic (Cheah et al., 2020), and efforts to ban same-sex marriage (Maisel & Fingerhut, 2011).

As Leigh and Melwani (2019) argue, exposure to mega-threats can impact people in a variety of ways, including altering their emotions, cognitions, and interactions with others. More specifically, they posit that exposure to mega-threats can increase negative emotions and cognitive rumination which can, in turn, yield downstream consequences. Moreover, they also argue these effects will be more pronounced among people who more strongly identify with the group(s) targeted by the mega-threat. Leveraging this theory, we therefore conceptualize the recent legislation targeting transgender Americans as a mega-threat and propose that exposure to this threat through news coverage will increase negative emotions and cognitive rumination as well as psychological and physical health symptoms among transgender youth and young adults. We also posit that the legislation will increase fears of disclosing one’s identity as a transgender person by signaling that there is widespread hostility toward transgender people and that by disclosing, one may be more vulnerable to experiencing that hostility. Importantly, we expect these negative impacts to reach all transgender youth and young adults, including those who do not reside within states that proposed or passed restrictive legislation. This is because mega-threats broadly signal a rejection of one’s social identity that can cause harm outside of the threat posed by the legislation itself. Finally, we measure exposure to the mega-threat posed by the recent legislation by asking participants about their news consumption related to the legislation as well as the degree to which people in their social network support the legislation. These measures were chosen because they capture the extent to which participants have engaged with the legislation or how threatening it might be to them personally due to their social network agreeing with the legislation.

The gender minority stress model also bolsters support for the above stated propositions. The gender minority stress model was created to capture the various identity-related stressors that gender minorities (i.e., transgender, non-binary, and genderqueer people) experience and this model proposes that forms of systemic oppression, including policies that restrict the rights of gender minorities, are critical antecedents to the health and well-being of gender minorities (Hendricks & Testa, 2012; Testa et al., 2015). Applying this to the current context, as Abreu et al. (2022) argued, “the antitransgender laws and bills being proposed and passed across the United States have contributed to structural stigma and gender minority stress for TGD [transgender] youth” (p. 3). Furthermore, the gender minority stress model also emphasizes the role of social support in the stress process such that getting affirmation for one’s identity from friends and family can improve outcomes (Testa et al., 2015). Conversely, it can be expected that having friends, family, and acquaintances who support oppressive policies would further erode well-being outcomes. As such, we

would expect that the existence and news coverage of, and perceived support for, these bills will have implications for the psychological and physical health of transgender youth and young adults.

Our proposition that media coverage of the recent restrictive legislation will harm transgender youth and young adults is also supported by evidence that documents the harm of other negative representations of transgender people in the media. Indeed, news coverage of transgender individuals is often limited, unidimensional (Capuzza, 2015, 2016), and uses delegitimizing language in reference to transgender topics (Billard, 2016). These representations have been shown to have implications for the identity development of transgender people (McInroy & Craig, 2015; Ringo, 2002). Moreover, the representation of transgender individuals in news coverage also affects attitudes toward transgender individuals (Li, 2019, 2021). Together, these findings point to the critical role of news exposure in societal discourse on transgender rights and illustrates how media dialogue surrounding transgender people impacts the community.

Early evidence on the effects of the recent legislation on the parents of transgender youth confirms the notion that the bills can cause indirect harm. Parents of transgender youth have expressed increased fears that the bills would worsen their children's mental health as well as increase their risk for suicide and discrimination (Abreu et al., 2022; Kidd et al., 2021). Moreover, parents also reported an increase in personal emotional distress in response to the legislation (Abreu et al., 2021). Furthermore, a study of health care providers similarly found that providers were concerned that the legislation would exacerbate mental health and suicide concerns among transgender youth (Hughes et al., 2021). Using a mixed-method design, the current study expands on these findings by examining the impact of the legislation on transgender youth and young adults more directly. Drawing on the rationale above, we hypothesize the following:

- Hypothesis 1:** News consumption related to the legislation is associated with increased negative affect (H1a), rumination (H1b), depressive symptoms (H1c), physical health symptoms (H1d), and fear of disclosure (H1e).
- Hypothesis 2:** Perceiving that people in one's social network support the legislation is associated with increased negative affect (H2a), rumination (H2b), depressive symptoms (H2c), physical health symptoms (H2d), and fear of disclosure (H2e).
- Hypothesis 3:** The relationships between news consumption and perceptions that people in one's social network support the legislation and the outcome variables will be mediated by rumination (H3a) and negative affect (H3b).

Method

Participants

This study was approved by the institutional review board at Ohio University. All participants provided informed consent prior to their participation in the study. Data were collected from transgender youth and young adults who were currently residing in the United States. We focused on transgender youth and young adults given that much of the recent legislation has targeted restricting gender-affirming care for transgender youth. Participants were recruited using two strategies. First, we recruited participants using Prolific Academic, which is an online survey platform that connects registered users to surveys for which they are eligible. We supplemented these efforts by also contacting transgender rights organizations given that Prolific does not register users under the age of 18 and had a limited number of participants who met our inclusion criteria. We provided information about the survey and asked organizations to send a brief recruitment message to their membership. Upon completion of the survey, data quality was determined by examining the time it took participants to complete the survey and participants who completed the survey in less than five minutes were removed from analyses.

In total, 113 eligible participants completed the survey and met our data quality criteria. A total of 78 participants were recruited through transgender rights organizations and the remaining 35 participants were recruited through Prolific. A power analysis based on an alpha value of .05 indicated that a sample of 110 was required to detect small to medium effect sizes, suggesting we had a sufficient sample size. Among our participants, 30 (26.5%) identified their gender identity as male/masculine, 26 (23.0%) identified as female/feminine, and 57 (50.4%) identified as non-binary. The average age was 20.68 ($SD = 4.49$) and 85.8% of our sample was 21 years of age or younger. The most commonly reported sexual orientations were gay or lesbian (31.9%) and bisexual (31.9%) followed by queer (16.8%), pansexual (8.0%), heterosexual (3.5%), asexual (3.5%), and other (4.4%). The majority identified their race as White (66.4%) with 7.1% identifying as Black/African American, 2.7% as American Indian or Alaska Native, 14.2% as Asian or Pacific Islander, 17.7% as Hispanic, and .9% as another racial/ethnic identity. Finally, the sample was geographically diverse, with participants from 27 states and the District of Columbia completing the survey.¹

¹ We examined whether residing within a state that had proposed or passed a bill related to restricting gender affirming care was related to our study variables (see Table 1). Results indicated that residing within such a state had no relationship with any of the variables contained in our regression analyses.

Table 1 Factor loadings for the fear of disclosure measure

Item	Factor loadings
<i>If I disclose my transgender identity to others:</i>	
I would be excluded at school	.786
My teachers would treat me differently	.689
My friends would treat me differently	.709
I would be ostracized	.821
My friendships would be ruined	.718
People would avoid me	.758
I would be harassed	.729
Classmates would feel uncomfortable around me	.805

$N = 113$

Measures

News Exposure

Participants were first asked to report the degree of exposure they had to news coverage surrounding the recently proposed bills that would limit transgender people from accessing gender affirming health care. We developed the measure of news exposure from prior measures assessing exposure to news coverage of other large-scale national events (Silver et al., 2013). In total the measure contained three items which asked participants to report how many hours per week they spent watching news coverage about legislation that restricts transgender youth from accessing gender affirming health care; how many hours they spent reading news articles on the same topic; and how many hours they spent viewing social media posts about this topic. A composite score was calculated by summing the three items together to reflect the total amount of time spent per week consuming news related to the recent legislation. The three items demonstrated adequate reliability ($\alpha = .91$).

Perceived Legislative Support

We next assessed the degree to which participants perceived that people in their social network supported the proposed legislation to restrict access to gender affirming health care. Paralleling a measure developed by Verrelli et al. (2019) to measure support for legislation on same-sex marriage, participants were asked to report how much they believed several groups of people would support the recent legislation. The groups included immediate family, extended family, transgender friends, cisgender friends, school peers, and neighbors. For each group, participants indicated the degree to which members of that group supported the legislation on a scale from -2 (*all oppose the legislation*) to +2 (*all support the legislation*). Reliability for the scale was .75.

Negative Affect

We measured participants' emotional responses to the recent legislation using the negative affect subscale of the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). The PANAS contains 10 negative emotions and participants were asked to report the extent to which they felt each emotion on a scale from 1 (*very slightly or not at all*) to 5 (*extremely*). Emotions included being afraid, scared, nervous, jittery, irritable, hostile, guilty, ashamed, upset, and distressed. We asked participants to report the degree to which they felt each emotion in response to the recent legislation aiming to restrict access to gender affirming health care. The reliability was .84.

Rumination

Participants were also asked to report the degree to which they experienced persistent or unwanted thoughts about the recent legislation using the 15-item Impact of Events Scale (Weiss & Marmar, 1997). This scale was developed to assess symptoms of post-traumatic stress and cognitive rumination following exposure to a stressful life event. Items assess intrusive thoughts and attempts to avoid or suppress thoughts about the event. A sample item is: "I thought about it when I didn't mean to" and items were rated on a response scale ranging from 0 (*not at all*) to 3 (*often*). The reliability for the scale was .90.

Depressive Symptoms

We next measured symptoms of depression experienced in response to the recent legislation. Depressive symptoms were captured using the patient health questionnaire (PHQ-9), which contains 9 items that assess common symptoms of depression (Kroenke et al., 2001). We note that we removed the final item that asks participants about suicidal ideation to reduce participant burden. A sample item from the remaining 8 items is: "Feeling down, depressed, or hopeless." Participants were asked to indicate how often they had been bothered by the symptoms listed in the measure on a response scale ranging from 0 (*not at all*) to 3 (*nearly every day*). The reliability for the reduced 8 item scale was .91.

Physical Health Symptoms

Physical health symptoms were measured using the Physical Health Questionnaire (PHQ; Schat et al., 2005). The PHQ was developed to capture the frequency with which people experience common physical health symptoms linked to stressful experiences. The scale contains 11 items and primarily focuses on symptoms related to sleep disturbances,

headaches, and gastrointestinal symptoms. Response options range from 1 (*not at all*) to 7 (*all of the time*) and the reliability for the scale was .89.

Fear of Disclosure

Participants rated the degree to which they were afraid to reveal they were transgender on an 8-item scale developed for the current study. The scale was created by adapting Ragins et al. (2007) fear of disclosure scale, which was originally created to capture fears of disclosing an identity at work, to be appropriate for a nonwork setting. The items were therefore adjusted to be context-neutral or to capture rejection that might occur in common nonwork settings (i.e., at school). Participants were asked to indicate what negative consequences would occur if they disclosed they were transgender and example items include, “I would be ostracized” and “My friendships would be ruined.” Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The adapted scale demonstrated good reliability ($\alpha = .91$). Given that the scale was developed for this study, we conducted an EFA to examine the underlying factor structure of the measure. Results indicated a one factor solution that accounted for 56.74% of the variance. Additionally, all of the factor loadings ($> .69$; see Table 1) exceeded recommended cutoffs (Hinkin, 1998).

Open-ended Questions

To better understand how participants were impacted by the recently proposed legislation, we also asked a series of open-ended questions. The first question asked participants how, if at all, they had been affected by the recent bills that seek to limit access to gender affirming health care. The second asked how, if at all, the bills would affect their experiences with health care providers or their willingness to seek medical care. Third, we asked respondents if and how access to gender-affirming care has affected them. Finally, we asked respondents if they had been treated differently since the recent bills were proposed and publicized and whether they had engaged in any coping responses that helped them process the proposed legislation.

Analyses

Study hypotheses were tested by conducting a series of regression analyses to examine the relationships between news exposure and perceived support for the proposed legislation and the outcome variables (i.e., negative affect, rumination, depressive symptoms, physical health symptoms, and fear of disclosure). A set of control variables (i.e., age, sexual orientation, race, gender identity, recruitment source, and whether or not the participant lived in a state

that had proposed a bill related to gender-affirming care) was entered in Step 1 of the regression model followed by the two focal independent variables (i.e., news consumption and legislative support) in Step 2. Given that gender identity had three categories, the original variable was coded into two separate variables that reflect identifying as female/feminine and non-binary, respectively. A separate regression model was conducted for each of the outcome variables. Next, we assessed mediation using model 4 of the PROCESS Macro (Hayes, 2017). For each model, the same demographic variables were entered as covariates, news consumption or perceived support for the legislation was entered as the predictor variable, and rumination and negative affect were entered as simultaneous mediators. Mediation was assessed by calculating the indirect effects using a bootstrapping method with 5,000 iterations. All analyses were conducted in SPSS Version 27.

Inductive thematic analysis was used to analyze the responses to the open-ended questions. Following recommendations for this type of qualitative coding (Glaser & Strauss, 1967), the authors first read through all of the responses to the five open-ended questions and generated a list of themes captured within the responses. Themes were created and refined until theoretical saturation was reached, or until the content of each response was accounted for by the set of generated themes. The number of themes produced for the open-ended questions ranged from 5 to 8. The authors next independently coded each of the responses for the themes that were present. Initial agreement for the coding was 98.6% and disagreements were discussed until consensus was reached. Frequency analyses were conducted to determine which themes were most represented among participant responses and there had to be at least two instances of any given theme for it to be retained.

Results

Descriptive statistics and correlations among all study variables are available in Table 2. Bivariate correlations indicate significant positive relationships between news consumption and negative affect ($r = .22, p = .019$), rumination ($r = .36, p = .002$), and physical health symptoms ($r = .30, p = .001$). Furthermore, there were also significant correlations between perceiving members of one’s social network as supportive of the legislation and rumination ($r = .37, p < .001$), depressive symptoms ($r = .36, p = .002$), physical health symptoms ($r = .36, p = .002$), and fear of disclosure ($r = .33, p = .005$). Together, these findings provide preliminary evidence that the recent legislation attempting to prohibit access to gender affirming health care has affected the health and well-being of transgender youth and young adults.

Table 2 Means, standard deviations, and intercorrelations for study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age	20.68	4.49														
2. Sexual orientation	1.96	.19	-.25*													
3. Race	1.34	.47	-.28*	.04												
4. Female	.23	.42	.22*	-.01	-.03											
5. Non-binary	.50	.50	-.37*	.19*	.11	-.55*										
6. Recruitment source	.33	.47	-.18	.14	-.06	-.12	.03									
7. Legislation	.27	.45	-.04	-.10	-.06	-.10	.09	.19*								
7. News consumption	7.27	12.11	.30*	.03	-.10	.23*	-.16	-.01	-.08	.91						
8. Perceived legislative support	-.03	.84	.45*	.12	-.14	.45*	-.34*	-.01	-.07	.15	.75					
9. Negative affect	3.19	.80	.12	-.11	-.11	-.03	.03	.07	.10	.22*	.18	.84				
10. Rumination	2.39	.64	.26*	-.14	-.13	.22*	-.27*	-.21*	.07	.29*	.36*	.37*	.90			
11. Depressive symptoms	2.41	.83	.12	-.01	-.08	.13	-.19	.11	.22*	.04	.36*	.40*	.47*	.91		
12. Physical health symptoms	3.72	1.26	.11	.06	-.22*	.10	-.11	-.02	.10	.30*	.36*	.51*	.51*	.57*	.89	
13. Fear of disclosure	3.68	1.35	.11	-.20*	-.04	.12	-.20*	.06	.05	-.02	.33*	.52*	.43*	.45*	.35*	.91

N=110–113 for all variables except perceived legislative support for which *N*=71; coefficient alphas are shown on the diagonal; sexual orientation is coded 1 for heterosexual and 2 for gay, lesbian, bisexual, or pansexual; race is coded 1 for White/Caucasian and 2 for nonwhite; non-binary is coded 1 for transgender men and women and 2 for non-binary participants; recruitment source coded 0=trans rights organization, 1=Prolific Academic; legislation is coded 0=no legislation proposed, 1=at least one bill proposed

* *p* < .05

Regression Analyses

We next conducted regression analyses to offer more robust tests of the study hypotheses. Results for each model are available in Table 3. Beginning with negative affect, results indicated that, after controlling for relevant demographic variables, news consumption had a non-significant relationship

with negative affect (*b* = .01, 95% CI [−.001, .03], *p* = .073). There was also a positive relationship between perceived legislative support and negative affect (*b* = .25, 95% CI [−.06, .55], *p* = .107), however this relationship failed to reach significance. Results for the second model, which included rumination as the outcome variable, yielded a significant positive relationship between news exposure and rumination

Table 3 News consumption and legislative support predicting well-being outcomes

	Negative affect			Rumination			Depressive symptoms			Physical health			Fear of disclosure		
	β	SE	ΔR^2	β	SE	R^2	β	SE	R^2	β	SE	R^2	β	SE	R^2
Step 1															
Age	.05	.03		.02	.02		.03	.02		.01	.04		.04	.04	
Sexual orientation	-.67	.56		-.26	.39		.06	.51		.52	.82		-1.09	.85	
Race	-.05	.26		.05	.18		.15	.23		-.37	.38		.32	.39	
Female	-.04	.29		.16	.20		-.09	.26		.33	.43		-.21	.44	
Non-binary	.26	.28		-.03	.19		-.13	.25		-.10	.41		-.51	.42	
Recruitment source	.30	.25		-.16	.17		.31	.23		.05	.37		.55	.38	
Legislation	.06	.25		.16	.18		.23	.23		.36	.37		.30	.39	
			.088			.110			.077			.063			.126
Step 2															
News consumption	.01	.01		.01*	.01		.00	.01		.03*	.01		-.01	.01	
Perceived legislative support	.25	.15		.29**	.10		.43**	.13		.62**	.21		.66**	.23	
			.077			.155			.138			.180			.116

Race is coded 1 for White/Caucasian and 2 for nonwhite; sexual orientation is coded 1 for heterosexual and 2 for gay, lesbian, bisexual, or pansexual

* *p* < .05; ** *p* < .01; *** *p* < .001

($b = .01$, 95% CI [.002, .022], $p = .023$) as well as between perceived legislative support and rumination ($b = .29$, 95% CI [.09, .48], $p = .006$). These results support Hypotheses 1b and 2b but do not support Hypotheses 1a and 2a.

The next model examined depressive symptoms as the outcome. Results indicated there was a non-significant relationship between news consumption and depressive symptoms ($b = .00$, 95% CI [−.02, 0.01], $p = 0.790$) but a significant positive relationship between perceived legislative support and depressive symptoms ($b = .43$, 95% CI [.16, .69], $p = .002$). Thus, Hypothesis 2c was supported but Hypothesis 1c was not. The model predicting physical health symptoms demonstrated a significant positive relationship for news consumption ($b = .03$, 95% CI [.01, .05], $p = .012$) and perceived legislative support ($b = .62$, 95% CI [0.20, 1.04]), $p = .005$). This supports Hypotheses 1d and 2d.

The final model contained news consumption and perceived legislative support predicting fear of disclosing one's transgender identity. Results indicated a non-significant relationship for news consumption ($b = -.01$, 95% CI [−.03, .02], $p = .509$), suggesting that exposure to news about the bills did not affect one's concerns about disclosing their transgender identity and failing to support Hypothesis 1e. However, in support of Hypothesis 2e, perceived legislative support was significantly and positively related to fear of disclosure ($b = .66$, 95% CI [.21, 1.11], $p = .005$), suggesting that feeling as though people in one's social network support restricting access to gender-affirming care was associated with participants fearing negative reactions if they were to disclose their identity as a transgender person.

Mediation Analyses

We conducted a series of mediation analyses using PROCESS model 4 (Hayes, 2017) to examine rumination and negative affect as potential mediators of the relationships between news consumption and perceived legislative support on the more distal outcome variables, in accordance with theorizing on mega-threats (Leigh & Melwani, 2019). These analyses were limited to the significant relationships revealed in the previous regression models. First, we evaluated both rumination and negative affect as potential mediators of the relationship between news consumption (predictor) and physical health (outcome). A test of the indirect effects revealed that neither rumination ($b = 0.003$, $SE = .003$, 95% CI [−.001, .01]) nor negative affect ($b = 0.01$, $SE = .01$, 95% CI [−.01, .01]) mediated the relationship between news consumption and physical health.

We next examined rumination and negative affect as mediators for a model in which support for legislation was the predictor variable. In the first analysis, depressive symptoms were the outcome variable and the indirect effects revealed that neither rumination ($b = 0.09$, $SE = .07$,

95% CI [−.02, .25] nor negative affect ($b = 0.06$, $SE = .05$, 95% CI [−.003, .17]) mediated the relationship between support for legislation and depressive symptoms. We then evaluated whether negative affect and rumination mediated the relationship between support for legislation (predictor) and physical health (outcome). A test of the indirect effects demonstrated that negative affect ($b = 0.17$, $SE = .10$, 95% CI [.02, .39]) but not rumination ($b = 0.04$, $SE = .07$, 95% CI [−.08, .22]) mediated the relationship between support for legislation and physical health.

Finally, we examined whether negative affect and rumination mediated the relationship between support for legislation (predictor) and fear of disclosure (outcome). The conditional indirect effects showed that negative affect ($b = 0.26$, $SE = .14$, 95% CI [.02, .58]) but not rumination ($b = 0.08$, $SE = .06$, 95% CI [−.05, .19]) mediated the relationship between support for legislation and fear of disclosure. In conjunction, these mediational analyses provided mixed support for Hypothesis 3b, but fail to support Hypothesis 3a.

Qualitative Analyses

General Impact of Recently Proposed Legislation

Themes that emerged for the first question, which asked how participants had been affected by the recent legislation seeking to restrict access to gender-affirming care, are summarized in Table 4. The most common theme was that participants felt they had not been affected by the recent legislation. However, some respondents who felt they were not affected explained this was because they were not able to access gender-affirming care for other reasons, such as not having disclosed their identity to their families or because they could not afford gender-affirming care. As such, the current bills did not alter their potential access to gender-affirming care because of the other barriers already in place. For example, one respondent stated, "I haven't been affected cause I never tried to get gender-affirming care, due to the fact that it seemed like a luxury I couldn't afford or have easy access to." Another wrote, "i have not yet been able to access gender affirming health care, entirely due to other circumstances."

The second most common theme was that respondents had experienced consequences for their emotional well-being. More specifically, respondents described increased distress, negative emotions, stress, and other adverse outcomes associated with the proposed legislation. As one example, one respondent described "I have been feeling hopeless about my future as a result of this." Moreover, some respondents also reported that they experienced concern for other members of the transgender community. That is, they express that even if they were not affected by the

Table 4 Qualitative themes for the general impact of the proposed legislation

Theme	Illustrative quote	Frequency
The legislation had no impact	“I don’t feel as if I’ve been significantly affected / affected as much as others in the trans community.”	31.5%
Emotional impacts	“Mentally it's taxing, I just hate seeing how much people hate me for existing.”	30.6%
Concern for others in the community	“I worried about my friends who had planned to get gender-affirming surgery and who were not passing. I worried that their lives and health were I danger.”	13.0%
Fears of not receiving needed health care	“It made me nervous—I decided to continue taking low-dose testosterone out of fear it would expire and I wouldn’t be able to continue taking testosterone later (due to legislation/age restrictions). So I took the risk of continuing T now to see more transition/appearance changes rather than staggering my doses as slowly as I prefer.”	10.2%
Less likely to seek health care	“I’m less likely to go to the doctor and ask for help.”	2.8%
Experienced harassment, discrimination, or mistreatment	“I leaned what my family thinks of trans people and that I am afraid of my extended family, especially my grandpa.”	6.5%
Increased concerns about disclosing	“I have not been physically affected, as I’m already scared to seek out any affirming care in the conservative area I’m in. The fear is there, though. It’s made me scared to come out to family and friends.”	3.7%

bills personally, they worried about the effects it would have on the community as a whole or on friends whose access to gender-affirming care might be affected. This theme is well illustrated in the following quote: “I’m over 18 so mostly emotionally, and because it impacts friends/acquaintances/ the community as a whole”.

Furthermore, other themes included worrying that respondents would not have access to needed medical care in the future, even outside of gender-affirming care; increases in experienced discrimination, harassment, or other negative treatment; and a heightened fear for one’s personal safety. Finally, a small number of participants described that they were less likely to seek medical care of any kind in the future or that they had to identify alternative ways to access care such as using online sources to purchase hormones or crossing state lines to do so.

Impact of Recently Proposed Legislation on Health Care Access

Themes for the ways the proposed legislation might affect one’s experiences with health care and/or health care providers are summarized in Table 5. The most common theme was that the introduction of the legislation would not affect respondents’ access to care or interactions with health care providers. However, this theme is again qualified by some respondents explaining that they already had negative interactions with health care providers, could not access gender-affirming care for other reasons, or had not disclosed their identity to their health care provider(s). One respondent described that they did not think the legislation would affect them “as I am fairly closeted.” Another stated, “It would not personally affect me because I am not out to my healthcare providers, other than my therapist.”

The second most commonly stated theme was that the legislation would restrict access to gender-affirming care which would reduce the respondent’s need or desire for health care. To illustrate, a respondent wrote, “The introduction of these bills would make it incredibly difficult to receive healthcare in the future.” Participants similarly indicated that the proposed legislation had decreased their general willingness to seek medical treatment, even outside of seeking gender-affirming care. This is well captured in the following quote: “I think I would seek out specifically trans friendly providers if I even go to a doctor. I would try to minimize how much I have to go to the doctor for sure.” Moreover, participants reported that the proposed legislation had made them less likely or unwilling to disclose their gender identity to their health care provider(s). Many explained that they were unsure how their identity as a transgender person would be perceived by medical professionals and they anticipated discrimination or stigma in response to their disclosure. A respondent noted, “I plan to avoid any topic of being transgender to avoid uncomfortable stares.” Relatedly, some participants also expressed feeling increased fear and/or anxiety in seeking medical treatment due to the anticipatory stress of possible discrimination and/or denial of medical services.

Impact of Gender-Affirming Care

Table 6 contains the themes for how (not) having access to gender-affirming care has or would affect our respondents. The theme that emerged most frequently was that having access to gender-affirming care has been beneficial for respondents’ mental health and/or that not having access would diminish respondents’ mental health. Notably, many respondents linked access to gender-affirming care to

Table 5 Qualitative themes for the impact of the proposed legislation on health care access

Theme	Illustrative quote	Frequency
The legislation will have no impact	“I don’t think they will as I am fairly closeted.”	26.2%
Increased concerns about experiencing discrimination or mistreatment in health care	“These bills seem to legitimize pathologizing transness, and many med places already seem a bit behind the curve, or even downright bigoted, so that really sucks (and adds to the danger of everything wrong with you being ignored or falsely attributed to your transness)”	12.6%
Reduced access to gender-affirming care	“It might be harder for me to get the care than i need such hormones or surgery.”	18.4%
Less willing to disclose their identity to health care providers	“They will restrict me from coming out and being honest with medical professionals about my identity”	11.7%
Decreased willingness to seek medical treatment	“It makes me really hesitant to go to just any doctor. When I do chose a doctor, i almost never disclose my transgender identity in fear of mistreatment or lack of understanding. I dont want to go to a doctor for [insert whatever medical thing] and have them focused on my gender than the actual problem at hand.”	14.6%
Increased fear and anxiety seeking medical treatment	“Taking away protections for me in health care just makes me more scared to go to doctors than I already was.”	16.5%

suicidality such that they stated that having access to gender-affirming care had “saved my life” or that if they did not have access to gender-affirming care, they would experience suicidal ideation. To illustrate, one respondent wrote, “If i didnt have it i quite literally would be dead right now. I attempted suicide many many times before i got care. Not once since.” Another stated, “to put it bluntly, if I lost the hope of medically transitioning I would end my life.” Participants also described that accessing gender-affirming care has been instrumental in combating their experience of dysphoria, which one respondent described as a painful psychological

experience that could only be mitigated through gender affirming surgery or hormone replacement therapy. Similarly, some respondents noted that having access to gender-affirming care allowed them to be more comfortable being transgender or disclosing their identity to other people. One person stated, “Not having this type of care makes me feel secretive and like I’m not able to tell my doctors everything that they should know.” Others even described that they felt safer when they had access to gender-affirming care.

Finally, similar to the other questions, some respondents indicated they did not feel that restricted access to

Table 6 Qualitative themes for the impact of accessing gender-affirming care

Theme	Illustrative quote	Frequency
Gender-affirming care has had no impact	“It hasn’t affected me directly that much because I don’t plan to take testosterone or any gender-affirming surgery.”	12.3%
Respondents did not have access to gender-affirming care for other reasons	“I don’t really need gender affirming care, I’m not well endowed so I personally just use bandages or tanktops to hide my chest because I don’t have the money for top surgery.”	13.2%
Mental health impacts, including suicidality	“I would kill myself without gender affirming care, it’s the only thing worth living for: the potential that some day I might be able to be myself.”	38.7%
Not having access would increase gender dysphoria	“It would cause me extreme dysphoria.”	12.3%
Having access makes people feel safer	“Gender affirming care makes me feel safer”	2.8%
Not having access reminds people they have fewer rights than others	“Makes me feel like I have fewer rights compared to any other heterosexual citizen.”	3.8%
Having access makes people more comfortable being transgender or disclosing their identity	“I’ve never experienced gender-affirming care, but I can imagine that I would be much more comfortable and open with my doctors. Not having this type of care makes me feel secretive and like I’m not able to tell my doctors everything that they should know.”	5.7%
Not having access would hinder transition plans or access to other care	“Not having access to gender affirming care would make it harder for me to fully transition.”	11.3%

gender-affirming care would affect them, and such responses were sometimes given by people who had not disclosed their identities to their family members and thus could not transition for other reasons. Respondents also again noted that they had limited access to gender-affirming care due to other obstacles (e.g., financial obstacles, an absence of qualified providers).

Impact of Recently Proposed Legislation on Treatment

The next question asked participants how, if at all, the recently proposed legislation had impacted how others had treated them and the themes for this question are summarized in Table 7. The majority of responses indicated that there had been no change in the way our respondents were treated by others in response to the proposed legislation. However, in many responses it was noted there was no change in treatment because respondents had not disclosed their identity to other people or because they had always received poor treatment from others. For example, one person described, “No, but that’s because I tend to avoid discussing the topic of being transgender around most people and a lot of people I interact with aren’t aware of the fact that I’m trans.” The second most common theme was that respondents had experienced an increase in discrimination, harassment, or other mistreatment since the legislation had been proposed and publicized (e.g., “Yes, they have been more hateful and more willing to use harmful language (insults, misgendering, slurs).” Some described that the mistreatment occurred in public whereas others stated that it was perpetrated by family members. One participant even described an increase in discrimination from health care providers.

Other respondents indicated they had attempted to avoid people to reduce their risk of experiencing discrimination.

In some cases, respondents avoided going into public or became socially isolated whereas in other cases respondents described that they only avoided unsupportive friends or family members. One respondent similarly indicated they felt an increased pressure to conceal their identity as a transgender person to avoid negative treatment from others. Finally, a small number of participants expressed that they had received increased support or sympathy from friends or other members of the community.

Coping Responses to the Recently Proposed Legislation

The final question asked respondents to indicate what forms of coping they have engaged in, if any, in response to the recently proposed legislation. Themes for the qualitative responses are shown in Table 8. A plurality of participants indicated they had not utilized any coping responses. However, among the participants that did employ coping responses, the most common were attempting to ignore the news or other information about the legislation, using anxiety-reducing techniques such as meditation or breathing exercises, and seeking social support from others. Other participants indicated they engaged in increased substance use and avoided contact with other people or hid their identity. Highlighting the increased substance use, one respondent wrote, “I smoke marijuana recreationally to deal with stress and anxiety/ depression, and have been smoking more frequently recently due to increased stress.” Another respondent described their attempts to hide their identity, stating “I hide underneath hoodies so people are less likely to know I am trans.” A small number of participants also stated that they had engaged in some form of advocacy against the bills or had used sleep as a coping mechanism.

Table 7 Qualitative themes for the impact of the proposed legislation on interpersonal treatment

Theme	Illustrative quote	Frequency
There has been no change in how people were treated	“Nothing has changed with the way people treat us, always with prejudice and lack of knowledge about gender” “Not necessarily since it’s not obvious i’m trans.”	59.8%
People have expressed sympathy or support	“People have treated me relatively the same, although I have received more sympathy from people in my life that I didn’t expect.”	6.5%
There has been an increase in discrimination, harassment, or other mistreatment	“People feel more comfortable being disrespectful towards me.” “Yes, they have been more hateful and more willing to use harmful language (insults, misgendering, slurs)”	21.7%
Respondents have anticipated more mistreatment or tried to hide their identity to avoid it	“People give me weird glances as if they are trying to discern my gender identity. I haven’t received any verbal or physical harassment, but the probability has increased since more people are expressing their anti-transgender sentiment louder now.”	4.4%
Respondents have increased their attempts to avoid people	“No, but that’s because I tend to avoid discussing the topic of being transgender around most people and a lot of people I interact with aren’t aware of the fact that I’m trans”	7.6%

Table 8 Qualitative themes for the coping strategies used in response to the legislation

Theme	Illustrative quote	Frequency
There were no coping strategies used	“Not at all”	42.0%
Seeking social support	“Spending time with friends who affirm my gender identity.”	8.0%
Substance use	“I’ve been smoking marijuana as a coping response.”	5.7%
Avoiding contact with other people or concealing one’s identity	“I hide underneath hoodies so people are less likely to know I am trans” “I have cut out all cis and hetero people from my friend group so that I am only surrounded by trans folks and queers. It is very validating.”	4.5%
Ignoring the news or information about the legislation	“I have to remove myself from the political climate. I have to focus on my body and mind and feeling safe and secure. Sometimes thinking so much about these legislation problems just stressed me out so much i have to shut down. I have to lay in bed and literally ignore being trans in this world so i dont mentally implode.”	22.7%
Engaging in advocacy work	“Bringing more awareness and education to others of/about the bills in order to stress it's importance”	3.4%
Using anxiety-reducing techniques	“I’ve done a lot of anxiety relief coping mechanisms. Modulating my breathing, and making sure I’m able to spend time with my support group.”	11.4%
Slept more than usual	“Sleeping usually. Which isn’t a good coping response I know but it’s the best one I have.”	2.3%

Supplemental Subgroup Analyses

We finally conducted a series of chi square analyses to examine whether the themes that emerged in response to our open-ended questions differed as a function of the participants’ gender identity. Our sample included both non-binary participants and participants with binary transgender identities and it is possible that the proposed legislation has differentially impacted each group, particularly given that non-binary people are less likely to medically transition (Clark et al., 2018). Results indicated that none of the chi square values were significant, which suggests that the themes participants endorsed were independent of their gender identity. This demonstrates that our non-binary and binary participants were affected by the legislation in similar ways.

Discussion

The goal of the current study was to understand the impact of the recently proposed legislation aimed at restricting access to gender-affirming health care in the United States on transgender youth and young adults. Results from our mixed-methods study indicate that exposure to news about the recent legislation was associated with greater rumination and physical health symptoms and that perceiving that people in one’s social network supported the legislation was associated with increased rumination, depressive symptoms, physical health symptoms, and fear of disclosing one’s identity as a transgender person. In line with previous theorizing on mega-threats, negative affect mediated the relationship between perceived legislative support and physical health, as well as the relationship between support for legislation

and fear of disclosure. Together, these results provide quantitative support for the indirect harm created through anti-transgender bills.

Moreover, in alignment with recent studies on the effects of the bills from the perspective of parents of transgender youth (Abreu et al., 2021, 2022; Kidd et al., 2021), qualitative themes also revealed that transgender youth and young adults had been impacted by the legislation in a host of ways, including mental health consequences, a decreased willingness to seek medical care of any kind, increased discrimination and other maltreatment, and heightened fears about disclosing their identities. Confirming prior findings (Meier et al., 2011; Tordoff et al., 2022), respondents also expressed that access to gender-affirming care has been integral for their mental health and that not having access would increase negative mental health symptoms and the risk of suicide. Finally, though some respondents found positive ways to cope with the stress associated with the proposed legislation, others reported using avoidance-based strategies or substance use. Implications of these findings are discussed in the subsequent section.

Policy and Public Health Implications

Results from the current study underscore the public health implications of the recently proposed legislation regarding access to gender-affirming care and can be used to guide future policy in this area. First, our findings demonstrate that the current legislation has had and will continue to have adverse effects on the well-being of transgender youth and young adults and that those effects occur through multiple pathways. That is, there has been a confluence of factors surrounding the recent legislation

that each carry harmful consequences. Our findings demonstrate that the legislation itself can erode important access to health care among transgender Americans that allow them to transition and mitigate feelings of gender dysphoria. Furthermore, the qualitative responses also underscore the centrality of gender-affirming care for the mental health of transgender youth and young adults, with almost half of our respondents describing that without gender-affirming care, they would experience significant mental health symptoms. Importantly, many linked access to gender-affirming care to suicidality, describing that not having access to gender-affirming care would increase their likelihood of attempting suicide.

Moreover, our findings also show the potential of the proposed legislation to do ambient and indirect harm that does not stem from the scope of the legislation itself. While previous research has pointed to the functional and direct harm created by barring access to gender-affirming care, our research emphasizes the symbolic harm created by exposure to the legislation and subsequent community support of this legislation. To elaborate, news consumption related to the legislation and/or perceptions that socially relevant others support the legislation were associated with a range of deleterious health consequences as well as increased fears of disclosing. Respondents also described that the legislation emboldened people to behave in more discriminatory ways toward transgender people and increased social isolation, fears of personal safety, and identity concealment as a result. Finally, the proposed legislation has also been a deterrent from seeking more general health care, thus leaving transgender youth and young adults vulnerable to untreated ill health. These consequences, when coupled with the more direct consequences of the legislation, stand to exacerbate existing health inequities between transgender and cisgender Americans and illuminate a need to mobilize public health resources to improve the health of this population.

Based on these findings, we encourage policy makers to carefully consider the adverse consequences of legislation restricting access to gender-affirming care when responding to the currently proposed legislation and when crafting new policies. We join the American Psychological Association, the American Academy of Pediatrics, the Human Rights Campaign, and other organizations in arguing that the health and identity-related consequences of restricting access to gender-affirming care are too great to warrant legislation that removes this right (American Psychological Association, 2021; Ronan, 2021). Importantly, we also extend these oppositions to the legislation to include concerns stemming from the existence of such legislation. Irrespective of the legislations' successful enactment, proposing and publicizing legislation of this kind increases a number of risk factors for an already vulnerable and minoritized group in the United States, such as exposure to increased discrimination,

heightened identity suppression, and restricted access to health care, all of which have notable consequences for health and well-being (Bradford et al., 2013; Hughto et al., 2015; Quinn et al., 2017). Policy makers can thus use these findings to more comprehensively document the direct and indirect harms of legislation restricting the rights of transgender people to inform efforts to combat current policies and guide future policy development.

Limitations

There are limitations of our study that should be considered alongside its contributions. Primarily, although our sample was demographically and geographically diverse, our analyses were based on a relatively small sample and should thus be interpreted with caution. We speculate that participants may have been reluctant to take part in a survey on such a sensitive topic, which may have contributed to our small sample size. We also note that our sample size was particularly low for perceived legislative support. T-tests were conducted to determine if there was nonresponse bias for this measure and results indicated that racially/ethnically minoritized participants were more represented among non-responders ($t = 2.00, p = .043$), which suggests that our findings may be more representative of White transgender youth and young adults. We encourage subsequent work that replicates our findings with larger samples to bolster support for our conclusions. Furthermore, it is possible that recruiting from different sources introduced sampling bias in that the participants recruited through the trans rights organizations may be more politically active than the average population. However, as shown in Table 2, recruitment source was unrelated to all study variables except rumination. Finally, we were unable to examine the impact of specific parties' support for the legislation. It is possible that having close friends or family members who support the legislation is more impactful than having acquaintances that support the legislation, and future work should test this proposition.

Conclusion

The proliferation of proposed and enacted legislation aiming to restrict access to gender-affirming care among transgender youth has garnered ample media attention over the last 2 years. The current study underscores the potential for such legislation to adversely affect the health and well-being of transgender youth and young adults both directly through limiting access to gender-affirming care and indirectly through the heightened maltreatment, psychological and physical health symptoms, identity concealment, isolation,

and fear engendered by such legislation being discussed in the national zeitgeist. We call on policy makers and public health officials to consider current and future legislation targeting transgender Americans in the context of these deleterious and health-compromising outcomes.

Availability of Data and Material Data are available upon reasonable request.

Declarations

Competing Interests The authors declare no competing interests.

References

- Abreu, R. L., Sostre, J. P., Gonzalez, K. A., Lockett, G. M., & Matsuno, E. (2021). “I am afraid for those kids who might find death preferable”: Parental figures’ reactions and coping strategies to bans on gender affirming care for transgender and gender diverse youth. *Psychology of Sexual Orientation and Gender Diversity*.
- Abreu, R. L., Sostre, J. P., Gonzalez, K. A., Lockett, G. M., Matsuno, E., & Mosley, D. V. (2022). Impact of gender-affirming care bans on transgender and gender diverse youth: Parental figures’ perspective. *Journal of Family Psychology*, *36*(5), 643–652.
- Alabama Senate Bill 184. (2022). Regular Session 2022. <https://legiscan.com/AL/drafts/SB184/2022>
- American Civil Liberties Union. (2022). Legislation affecting LGBTQ rights across the country. Retrieved from <https://www.aclu.org/legislation-affecting-lgbtq-rights-across-country>
- American Psychological Association. (2021). Criminalizing gender affirmative care with minors: Suggested discussion points with resources to oppose transgender exclusive bills. Retrieved from <https://www.apa.org/pi/lgbt/resources/policy/issues/gender-affirmative-care>
- Arizona Senate Bill 1138. (2022). Fifty Fifth Legislature, Second Regular Session. (Enacted). <https://apps.azleg.gov/BillStatus/BillOverview/76466>
- Billard, T. J. (2016). Writing in the margins: Mainstream news media representations of transgenderism. *International Journal of Communication*, *10*, 4193–4218.
- Bor, J., Venkataramani, A. S., Williams, D. R., & Tsai, A. C. (2018). Police killings and their spillover effects on the mental health of black Americans: A population-based, quasixperimental study. *Lancet*, *392*, 302–310.
- Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: Results from the Virginia transgender health initiative study. *American Journal of Public Health*, *103*, 1820–1829.
- Capuzza, J. C. (2016). Improvements still needed for transgender coverage. *Newspaper Research Journal*, *37*(1), 82–94.
- Capuzza, J. C. (2015). Who defines gender diversity? Sourcing routines and representation in mainstream US news stories about transgenderism. *International Journal of Transgenderism*, *15*(3–4), 115–128.
- Cheah, C. S. L., Wang, C., Ren, H., Zong, X., Cho, H. S., & Xue, X. (2020). COVID-19 racism and mental health in Chinese American families. *Pediatrics*, *146*, e2020021816.
- Clark, B. A., Veale, J. F., Townsend, M., Frohard-Dourlent, H., & Saewyc, E. (2018). Nonbinary youth: Access to gender affirming primary health care. *International Journal of Transgenderism*, *19*(2), 158–169.
- Davis, S. A., & Meier, S. C. (2014). Effects of testosterone treatment and chest reconstruction surgery on mental health and sexuality in female-to-male transgender people. *International Journal of Sexual Health*, *26*, 113–128.
- de Vries, A. L., McGuire, J. K., Steensma, T. D., Wagenaar, E. C., Doreleijers, T. A., & Cohen-Kettenis, P. T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, *134*, 696–704.
- Freedom for all Americans. (2022). Legislative tracker: Youth health care bans. Retrieved from <https://freedomforallamericans.org/legislative-tracker/medical-care-bans/>
- Goodman, J. D. (2022). How medical care for transgender youth became ‘child abuse’ in Texas. *The New York Times*. Retrieved from <https://www.nytimes.com/2022/03/11/us/texas-transgender-youth-medical-care-abuse.html>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Aldine.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis (2nd ed.). New York, NY: Guilford Press.
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the minority stress model. *Professional Psychology, Research and Practice*, *43*, 460–467.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, *1*, 104–121.
- Human Rights Campaign. (2023). Human rights campaign foundation state equality index: 91% of anti-LGBTQ+ bills in 2022 failed to become law. *Human Rights Campaign*. Retrieved from <https://www.hrc.org/press-releases/human-rights-campaign-foundation-state-equality-index-91-of-anti-lgbtq-bills-in-2022-failed-to-become-law>.
- Hughes, L. D., Kidd, K. M., Gamarel, K. E., Operario, D., & Dowshen, N. (2021). “These laws will be devastating”: Provider perspectives on legislation banning gender-affirming care for transgender adolescents. *Journal of Adolescent Health*, *69*(6), 976–982.
- Hughto, J. M. W., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science & Medicine*, *147*, 222–231.
- Kidd, K. M., Sequeira, G. M., Paglisotti, T., Katz-Wise, S. L., Kazmerski, T. M., Hillier, A., & Dowshen, N. (2021). “This could mean death for my child”: Parent perspectives on laws banning gender-affirming care for transgender adolescents. *Journal of Adolescent Health*, *68*, 1082–1088.
- Kimberly, L. L., Folkers, K. M., Friesen, P., Sultan, D., Quinn, G. P., Bateman-House, A., Parent, B., & Salas-Humara, C. (2018). Ethical issues in gender-affirming care for youth. *Pediatrics*, *142*, e20181537.
- Kraschel, K. L., Chen, A., Turban, J. L., & Cohen, I. G. (2022). Legislation restricting gender-affirming care for transgender youth: Politics eclipse healthcare. *Cell Reports Medicine*, *3*(8), 100719.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*, 606–613.
- Kuper, L., & E., Stewart, S., Preston, S., Lau, M., & Lopez, X. (2020). Body dissatisfaction and mental health outcomes of youth on gender-affirming hormone therapy. *Pediatrics*, *145*, 20193006.
- Lavietes, M., & Ramos, E. (2022). Nearly 240 anti-LGBTQ bills filed in 2022 so far, most of them targeting trans people. *NBC News*. Retrieved from <https://www.nbcnews.com/nbc-out/out-politics-and-policy/nearly-240-anti-lgbtq-bills-filed-2022-far-targeting-trans-people-rcna20418>

- Leigh, A., & Melwani, S. (2019). #Blackemployeesmatter: Mega-threats, identity fusion, and enacting positive deviance in organizations. *Academy of Management Review*, *44*, 564–591.
- Li, M. (2019). (Mis) matching: Journalistic uses of gender pronouns and names can influence implicit attitudes toward transgender people, perceived news content credibility, and perceived reporter professionalism. *Newspaper Research Journal*, *40*(4), 517–533.
- Li, M. (2021). Exemplifying power matters: The impact of power exemplification of transgender people in the news on issue attribution, dehumanization, and aggression tendencies. *Journalism Practice*, 1–29.
- Maisel, N. C., & Fingerhut, A. W. (2011). California's ban on same-sex marriage: The campaign and its effects on gay, lesbian, and bisexual individuals. *Journal of Social Issues*, *67*, 242–263.
- McInroy, L. B., & Craig, S. L. (2015). Transgender representation in offline and online media: LGBTQ youth perspectives. *Journal of Human Behavior in the Social Environment*, *25*, 606–617.
- Meier, S. C., Fitzgerald, K., Pardo, S., & Babcock, J. (2011). The effects of hormonal gender affirmation treatment on mental health in female-to-male transsexuals. *Journal of Gay & Lesbian Mental Health*, *15*, 281–299.
- Ohio House Bill 454. (2022). 134th General Assembly. <https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA134-HB-454>
- Olson, K. R., Durwood, L., DeMeules, M., & McLaughlin, K. A. (2016). Mental health of transgender children who are supported in their identities. *Pediatrics*, *137*, 31–38.
- Olson, K. R., Durwood, L., Horton, R., Gallagher, N. M., & Devor, A. (2022). Gender identity 5 years after social transition. *Pediatrics, Prepublication Release*. <https://doi.org/10.1542/peds.2021-056082>
- Quinn, D. M., Weisz, B. M., & Lawner, E. K. (2017). Impact of active concealment of stigmatized identities on physical and psychological quality of life. *Social Science & Medicine*, *192*, 14–17.
- Ragins, B. R., Singh, R., & Cornwell, J. M. (2007). Making the invisible visible: Fear and disclosure of sexual orientation at work. *Journal of Applied Psychology*, *92*, 1103–1118.
- Reisner, S. L., White, J. M., Bradford, J. B., & Mimiaga, M. J. (2014). Transgender health disparities: Comparing full cohort and nested matched-pair study designs in a community health center. *LGBT Health*, *1*, 177–184.
- Ringo, P. (2002). Media roles in female-to-male transsexual and transgender identity formation. *International Journal of Transgenderism*, *6*(3).
- Ronan, W. (2021). Major health, education, and child welfare organizations oppose anti-LGBTQ state-based legislation. *Human Rights Campaign*. Retrieved from <https://www.hrc.org/press-releases/major-health-education-and-child-welfare-organizations-oppose-anti-lgbtq-state-based-legislation>
- Russell, B. Z. (2022). *House passes anti-trans youth treatment bill*. Idaho Press. Retrieved from https://www.idahopress.com/news/local/house-passes-anti-trans-youth-treatment-bill/article_ebb0623c-6df9-5a94-8beb-16d5c7688834.html
- Schat, A. C. H., Kelloway, E. K., & Desmarais, S. (2005). The Physical Health Questionnaire (PHQ): Construct validation of a self-report scale of somatic symptoms. *Journal of Occupational Health Psychology*, *10*, 363–381.
- Sevelius, J. (2013). Gender affirmation: A framework for conceptualizing risk behavior among transgender women of color. *Sex Roles*, *68*, 675–689.
- Silver, R. C., Holman, E. A., Andersen, J. P., Poulin, M., McIntosh, D. N., & Gil-Rivas, V. (2013). Mental- and physical-health effects of acute exposure to media images of the September 11, 2001, attacks and the Iraq war. *Psychological Science*, *24*, 1623–1634.
- Su, D., Irwin, J. A., Fisher, C., Ramos, A., Kelley, M., Mendoza, D. A. R., & Coleman, J. D. (2016). Mental health disparities within the LGBT population: A comparison between transgender and nontransgender individuals. *Transgender Health*, *1*, 12–20.
- Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the gender minority stress and resilience measure. *Psychology of Sexual Orientation and Gender Diversity*, *2*, 65–77.
- Thoma, B. C., Salk, R. H., Choukas-Bradley, S., Goldstein, T. R., Levine, M. D., & Marshal, M. P. (2019). Suicidality disparities between transgender and cisgender adolescents. *Pediatrics*, *144*, e20191183.
- Tordoff, D. M., Wanta, J. W., Collin, A., Stepney, C., Inwards-Breland, D. J., & Ahrens, K. (2022). Mental health outcomes in transgender and nonbinary youths receiving gender-affirming care. *JAMA Network Open*, *5*, e220978.
- Verrelli, S., White, F. A., Harvey, L. J., & Pulciani, M. R. (2019). Minority stress, social support, and the mental health of lesbian, gay, and bisexual Australians during the Australian marriage law postal survey. *Australian Psychologist*, *54*, 336–346.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063–1070.
- Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale-Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing Psychological Trauma and PTSD* (pp. 399–411). New York: Guilford.
- World Professional Association for Transgender Health. (2012). *Standards of care for the health of transsexual, transgender, and gender nonconforming people* [7th Version]. Retrieved from <https://www.wpath.org/publications/soc>
- Wyckoff, A. S. (2022). AAP continues to support care of transgender youths as more states push restrictions. American Academy of Pediatrics. Retrieved from <https://publications.aap.org/aapnews/news/19021/AAP-continues-to-support-care-of-transgender>

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