**ORIGINAL PAPER**

# Cultural Threat, Outgroup Discrimination, and Attitudes toward Transgender Rights

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## Abstract

Scholars often highlight the roles that group threat and intergroup solidarity play in shaping attitudes toward outgroups. Competition among social groups, including over values and culture, can underlie negative attitudes toward outgroups. Meanwhile, perceptions of discrimination against outgroups can drive feelings of solidarity, sympathy, or empathy, which may foster more positive attitudes. These social identity concepts are often studied in the context of racial, ethnic, and religious prejudice, with less attention to how they apply to attitudes toward transgender and gender diverse people. Using a 2022 national survey, we assess how respondents' perceptions of cultural threat from the LGBTQ community and perceptions of discrimination among a range of outgroups are related to attitudes about transgender rights policies, including access to public restrooms, participation in school sports, and medical transition care. We find that cultural threat is consistently associated with support for policies that restrict the rights of transgender people, but perceived outgroup discrimination tends not to show a significant relationship with these attitudes.

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## Introduction

As transgender rights have risen on the national agenda in recent years, so has scholarly attention to the politics of these issues. Since 2015, there has been an increase in public opinion studies on the topic (e.g., Jones et al., 2018; Michelson & Harrison, 2020; Taylor, Lewis, and Haider-Markel, 2018). Much of this research has centered on individual traits, values that relate to morality and equality, and political orientations as key determinants of individual attitudes toward transgender people and the policies that affect their rights (Haider-Markel et al., 2019). The empirical and theoretical focus of this work is derived from the related literature on gay rights and morality politics (e.g., Lewis et al., 2017). However, as transgender people constitute a minority group within the larger social and political system, inter-group dynamics – the ways in which group identities shape attitudes toward outgroups – also likely affect attitudes toward them. Studies about attitudes toward other minority groups, including those based on racial, ethnic, national origin, and religious identity, often explore public opinion through an ingroup versus outgroup lens, highlighting concepts such as threat and solidarity (e.g., Kuo et al., 2014; Rabinowitz et al., 2009).

Our research applies the social identity theoretical framework to the study of public opinion toward transgender rights. We assess how well group-centered theories help explain current attitudes on this salient topic. In particular, we examine the roles of outgroup cultural threat and the perception of outgroup discrimination. Outgroup cultural threat is the feeling of insecurity invoked by the different cultural or behavioral values represented by a group, while perceptions of discrimination against outgroups may foster feelings of solidarity, sympathy, and empathy for outgroups (Dinas et al., 2021; Harth et al., 2008). We test how perceptions of outgroup cultural threat and discrimination affect attitudes toward a wide range of transgender-related policies, including access to public bathrooms, participation in sports, and medical transition care. Analyses from a national, demographically representative survey fielded in 2022 reveal that LGBTQ cultural threat consistently shapes public attitudes toward public policies related to transgender rights, while the perception of transgender discrimination only affects attitudes toward allowing participation in K-12 sports.

## Public Attitudes Toward Transgender Rights

Since 2015, multiple teams of researchers have fielded several nationally representative surveys on transgender rights (Haider-Markel et al., 2019). This line of research extended theories about public opinion toward gay rights to attitudes about transgender rights. These studies predominantly focused on political determinants like partisanship, ideology, and elite cues, as well as moral determinants like religiosity (Castle, 2018; Jones et al., 2018; Jones & Brewer, 2020; Lewis et al., 2017). As transgender politics has emerged on the national agenda, these

determinants have become more salient in shaping opinion as political and religious elites solidify their positions and send more consistent messages to the public (Jones & Brewer, 2020; Lewis et al., 2022).

In addition, research has identified psychological and personality traits that underlie attitudes toward transgender rights. Authoritarianism is associated with negative feelings toward transgender people and opposition to transgender rights (Miller et al., 2017; Norton & Herek, 2013). Similarly, individuals with more traditional moral value orientations tend to view transgender rights negatively (Jones et al., 2018; Taylor et al., 2018a, 2018b). Meanwhile, egalitarian value orientations are positively associated with support for transgender rights (Jones et al., 2018; Taylor et al., 2018a, 2018b). There are also studies showing a significant link between disgust sensitivity and negative attitudes toward transgender people (Miller et al., 2017; Vanaman & Chapman, 2020).

Perhaps not surprisingly, gender is significantly associated with attitudes toward transgender rights, with women being more supportive (Taylor et al., 2018a, 2018b). In addition to a gender gap on these issues, beliefs about gender are related to opinions on transgender rights. Adherence to traditional gender roles, gender essentialism, and gender congruence (i.e., the extent to which people perceive their masculinity or femininity as aligned to their sex) may affect attitudes toward transgender people, transgender political candidates, and specific policies like transgender athletes' participation in sports (Flores et al., 2020; Haider-Markel et al., 2017; Lewis et al., 2021).

## Social Identity Theory

The variables highlighted by the literature tend to focus on people's own political, psychological, and value orientations as a way to understand attitudes toward transgender rights. Relatively less work examines how group identities may shape these attitudes (but see Flores et al., 2018, 2021). Social identity theory suggests that intergroup discrimination is driven by group identities and specifically through comparisons to outgroups (e.g., Tajfel, 1974; 1984; Tajfel & Turner, 1979; see also Huddy, 2001 for a comprehensive review). In this way, social group identity is characterized by the use of negative stereotypes or group generalizations as a means to boost ingroup esteem (Abrams & Hogg, 1988; Sniderman & Hagendoorn, 2009; Tajfel, 1982). Indeed, a myriad of studies demonstrate the importance of social group identity to make sense of the complexities in political decision making, and they highlight bias toward ingroups in American politics (e.g., Brady & Sniderman, 1985; Kalkan, Layman, and Green, 2018; Rabinowitz et al., 2009). To what extent do these concepts, primarily developed in reference to racial, ethnic, and national identity groups, apply to a group defined by gender identity?

Some recent studies of attitudes toward transgender rights are consistent with social identity theory. For example, studies examining the effect of interpersonal contact find that knowing someone who is transgender can help overcome negative group stereotypes (e.g., Tadlock et al., 2017; but see Jones et al., 2018). Even mediated contact, brief exposure to images, or interpersonal contact with a related group

member (i.e., someone who is gay) can have a positive effect on attitudes toward transgender people (Flores, 2015; Flores et al., 2018; Lewis et al., 2017; Miller et al., 2020). Studies examining the efficacy of tactics to overcome transphobia, such as perspective-taking and empathy exercises, also extend on the concepts of social identity (Broockman & Kalla, 2016; Flores et al., 2018, 2021; Kalla & Broockman, 2020; Michelson & Harrison, 2020). Yet, few studies in this area have directly assessed how cultural threat and perceptions of discrimination – the group-centric concepts that may underlie transphobic attitudes in the first place – affect attitudes toward transgender rights.

## Group Threat

One key concept explaining hostility and discrimination toward outgroups is group threat. Group position theory extends social identity theory to highlight the hierarchical power and stratification of social groups. In some situations, dominant ingroups may perceive that their relative position of power in society is threatened by outgroups. Often referred to as "realistic group threat," it can foster ingroup-interested attitudes and emotions, and make outgroup stereotypes more accessible when forming outgroup attitudes (Blumer, 1958; Bobo & Hutchings, 1996; Riek et al., 2006; Schmitt & Branscombe, 2002). Group threat is often conceptualized as a reaction to perceived political and economic competition from racial and ethnic groups, especially in the face of changing demographics that could affect the existing power structure (e.g., Abrajano & Hajnal, 2015; Branton & Jones, 2005; Giles & Evans, 1986; Glaser, 1994; Jardina, 2019).

However, in the context of transgender rights, economic and political threat may not be applicable given the relatively small size of the transgender population and disproportionate poverty in the transgender community (Herman, Flores, and O'Neill, 2022; James et al., 2016). Beyond material threats, outgroups could also pose a symbolic threat to ingroups. Groups defined by cultural or behavioral traits, such as religious traditions or sexual orientation, may threaten the dominant value structure in a society (e.g., Kalkan et al., 2009). Rather than a threat to economic or political resources, the cultural or behavioral values of the groups themselves poses a threat, especially since those cultural values can be adopted by individuals that are not part of the outgroup. In addition, exposure to cultural differences can provoke a sense of "cultural shock" and stress among ingroup members that perceive disruption to their familiar sociocultural environment (e.g., Newman 2012). Adorno et al., (1950, p. 149) describe this perceived threat as "the feeling of difference" that provokes a sense of threat and hostility. While this sense of threat from cultural differences may be clear in groups defined along cultural or behavioral lines, it is also evident in attitudes toward racial and ethnic groups through symbolic or modern racism (e.g., Kinder & Sears, 1981; Sears, 1988). A meta-analysis of Intergroup Threat Theory finds that both materialistic threat and symbolic threat significantly affect attitudes toward a range of outgroups (Riek, Mania, and Gartner, 2006).

Transgender people as a group fit into the concept of a cultural or behavioral outgroup because transgender identities directly challenge the traditional concepts

of gender, including gender roles and norms (Currah et al., 2006), that are central organizing constructs of the social world (Bern, 1981). Indeed, cultural threat from transgender people is evident in concerns about "social contagion" of transgender identities (e.g., Marchiono, 2017; but see Ashley, 2020). Similarly, allies in the broader LGBTQ community are defined as a group in opposition to dominant norms surrounding gender and sexuality (Pierceson, 2019). Cottrell et al. (2010) find that perceived value threats from gays and lesbians predicted emotional disgust toward the group and negative attitudes toward gay rights policies. Consistent with feelings of cultural threat, Haider-Markel and Joslyn (2018) find that people that provide higher estimates of the size of the gay population are less supportive of gay rights.

As such, we expect ($H_1$) that perceptions of cultural threat will be associated with negative attitudes toward transgender rights and positively associated with support for restrictive policies on transgender people.

### Perceptions of Discrimination

While cultural threat likely fosters negative intergroup attitudes, social group identity could also have positive effects on attitudes toward outgroups. Feelings of intergroup solidarity may arise from perceptions of shared experiences like discrimination (Meeusen, Abts, and Meulumen, 2019). Members of outgroups that perceive discrimination against other outgroups may activate a shared "disadvantaged minority" identity that leads to feelings of sympathy or solidarity with those of other groups (Craig & Richeson, 2012; Galanis & Jones, 1986). For example, Becker and Jones (2021) found that gender differences in support for transgender rights were related to perceptions of shared discriminatory experiences. In their study, people who had experienced gender-based discrimination were more supportive of transgender people than those who did not report those discriminatory experiences.

When members of dominant groups perceive discrimination against outgroups, this may lead to feelings of sympathy (Conover, 1988) or "helping behavior" that can boost their dominant group status and self-esteem (Nadler et al., 2009). Numerous studies show that when dominant group members recognize discrimination against minority groups, the dominant group members' tend to increase their support for policies that reduce racial discrimination (e.g., Bobo & Kluegel, 1993; Mangum & DeHaan, 2019; Nadler et al., 2009; Tuch & Hughes, 1996). Chudy (2021) finds that feelings of racial and gender sympathy among white Americans are associated with support for policies that benefit black Americans and women, respectively. Feelings of group empathy can have positive effects on attitudes toward policies that affect minority groups, including the LGBTQ community (Sirin, Valentino, and Villalobos, 2021).

The literature on the link between perceptions of discrimination against outgroups and supportive attitudes offers at least three possible pathways. Perceived discrimination may foster solidarity through shared discriminatory experiences (e.g., Craig & Richeson, 2012; Sirin et al., 2016). Next, perceptions of unfair treatment could trigger sympathy or feelings of personal distress over mistreatment of outgroups (e.g., Batson, 2011; Chudy, 2021). Third, individuals from one group may

internalize the experiences of another group, producing an empathetic emotion that can diminish group-based bias and stereotyping (Sirin et al., 2016, 2021; see also Finlay & Stephan, 2000; Galinsky & Moskowitz, 2000).

Each of these three pathways is dependent upon individuals' experiences and psychological dispositions. A sense of shared experiences requires that an individual has experienced discrimination that relates to perceived discrimination toward members of an outgroup (Becker & Jones, 2021). Sympathy is conditional upon the levels of distress that people feel, which may depend upon how unfair they perceive the disparate treatment of an outgroup to be (Batson et al. 1987; Conover, 1988). Empathy, meanwhile, is a multidimensional concept that includes individuals' cognitive ability to detect emotion in others and the motivation to care about the plight of others (e.g., Davis, 1983; Sirin et al., 2017). As such, people will vary in the extent to which they are able to consider others' perspectives and have empathic concern.

However, perceiving discrimination against outgroups is a necessary initial step in each of these proposed pathways, regardless of the pathway that may link it to supportive attitudes. Thus, our analysis focuses on the potential effects of perceived discrimination. We expect ($H_2$) that individuals who perceive discrimination against transgender people will be more likely to hold positive views of transgender rights and will oppose restrictive policies regardless of their membership in dominant or subordinate groups.

## Data and Analyses

To assess how cultural threat and perception of discrimination affect people's attitudes toward policies related to transgender rights, we analyzed data from a national, demographically representative survey of 1,597 American adults fielded by Dynata, via their online panel, from August 3–9, 2022.[1] Respondents were asked a series of questions about their attitudes on several political topics, character traits, ideology, partisanship, religiosity, and key demographics. Beyond recoding missing responses, all variables described below are included in their original form, without any standardization or transformation.

Our analyses focus on dependent variables measuring attitudes toward three transgender-related policies that are drawing significant attention in policy debates: bathroom access, participation in youth sports, and medical transition care. Each of these issues fits within the "body politics" construct of policies affecting transgender people that emphasize individual comfort with transgender bodies (Miller, et al., 2017). Yet, they vary in other relevant considerations and underlying opinion structures. Bathroom access policies are often framed in terms or privacy, personal safety, and equality (Haider-Markel et al., 2019. Sports participation policies often invoke concerns about fairness, equity, and social development (Flores et al., 2023). Medical transition care debates often cover issues of privacy, child welfare, and parental rights (Paris, 2023).

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[1] Survey methodology and demographic representativeness is presented in the supplementary report.

Attitudes toward restrictive bathroom access policies are measured with two sequential items asking whether respondents support or oppose (using a seven-point Likert response with higher scores indicating greater opposition to the policy):

- Laws that require transgender adults to use public restrooms and locker rooms that correspond to their sex at birth rather than their current gender identity.
- Laws that require transgender students in schools to use restrooms and locker rooms that correspond to their sex at birth rather than their current gender identity.

The graphs in the top row of Fig. 1 show the distribution of responses to these items, revealing little variation in levels of support for restrictive restroom policies between those related to adults and those for schools. Indeed, 46% of respondents express some level of support for restrictive policies for adults and 50% support restrictive policies at schools. Opposition to these policies garnered 28% and 25%, respectively. About a quarter of respondents to both items neither support nor oppose these policies, reflecting ongoing uncertainty about this issue. This divide in public opinion is in line with recent trends on this issue (Lewis et al., 2022).

Another contentious issue that has garnered substantial public and legislative attention recently is the participation of transgender students in sex-segregated athletics (Sharrow, 2021). Since 2020, 23 states have enacted laws barring transgender youths from participating in sports consistent with their gender identity, with many additional state athletic associations issuing similarly restrictive policies (TransAthlete.com, 2023). Attitudes toward participation in youth sports are gauged with two split-sample items asking whether respondents favor or oppose (four-point response):

- Banning transgender girls from K-12 sports
- Allowing transgender girls in K-12 sports

We utilized these two different phrasings to assess attitudes on this issue because recent polling on the issue has produced substantially different responses across surveys, especially between those that ask respondents about legislative bans, negatively-phrased restrictive government interventions, and those that ask about allowing transgender girls to participate, more positively-phrased policies without government intervention. Graphs in the second row of Fig. 1 show that 55% of respondents support *banning* transgender girls from participating in K-12 sports. However, 61% oppose *allowing* transgender girls to participate in K-12 sports. The difference in the responses to the two items is consistent with differences from other 2022 surveys. A survey asking about *banning* participation found that 59% of Americans opposed bans (Flores et al., 2023), but a *Washington Post* survey from the same time period found that 55% and 49% of Americans believed that transgender girls should not be *allowed* to participate in high school and youth sports, respectively (Bahrampour, Clement, and Guskin, 2022). This suggests that the framing of the policy as a restrictive formal policy or an informal norm may affect people's attitudes.
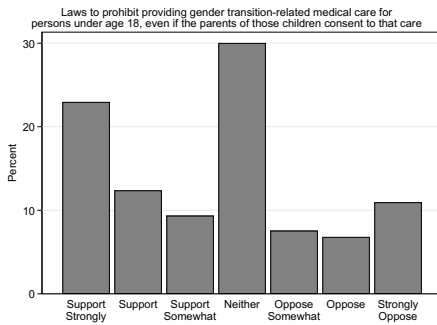
*Public Restrooms*
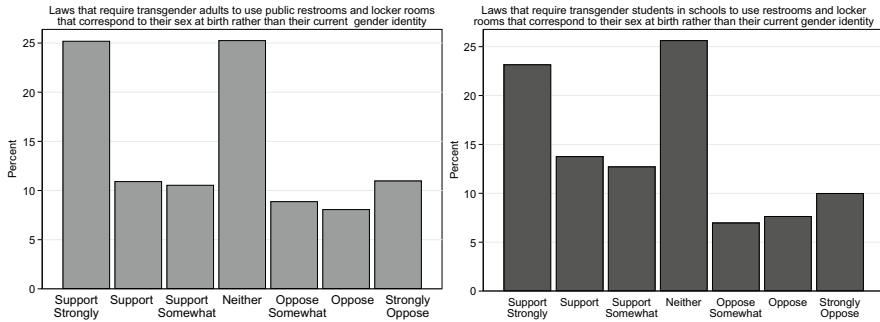


*K-12 Sports*
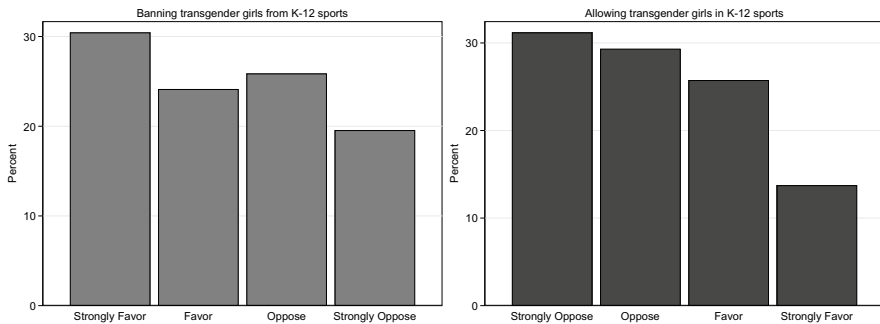


*Medical Transition Care for Children*



**Fig. 1** Attitudes toward Various Policies Related to Transgender Rights.

Attitudes toward medical transition care for children, an issue that has drawn increasing attention in state legislatures across the U.S. since 2021, were measured with an item asking respondents whether they support or oppose (seven-point response):

Proposed laws that would prohibit providing gender transition-related medical care for persons under age 18, even if the parents of those children consent to that care being provided.

As seen in bottom graph of Fig. 1, 44% of respondents report some level of support for prohibiting transition-related medical care for persons under age 18 even if the parents of those children consent to that care and 25% oppose to these restrictions. However, 30% of respondents neither support nor oppose these policies, reflecting a substantial amount of uncertainty on the issue.

Prior to asking about these issue attitudes, the survey included a set of items designed to measure the two primary explanatory variables in this study: LGBTQ cultural threat and perceptions of discrimination. The LGBTQ cultural threat scale was adapted from the cultural threat scale used in a study of prejudice toward immigrants (Stephan, Ibarra, and Bachman, 1999). We asked about the perceived threat posed by the broader LGBTQ community rather than transgender people specifically because Americans tend to include transgender people within this larger umbrella group (e.g., Lewis et al., 2017), which is also reflected in the LGBTQ movement's inclusion of transgender issues in recent years (Taylor & Lewis, 2014). While people do make distinctions between transgender rights and gay rights, there is evidence of similar underlying attitudinal structures (e.g., Lewis et al., 2017). Indeed, studies have shown that interpersonal contact with gays or lesbians has a positive effect on attitudes toward transgender people (Flores, 2015; Tadlock et al., 2017). Focusing on the umbrella LGBTQ group also allows us to measure a broader perception of threat that is less likely to be overlapping with a specific affect toward transgender people.

The LGBTQ cultural threat scale consists of three items asking how much respondents agree or disagree (seven-point response) with the following statements:

- LGBTQ people are undermining American culture.
- The values and beliefs of LGBTQ people regarding moral and religious issues are not compatible with the beliefs and values of most Americans.
- The values and beliefs of LGBTQ people regarding social relations are not compatible with the beliefs and values of most Americans.

These items were combined in an additive scale where each question was coded from zero to four so that higher scores indicate higher perceptions of threat ($\alpha = 0.86$). The resulting scale ranges from zero to twelve, with a mean score of 5.7 ($SD = 3.5$). As seen in Fig. 2, a plurality of respondents score in the middle of the scale, with additional peaks at the minimum and maximum. A greater percentage of people scored below the midpoint of the LGBTQ Cultural threat ccale (43%) than above the midpoint (39%).

Our measure of perception of discrimination focuses specifically on transgender people, asking people how much discrimination that transgender people experience in the United States today (a lot, some, only a little, or none at all).[2] Figure 2 plots the distribution of the scale, which shows that most respondents perceive relatively

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[2] Alternative models using perceptions of LGBT people, measured as the mean level of discrimination between transgender people and gay, lesbian, and bisexual people, produces similar results and do not affect our findings.
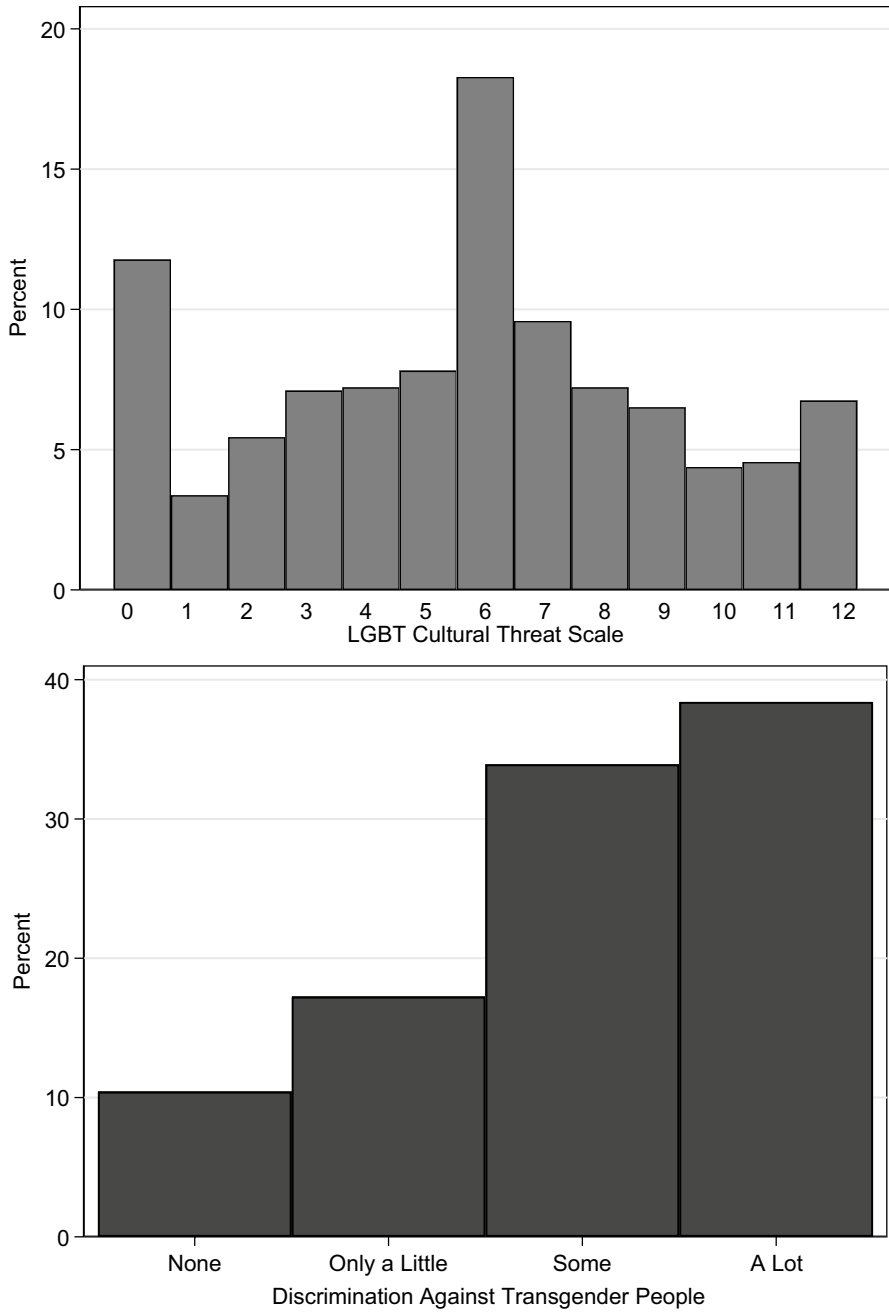
Fig. 2 LGBT Cultural Threat Scale and Perceived Discrimination against Transgender People.

high levels of discrimination against transgender people in American society. About 38 percent of respondents believed transgender people experienced "a lot" of discrimination, while another 34 percent reported "some" discrimination.

In addition, the analytical models account for psychological traits and predispositions that significantly shape attitudes toward transgender people and related issues (see Table B in the Supplementary Report for more information). Moral traditionalism, the degree to which people hold traditional moral values, is a consistent predictor of negative attitudes (Jones et al., 2018; Lewis et al., 2021; Taylor et al., 2018a, 2018b). It is measured with an additive scale ($\alpha = 0.65$) of four five-point items regarding moral changes in society adapted from the American National Election Studies (ANES, 2015), ranging from 4 to 20 with a mean of 11.8 ($SD = 3.3$).[3]

Authoritarianism, an individual's orientation toward conformity (Feldman & Stenner, 1997), also has a significant negative effect on attitudes toward transgender rights since these identities violate traditional gender norms (Casey, 2016; Miller et al., 2017; Norton & Herek, 2013). We use an additive scale ($\alpha = 0.71$), adapted from the ANES (2015) that includes eight binary-choice items regarding children's attributes, which ranges from 1 to 8 with a mean of 4.6 ($SD = 2.0$).

Egalitarianism, the support for promoting equality, is positively associated with support for transgender rights (Flores, 2020; Flores et al., 2020; Jones et al., 2018). The ANES (2015) derived measure is an additive scale ($\alpha = 0.67$) of four five-point items regarding equality and equity, ranging from 4 to 20 with a mean of 13.6 ($SD = 3.4$).

Disgust sensitivity, the extent to which people respond to aversive stimuli with emotions of disgust or repulsion, tends to elicit ingroup favoritism and negative outgroup attitudes (e.g., Faulkner et al., 2004; Miller, 2011). Disgust sensitivity has been linked to negative attitudes toward gays and lesbians (e.g., Haidt, 2001) as well as transgender people, especially as they related to policies that are "body-centric" (Miller et al., 2017). This trait is measured with an additive scale ($\alpha = 0.63$) of three four-point response items asking respondents how well statements regarding hygienic behavior describe them. This scale, adapted from Miller et al. (2017) ranges from 0 to 9 with a mean of 4.6 ($SD = 2.6$).

Given our attention to Social Identity Theory, the models include measures of interpersonal contact with LGBT people (e.g., Tadlock et al., 2017). We asked whether respondents have a close friend or family member who is transgender, with 16.5% of people reporting close contact. Since knowing someone who is gay or lesbian also affects attitudes toward transgender people (Flores, 2015; Tadlock et al., 2017), we also include a similar item for these groups, with 51.8% reporting close contact.

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[3] Factor analysis of the items on the Moral Traditionalism scale, shown in Supplementary Report Table D, reveals some overlap with the LGBTQ Cultural Threat Scale, specifically the items that mention "traditional family ties" and "newer lifestyles." As shown in Supplementary Report Table E–G, omitting those items from the moral traditionalism scale does not substantively change the result of the analyses presented here.

The models also include two standard political variables: ideology and partisan identification. Ideology is measured via a seven-point self-placement scale, ranging from very liberal to very conservative, with a mean of 4.0 (moderate/middle of the road) $(SD = 1.6)$. Partisan identification is derived from two questions about which party the respondent belongs to and the strength of their attachment. The resulting seven-point scale ranges from strong Democrat to strong Republican, with independents in the middle.

Finally, we account for religiosity and demographic characteristics. Religiosity is gauged by asking how frequently respondents attend religious services, ranging from "never" (0) to "several times a week" (8) with a mean of 3.2 (about "2–3 time a month") $(SD = 3.0)$. People with higher levels of religiosity tend to be less supportive of transgender rights, especially when it relates to religion-based refusal of services (Lewis et al., 2022). Educational attainment is measured as a five-point scale ranging from less than high school (1) to post-graduate degree (5) with 43% having a college degree or more. Since we analyze attitudes toward policies related to children and schools, the models include an indicator for parents of children under the age of 18, which covers 40% of respondents. Sex and transgender identity are measured with dichotomous indicators for females and transgender people. Age is measured in logged years, with a mean of 3.7 (about 44 years) $(SD = 0.3)$. Racial self-identification covers four categories: White or Caucasian (67.7%), Black or African-American (16.4%), Asian or Asian-American (8.0%), and some other race including multiracial (7.9%). Finally, a dichotomous indicator measures "Spanish, Hispanic, or Latino" identity (14.1%).

## Modelling Attitudes Toward Policies Related to Transgender Rights

We begin our analysis by estimating ordinal logistic regressions models of opposition to restrictive bathroom access policies. The results for the two bathroom items are presented in Table 1 and are consistent across the two models. LGBTQ cultural threat has a statistically significant negative association with opposition to restrictive bathroom policies for both adults and school children. Consistent with $H_1$, those that feel more threatened by the LGBTQ community are more likely to support bathroom policies that only allow access based one birth sex. As seen in Fig. 3, people with higher cultural threat scores are more likely to support restrictive policies than those who do not feel threatened. The predicted probability of supporting (somewhat support to strongly support) a restrictive policy for adults in public restrooms is 0.63 (95% CI: 0.58, 0.68) among those most threatened, compared to just 0.32 (95% CI: 0.28, 0.37) for those that feel least threatened. For school policies the corresponding predicted probabilities are 0.67 (95% CI: 0.62, 0.71) and 0.34 (95% CI: 0.30, 0.39), respectively. Importantly, these effects are evident even when accounting for the significant effects of moral traditionalism, which is also associated with support for restrictive restroom access policies in both models. As such, the effect of LGBTQ cultural threat is independent of general resistance to change in society that is being reflected by Moral Traditionalism, but rather shows the effects of perceived threat posed by a specific group.

**Table 1** Ordered Logit Models of Opposition to Restrictive Restroom Policies

| Variable | Restrooms—Adults | | Restrooms—Students | |
|---|---|---|---|---|
| | $b_i$ | $SE_b$ | $b_i$ | $SE_b$ |
| Cultural threat | − 0.124*** | (0.018) | − 0.134*** | (0.018) |
| Transgender discrimination | − 0.011 | (0.053) | 0.044 | (0.053) |
| Moral traditionalism | − 0.166*** | (0.021) | − 0.212*** | (0.022) |
| Authoritarianism | − 0.014 | (0.026) | − 0.029 | (0.026) |
| Egalitarianism | 0.064*** | (0.016) | 0.048** | (0.016) |
| Disgust sensitivity | − 0.051* | (0.020) | − 0.054** | (0.020) |
| Transgender contact | 0.211 | (0.140) | 0.345* | (0.139) |
| Gay/Lesbian contact | − 0.062 | (0.098) | − 0.126 | (0.099) |
| Ideology (L→C) | − 0.052 | (0.037) | − 0.073* | (0.036) |
| Partisanship (D→R) | − 0.055* | (0.028) | − 0.074** | (0.027) |
| Religious attendance | − 0.017 | (0.018) | − 0.005 | (0.018) |
| Education level | − 0.054 | (0.045) | − 0.066 | (0.046) |
| Parent | − 0.216* | (0.102) | − 0.106 | (0.103) |
| Female | 0.217* | (0.095) | 0.247** | (0.095) |
| Transgender | − 0.337 | (0.569) | 0.263 | (0.536) |
| Age (logged) | − 0.441** | (0.171) | − 0.388* | (0.172) |
| Black | 0.152 | (0.136) | 0.134 | (0.138) |
| Asian | 0.445** | (0.165) | 0.432** | (0.165) |
| Other race | 0.055 | (0.175) | 0.254 | (0.179) |
| Hispanic | − 0.003 | (0.139) | − 0.167 | (0.140) |
| Cut 1 | − 5.708 | (0.742) | − 6.635 | (0.743) |
| Cut 2 | − 5.058 | (0.738) | − 5.766 | (0.738) |
| Cut 3 | − 4.500 | (0.735) | − 5.083 | (0.734) |
| Cut 4 | − 3.150 | (0.731) | − 3.604 | (0.730) |
| Cut 5 | − 2.527 | (0.731) | − 3.039 | (0.730) |
| Cut 6 | − 1.744 | (0.731) | − 2.203 | (0.730) |
| Count $R^2$ | 0.396 | | 0.404 | |

The dependent variables are seven-point Support/Oppose responses. Higher values indicate stronger opposition to restrictive policies for transgender people. N = 1,580

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed)

However, perceived transgender discrimination is not a significant predictor of these attitudes, suggesting that people are not drawing on concerns about discrimination when forming opinions on this issue. Beyond the significant impact of LGBTQ cultural threat and moral traditionalism, the models reveal that respondents with egalitarian values and lower levels of disgust sensitivity are more opposed to restrictive bathroom policies. In addition, and consistent with state legislative trends, Republican respondents are more likely than Democrats to support restrictive policies.

Table 2 presents the results from models of attitudes toward *banning* and *allowing* transgender girls to participate in K-12 sports. As in the models of support for
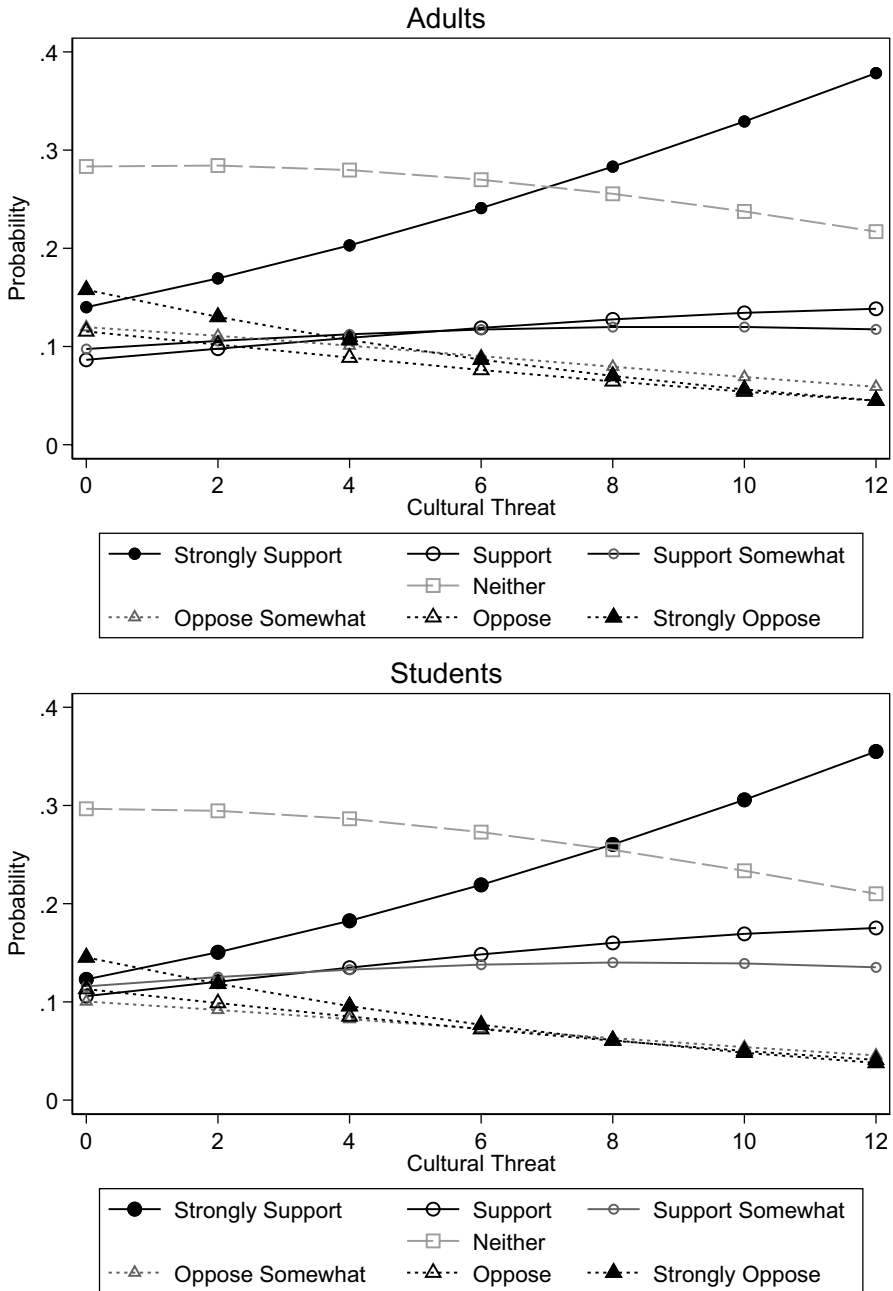
**Fig. 3** Average Predicted Margins by Cultural Threat, Public Restroom Policies.

**Table 2** Ordered Logit Models of Attitudes toward Transgender Girls in Sports

| Variable | Oppose bans on participation | | Support allowing participation | |
|---|---|---|---|---|
| | $b_i$ | $SE_b$ | $b_i$ | $SE_b$ |
| Cultural threat | − 0.134*** | (0.026) | − 0.001 | (0.027) |
| Transgender discrimination | − 0.044 | (0.078) | 0.294*** | (0.082) |
| Moral traditionalism | − 0.117*** | (0.031) | − 0.218*** | (0.032) |
| Authoritarianism | 0.056 | (0.039) | − 0.037 | (0.038) |
| Egalitarianism | 0.053* | (0.024) | − 0.022 | (0.024) |
| Disgust sensitivity | 0.012 | (0.028) | 0.081** | (0.030) |
| Transgender contact | 0.223 | (0.202) | 0.542** | (0.203) |
| Gay/Lesbian contact | − 0.140 | (0.145) | − 0.100 | (0.149) |
| Ideology (L→C) | − 0.045 | (0.052) | − 0.224*** | (0.056) |
| Partisanship (D→R) | 0.037 | (0.040) | − 0.158*** | (0.042) |
| Religious attendance | − 0.042 | (0.027) | 0.129*** | (0.027) |
| Education level | − 0.047 | (0.066) | − 0.044 | (0.069) |
| Parent | − 0.137 | (0.151) | 0.264 | (0.151) |
| Female | 0.551*** | (0.137) | 0.285* | (0.145) |
| Transgender | − 1.460 | (0.789) | 0.713 | (0.878) |
| Age (logged) | − 0.091 | (0.253) | − 0.201 | (0.259) |
| Black | 0.153 | (0.200) | − 0.529* | (0.204) |
| Asian | 0.275 | (0.240) | 0.085 | (0.241) |
| Other race | 0.350 | (0.266) | − 0.180 | (0.274) |
| Hispanic | − 0.159 | (0.205) | − 0.196 | (0.208) |
| Cut 1 | − 2.574 | (1.062) | − 5.003 | (1.112) |
| Cut 2 | − 1.358 | (1.058) | − 3.340 | (1.103) |
| Cut 3 | 0.054 | (1.058) | − 1.508 | (1.101) |
| N | 793 | | 787 | |
| *Count $R^2$* | 0.402 | | 0.465 | |

The dependent variables are four-point Favor/Oppose responses. Higher values indicate opposition to bans and support for allowing transgender girls to participate in K-12 sports

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

restrictive restroom policies, the effect of LGBTQ cultural threat on support for *banning* transgender girls from K-12 sports is statistically significant, but perceived transgender discrimination shows no impact. Indeed, beside moral traditionalism, egalitarianism, and gender, none of the other variables in the model are statistically significant. Even though restrictive sports participation policies have largely followed party lines, partisanship, ideology and religiosity do not significantly shape attitudes towards bans.

Instead, LGBTQ cultural threat shows a substantively large effect, as shown in Fig. 4. Respondents who feel more threatened by the LGBTQ community are more likely to support a ban. Those who feel most threatened have a 0.74 (95% CI: 0.67, 0.81) predicted probability of favoring or strongly favoring a ban on participation,
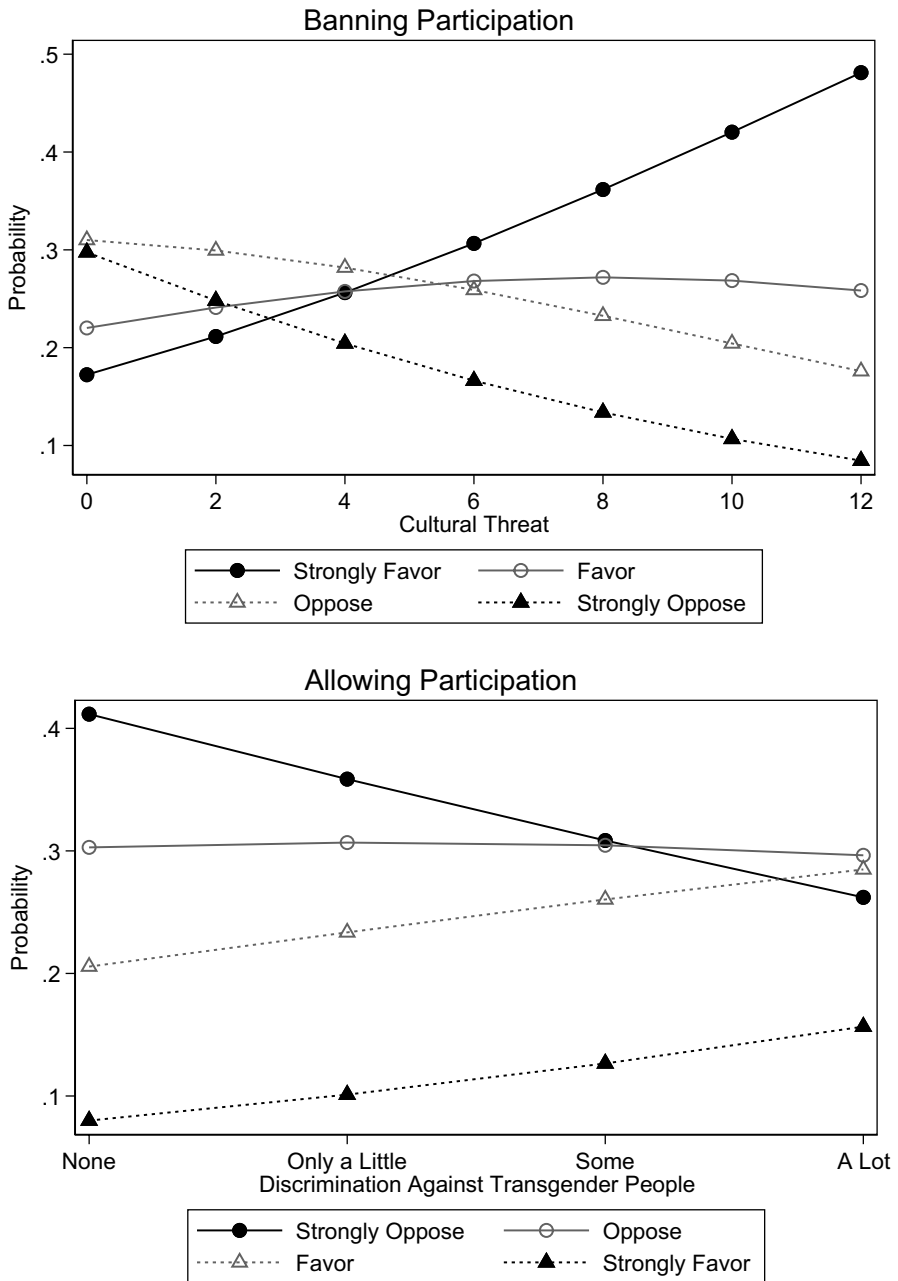
## Banning Participation



## Allowing Participation



**Fig. 4** Average Predicted Margins by Cultural Threat and Transgender Discrimination, Transgender Girls in K-12 Sports.

compared with just a 0.39 (95% CI: 0.32, 0.47) corresponding predicted probability for those that feel least threatened.

The results for the model of attitudes toward *allowing* transgender girls to participate in K-12 sports are markedly different from the question about *bans*. LGBTQ cultural threat does not have an influence, but perceptions of discrimination are significantly associated with support for transgender participation. In addition, factors like ideology, partisanship, religiosity and disgust sensitivity show significant effects.

The lower graph in Fig. 4 shows that respondents who perceive more discrimination are more likely to favor or strongly favor allowing transgender girls to participate in K-12 sports. Conversely, the predicted probability of opposing or strongly opposing participation of transgender girls declines from 0.71 (95% CI: 0.65, 0.78) for those that perceive no discrimination against transgender people to 0.56 (95% CI: 0.52, 0.60) for those that perceive the most discrimination. Notably, the predicted probabilities remain relatively high across all levels of perceived discrimination, reflecting the public's overall opposition to this policy.

To assess whether the differences in the results across the two models are statistically significant, we also estimated the two models simultaneously. This estimation approach allows for Wald chi-square tests of the equality of coefficients across the models. The results from this analysis, presented in Supplementary Report Table H, confirm that the coefficients for LGBTQ cultural threat and transgender discrimination vary significantly between the two models. In addition, these tests confirm other apparent differences in the effect size and statistical significance for several other coefficients across the two models, including moral traditionalism, egalitarianism, partisanship, and religious attendance. In all, the results support the argument that the framing of the question as a formal restrictive policy or an informal norm may change the considerations that people draw on in forming their opinions.

Finally, Table 3 presents the results of an ordered logit model of opposition to prohibitions on medical transition care for children. As expected, LGBTQ cultural threat has a significant negative association with attitudes regarding medical transition care for children. Respondents who feel more threatened by the LGBTQ community are more likely to support prohibitions. Figure 5 shows that the predicted probability of supporting (support somewhat to strongly support) a restrictive policy on medical transition care for children is 0.64 (95% CI: 0.59, 0.69) for respondents that feel most threatened, compared to just 0.28 (95% CI: 0.24, 0.33) for those that feel least threatened. As with formal restrictions on restrooms and bans on athletics, perception of discrimination against transgender people is not a significant predictor. Similar to the model of bans on athletic participation, disgust sensitivity, ideology, partisanship, and religiosity are not significant determinants of attitudes. Yet, in this model educational attainment and parental status are significantly associated with support for restrictions, suggesting some relatively unique factors are at play for this policy attitude.

**Table 3** Ordered Logit Model of Opposition to Bans on Transition Care for Children

| Variable | $b_i$ | $SE_b$ |
|---|---|---|
| Cultural threat | − 0.143*** | (0.018) |
| Transgender discrimination | 0.005 | (0.053) |
| Moral traditionalism | − 0.142*** | (0.022) |
| Authoritarianism | 0.001 | (0.026) |
| Egalitarianism | 0.090*** | (0.016) |
| Disgust sensitivity | − 0.005 | (0.020) |
| Transgender contact | 0.028 | (0.140) |
| Gay/Lesbian contact | − 0.084 | (0.099) |
| Ideology (L→C) | − 0.063 | (0.036) |
| Partisanship (D→R) | − 0.032 | (0.027) |
| Religious attendance | − 0.034 | (0.018) |
| Education level | − 0.137** | (0.046) |
| Parent | − 0.202* | (0.102) |
| Female | 0.026 | (0.095) |
| Transgender | 0.173 | (0.512) |
| Age (logged) | 0.183 | (0.173) |
| Black | 0.121 | (0.137) |
| Asian | 0.661*** | (0.166) |
| Other race | 0.109 | (0.184) |
| Hispanic | − 0.186 | (0.141) |
| Cut 1 | − 3.067 | (0.747) |
| Cut 2 | − 2.307 | (0.744) |
| Cut 3 | − 1.818 | (0.742) |
| Cut 4 | − 0.224 | (0.742) |
| Cut 5 | 0.338 | (0.743) |
| Cut 6 | 1.032 | (0.745) |
| Count $R^2$ | 0.414 | |

The dependent variable is a seven-point Support/Oppose response. Higher values indicate stronger opposition to prohibitions on medical transition care for children. $N = 1{,}580$

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

## Discussion and Conclusion

The results of our analyses support the argument that attitudes toward policies that target the rights of transgender people are significantly and consistently shaped by feelings of cultural threat. People who believe that American values are threatened by the LGBTQ community are more likely to support restrictive policies on access to public restrooms, bans on participation in athletics, and prohibitions on medical transition care for children. Strikingly, the strong impact of cultural threat is evident even when accounting for moral traditionalism and other factors that typically shape issue attitudes, such as partisanship, ideology and religiosity. This suggests that the
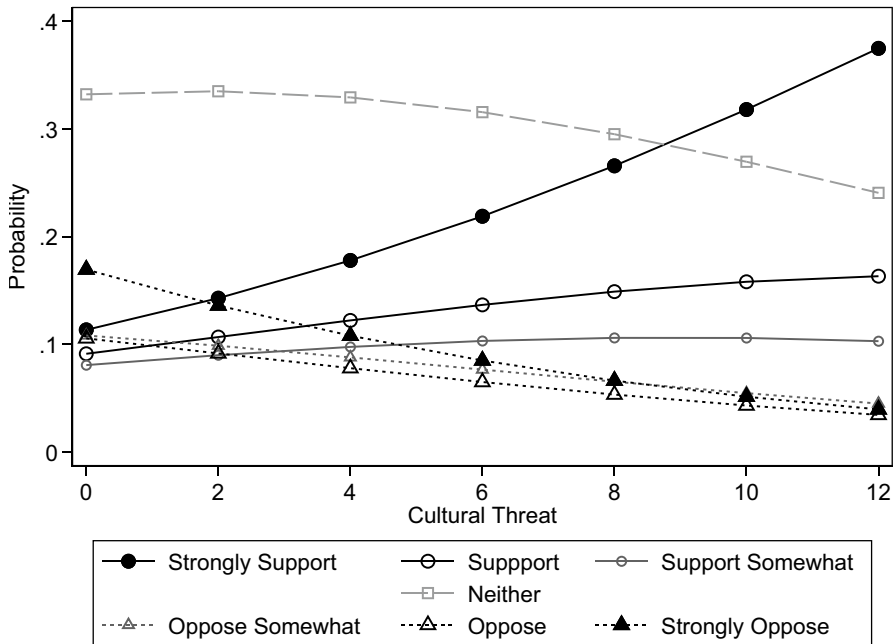
**Fig. 5** Average Predicted Margins by Cultural Threat, Prohibitions on Medical Transition Care for Children.

effect of LGBTQ cultural threat is not merely a resistance to change or a preference for traditional values in society, but rather a response to specific perceived threat from an outgroup.

Since cultural threat is based on negative group stereotypes and feelings of difference from outgroups, these feelings may be ameliorated through experiences and messaging that undermine negative stereotypes and emotions. This is consistent with studies that have found that interpersonal contact reduces transphobia (e.g., Tadlock et al., 2017). It also implies that messages emphasizing shared values and experiences, across groups may be effective in reducing negative attitudes toward transgender people. This mechanism may be at play in studies of perspective-taking tactics, especially those that use "perspective-getting" approaches that share an outgroup member's experiences with a member of a dominant ingroup (Kalla and Broockman, 2021).

Further, negative stereotypes of outgroups that underlie feelings of cultural threat may be undercut by deemphasizing social group boundaries, where people are viewed as individuals rather than members of outgroups. Research suggests that people rely less on stereotypes, feel less threatened, and may be more open to differences when considering individuals relative to groups (Riek et al., 2006). Both interpersonal contact and personal narratives (e.g., Flores et al., 2022) may foster this kind of decategorization.

Perceptions of discrimination against transgender people, however, does not appear to shape attitudes toward formal policies related to transgender rights.

This result may be evidence of disconnect between perceptions of discrimination against outgroups and the expected feelings of solidarity, sympathy, or empathy for transgender people that could foster positive attitudes. The literature on outgroup solidarity and empathy suggests that recognition of *shared* experiences of discrimination drive empathy for outgroups (e.g., Craig & Richeson, 2012; Sirin et al., 2016). However, the specific issues facing the transgender community, such as access to gender-segregated public bathrooms, school sports, and medical transition care, may not connect as clearly to shared experiences for most members of other groups in the post-Civil Rights Act of 1964 era given the ban on de jure discrimination in public accommodations and education settings. Indeed, most Americans alive today did not grow up in a country where bathroom and education access were legally and racially segregated. In addition, literature on sympathy and empathy suggest that some people may respond to the perception of the suffering of others egotistically by seeking to minimize their own stress rather than altruistically by seeking to support those need (e.g., Batson, et al., 2002). Together with work on empathic ability, this suggests that altruistic attitudinal effects of perceptions of discrimination may vary across individual traits. Future work on group empathy should consider how shared experiences and psychological traits condition the effects of perceptions of discrimination on attitudes toward outgroups.

The only model that produced a statistically significant coefficient for Transgender Discrimination was support for *allowing* transgender girls to participate in K-12 sports. Notably, the phrasing of this item in using "allowing" rather than a reference to a more formal policy like a law, may have invoked a different set of considerations than the item that asked about a more formal ban, including the government taking action versus no government intervention. Other differences in coefficients, such as the significant effects of partisanship and ideology, underscore the substantial changes that this framing has on attitude formation about informal norms relative to formal laws. Indeed, the shift in framing not only seems to activate different considerations, but it also affects aggregate levels of support. Americans appear much more opposed to *allowing* transgender girls to participate in K-12 sports than they are supportive of legal bans on their participation.

The significant effect of cultural threat on support for *banning* participation is consistent with the other issue attitudes, each of which asks about a formal restriction on rights of transgender people. It appears that a sense of LGBTQ cultural threat is influencing people to support policies that would force transgender people to acculturate to the dominant cisgender culture and limit the impact of the group's cultural impact. Yet when framed as whether to "allow participation" respondents may see the policy statement as a less formal restriction and more of a question of best practices, which may explain the higher level of opposition to inclusive policy. In this way, a sense of cultural threat may be less relevant for attitude formation, but perceptions of discrimination may be more central in deciding whether transgender girls should be allowed to participate in K-12 sports. For respondents that believe that transgender people face a lot of discrimination, allowing participation in sports may be an appropriate way to reduce that discrimination.

These findings provide insight into the foundations of negative attitudes toward transgender rights and may help extend work on tactics to reduce transgender bias.

While possible empathizing effects of perceived outgroup discrimination underscores the potential for perspective-taking tactics that successfully shifted attitudes (e.g., Broockman & Kalla, 2016), we find limitations when the issue at stake may not be relatable to members of other groups. Medical transition care is an issue where there are not parallel concerns for most other groups in society. For bathroom access and sports participation in schools, there are obvious historic parallels, but these are likely viewed as something from the history books for most people. This may present considerable hurdles in challenging recent legislation banning transgender girls from school sports, regulating bathroom access, and restricting medical transition care for children. Yet, the consistency of the impact of cultural threat suggests that communicating shared values could help to reduce negative attitudes toward transgender people. Indeed, advocates for transgender rights have seen success when highlighting core American values like equality, fairness, and liberty (Taylor et al., 2018a, 2018b). If people perceive that the values underlying transgender rights advocates' policy goals are consistent with their own value system, then perceptions of threat may decrease and attitudes about transgender rights could improve.

An emphasis on shared values across groups as a way to reduce feelings of outgroup threat may be particularly important as state legislatures controlled by Republicans increasingly have turned their attention to passing restrictive policies that exacerbate perceptions of threat by the transgender community. Since 2022, when this survey was fielded, 8 states with Republican dominated governments enacted restrictions on access to public restrooms, 14 states instituted bans on transgender youth participation in sports, and 21 passed restrictions on medical transition care for children (Movement Advancement Project 2023). Though the models of attitudes toward these policies does not consistently find a significant effect for partisan identity, the more party elites stake out clear positions on these issues, the more powerful those cues will likely become in affecting public attitudes (Jones et al., 2018; Lewis et al., 2022). Thus, the ability to mitigate and reduce cultural threat through communicating shared values may be an important avenue to reduce transphobia in an increasingly partisan policy environment. Such a strategy echoes that followed by the gay rights movement when it promoted sameness with heterosexuals as an avenue to political and social change during the fight for same-sex marriage (Ghazani, Taylor, and Stone 2016).

## Declarations

**Consent to participate** Informed consent was obtained from all individual participants included in the study.

# References

Abrajano, M., & Hajnal, Z. (2015). *White Backlash: Immigration, Race, and American Politics*. Princeton University Press.

Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology, 18*(4), 317–334.

Adorno, T., Frenkel-Brenswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The Authoritarian Personality*. Verso Books.

American National Election Studies. (2015). User's guide and codebook for the ANES 2012 Time Series Study. Retrieved from https://electionstudies.org/wp-content/uploads/2012/02/anes_timeseries_2012_userguidecodebook.pdf 14 December 2019.

Ashley, F. (2020). A critical commentary on 'rapid-onset gender dysphoria.' *The Sociological Review, 68*(4), 779–799.

Bahrampour, T., Clement, S., and Guskin. E. (2022). Most Americans Oppose Trans Athletes in Female Sports, Poll Finds. *Washington Post*, June 15, 2022. https://www.washingtonpost.com/dc-md-va/2022/06/13/washington-post-umd-poll-most-americans-oppose-transgender-athletes-female-sports/.

Batson, C. D. (2011). *Altruism in Humans*. Oxford University Press.

Batson, C. D., Chang, J., Orr, R., & Rowland, J. (2002). Empathy, attitudes, and action: Can feeling for a member of a stigmatized group motivate one to help the group? *Personality and Social Psychology Bulletin, 28*(12), 1656–1666.

Becker, A. B., & Jones, P. E. (2021). Experience with discrimination, perceptions of difference, and the importance of gender conformity on support for transgender rights. *Politics, Groups, and Identities, 9*(5), 1051–1067.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*(4), 354–364.

Blumer, H. (1958). Race prejudice as a sense of group position. *Pacific Sociological Review, 1*(1), 3–7.

Bobo, L., & Hutchings, V. L. (1996). Perceptions of racial group competition: Extending Blumer's theory of group position to a multiracial social context. *American Sociological Review, 61*(6), 951–972.

Bobo, L., & Kluegel, J. R. (1993). Opposition to race-targeting: self-interest, stratification ideology, or racial attitudes? *American Sociological Review, 58*(4), 443–464.

Brady, H. E., & Sniderman, P. M. (1985). Attitude attribution: A group basis for political reasoning. *American Political Science Review, 79*(4), 1061–1078.

Branton, R. P., & Jones, B. S. (2005). Reexamining racial attitudes: The conditional relationship between diversity and socioeconomic environment. *American Journal of Political Science, 49*(2), 359–372.

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

Casey, L. (2016). Emotional Agendas: Disgust and the Dynamics of LGBT Politics. Ph.D. diss., University of Michigan

Castle, J. (2019). New fronts in the culture wars? Religion, partisanship, and polarization on religious liberty and transgender rights in the United States. *American Politics Research, 47*(3), 650–679.

Chudy, J. (2021). Racial sympathy and its political consequences. *The Journal of Politics, 83*(1), 122–136.

Conover, P. J. (1988). The role of social groups in political thinking. *British Journal of Political Science, 18*(1), 51–76.

Cottrell, C. A., Richards, D. A. R., & Nichols, A. L. (2010). Predicting policy attitudes from general prejudice versus specific intergroup emotions. *Journal of Experimental Social Psychology, 46*(2), 247–254.

Craig, M. A., & Richeson, J. A. (2012). Coalition or derogation? How perceived discrimination influences intraminority intergroup relations. *Journal of Personality and Social Psychology, 102*(4), 759–777.

Currah, P., Juang, R., & Minter, S. (2006). *Transgender Rights*. University of Minnesota Press.

Davis, M. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*, 113–126.

DeBell, M., Wilson, C., Segura, G., Jackman, S., & Hutchings, V. (2011). *Methodology Report and User's Guide for the ANES 2010–2012 Evaluations of Government and Society Study*. Stanford University.

Dinas, E., Fouka, V., & Schläpfer, A. (2021). Recognition of collective victimhood and outgroup prejudice. *Public Opinion Quarterly, 85*(2), 517–538.

Faulkner, J., Schaller, M., Park, J. H., & Duncan, L. A. (2004). Evolved disease-avoidance mechanisms and contemporary xenophobic attitudes. *Group Processes & Intergroup Relations, 7*(4), 333–353.

Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology, 18*(4), 741–770.

Finlay, K. A., & Stephan, W. G. (2000). Improving intergroup relations: The effects of empathy on racial attitudes1. *Journal of Applied Social Psychology, 30*(8), 1720–1737.

Flores, A. R. (2015). Attitudes toward transgender rights: Perceived knowledge and secondary interpersonal contact. *Politics, Groups, and Identities, 3*(3), 398–416.

Flores, A. R. (2020). *Attitudes toward LGBT Rights: Political Tolerance and Egalitarian Values in the United States. In Oxford Research Encyclopedia of Politics*. Oxford University Press.

Flores, A., Boden, D., Haider-Markel, D., Lewis, D., Miller, P., & Taylor, J. (2023). Taking perspective of the stories we tell about transgender rights: The narrative policy framework. *Policy Studies Journal, 51*(1), 123–143.

Flores, A. R., Haider-Markel, D. P., Lewis, D. C., Miller, P. R., Tadlock, B. L., & Taylor, J. K. (2018). Transgender prejudice reduction and opinions on transgender rights: Results from a mediation analysis on experimental data. *Research & Politics*. https://doi.org/10.1177/2053168018764945

Flores, A. R., Haider-Markel, D. P., Lewis, D. C., Miller, P. R., Tadlock, B. L., & Taylor, J. K. (2020). Public attitudes about transgender participation in sports: The roles of gender, gender identity conformity, and sports fandom. *Sex Roles, 83*(5), 382–398.

Flores, A. R., Haider-Markel, D. P., Lewis, D. C., Miller, P. R., & Taylor, J. K. (2021). Antidiscrimination interventions, political ads on transgender rights, and public opinion: Results from two survey experiments on adults in the United States. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2021.729322

Flores, A. R., Haider-Markel D. P., Lewis, D. C., Miller, P. R., and Taylor, J. K. (2022). Analysis | Americans Aren't Asking for Transgender Sports Bans. So Why Pass Them? *Washington Post*, May 23, 2022. https://www.washingtonpost.com/politics/2022/05/24/transgender-sports-bans-public-opinion-republicans/.

Galanis, C. M. B., & Jones, E. E. (1986). When stigma confronts stigma: Some conditions enhancing a victim's tolerance of other victims. *Personality and Social Psychology Bulletin, 12*(2), 169–177.

Galinsky, A. D., & Moskowitz, G. B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology, 78*(4), 708–724.

Ghaziani, A., Taylor, V., & Stone, A. (2016). Cycles of sameness and difference in LGBT social movements. *Annual Review of Sociology, 42*(1), 165–183.

Giles, M. W., & Evans, A. (1986). The power approach to intergroup hostility. *Journal of Conflict Resolution, 30*(3), 469–486.

Glaser, J. M. (1994). Back to the black belt: Racial environment and white racial attitudes in the south. *The Journal of Politics, 56*(1), 21–41.

Haider-Markel, D. P., & Joslyn, M. R. (2018). Not threat, but threatening: Potential causes and consequences of gay innumeracy. *Journal of Homosexuality, 65*(11), 1527–1542.

Haider-Markel, D. P., Miller, P. R., Flores, A. R., Lewis, D. C., Tadlock, B. L., & Taylor, J. K. (2017). Bringing 'T' to the table: Understanding individual support of transgender candidates for public office. *Politics, Groups, and Identities, 5*(3), 399–417.

Haider-Markel, D. P., Taylor, J. K., Flores, A. R., Lewis, D. C., Miller, P. R., & Tadlock, B. L. (2019). Morality politics and new research on transgender politics and public policy. *The Forum, 17*(1), 159–181.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*(4), 814.

Harth, N. S., Kessler, T., & Leach, C. W. (2008). Advantaged group's emotional reactions to intergroup inequality: The dynamics of pride, guilt, and sympathy. *Personality and Social Psychology Bulletin, 34*(1), 115–129.

Herman, J. L., Flores, A. R., and O'Neill, K. K. (2022). *How Many Adults and Youth Identify as Transgender in the United States?* Los Angeles, CA: The Williams Institute. Accessed August 8, 2022 from https://williamsinstitute.law.ucla.edu/wp-content/uploads/Trans-Pop-Update-Jun-2022.pdf.

Huddy, L. (2001). From social to political identity: A critical examination of social identity theory. *Political Psychology, 22*(1), 127–156.

James, S., Herman, J., Rankin, S., Keisling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality. Accessed July 27, 2022 from https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf

Jardina, A. (2019). *White Identity Politics*. Cambridge University Press.

Jones, P. E., & Brewer, P. R. (2020). Elite cues and public polarization on transgender rights. *Politics, Groups, and Identities, 8*(1), 71–85.

Jones, P. E., Brewer, P. R., Young, D. G., Lambe, J. L., & Hoffman, L. H. (2018). Explaining public opinion toward transgender people, rights, and candidates. *Public Opinion Quarterly, 82*(2), 252–278.

Kalkan, K. O., Layman, G. C., & Green, J. C. (2018). Will Americans vote for muslims? Cultural outgroup antipathy, candidate religion, and US voting behavior. *Politics and Religion, 11*(4), 798–829.

Kalkan, K. O., Layman, G. C., & Uslaner, E. M. (2009). 'Bands of others'? Attitudes toward muslims in contemporary American society. *The Journal of Politics, 71*(3), 847–862.

Kalla, J. L., & Broockman, D. E. (2020). Reducing exclusionary attitudes through interpersonal conversation: Evidence from three field experiments. *American Political Science Review, 114*(2), 410–425.

Kalla, J. L., & Broockman, D. E. (2023). Which narrative strategies durably reduce prejudice? Evidence from field and survey experiments supporting the efficacy of perspective-getting. *American Journal of Political Science, 67*(1), 185–204.

Kinder, D. R., & Sears, D. O. (1981). Prejudice and politics: Symbolic racism versus racial threats to the good life. *Journal of Personality and Social Psychology, 40*(3), 414–431.

Kuo, A., Malhotra, N., & Mo, C. H. (2017). Social exclusion and political identity: The case of Asian American partisanship. *The Journal of Politics, 79*(1), 17–32.

Lewis, D. C., Flores, A. R., Haider-Markel, D. P., Miller, P. R., Tadlock, B. L., & Taylor, J. K. (2017). Degrees of acceptance: Variation in public attitudes toward segments of the LGBT community. *Political Research Quarterly, 70*(4), 861–875.

Lewis, D. C., Tadlock, B. L., Flores, A. R., Haider-Markel, D. P., Miller, P. R., & Taylor, J. K. (2021). Public attitudes on transgender military service: The role of gender. *Armed Forces & Society, 47*(2), 276–297.

Lewis, D. C., Flores, A. R., Haider-Markel, D. P., Miller, P. R., & Taylor, J. K. (2022). Transitioning opinion? Assessing the dynamics of public attitudes toward transgender rights. *Public Opinion Quarterly, 86*(2), 343–368.

Marchiano, L. (2017). Outbreak: On transgender teens and psychic epidemics. *Psychological Perspectives, 60*(3), 345–366.

Mangum, M., & DeHaan, L. (2019). Entitlement and perceived racial discrimination: The missing links to white opinions toward affirmative action and preferential hiring and promotion. *American Politics Research, 47*(2), 415–442.

Meeusen, C., Abts, K., & Meuleman, B. (2019). Between solidarity and competitive threat? The ambivalence of anti-immigrant attitudes among ethnic minorities. *International Journal of Intercultural Relations, 71*(July), 1–13.

Michelson, M. R., & Harrison, B. F. (2020). *Transforming Prejudice: Identity, Fear, and Transgender Rights*. Oxford University Press.

Miller, P. R. (2011). The emotional citizen: Emotion as a function of political sophistication. *Political Psychology, 32*(4), 575–600.

Miller, P. R., Flores, A. R., Haider-Markel, D. P., Lewis, D. C., Tadlock, B. L., & Taylor, J. K. (2017). Transgender politics as body politics: Effects of disgust sensitivity and authoritarianism on transgender rights attitudes. *Politics, Groups, and Identities, 5*(1), 4–24.

Nadler, A., Harpaz-Gorodeisky, G., & Ben-David, Y. (2009). Defensive helping: Threat to group identity, ingroup identification, status stability, and common group identity as determinants of intergroup help-giving. *Journal of Personality and Social Psychology, 97*, 823–834.

Newman, B. J. (2013). Acculturating contexts and anglo opposition to immigration in the United States. *American Journal of Political Science, 57*(2), 374–390.

Norton, A. T., & Herek, G. M. (2013). Heterosexuals' attitudes toward transgender people: Findings from a National Probability Sample of US Adults. *Sex Roles, 68*(11), 738–753.

Paris, Francesca. 2023. Bans on Transition Care for Young People Spread Across U.S. *The New York Times*, April 15. Accessed: https://www.nytimes.com/2023/04/15/upshot/bans-transgender-teenagers.html

Pierceson, J. (2019). *LGBTQ Americans in the U.S. Political System: An Encyclopedia of Activists, Voters, Candidates, and Officeholders.* New York: ABC-CLIO.

Rabinowitz, J. L., Sears, D. O., Sidanius, J., & Krosnick, J. A. (2009). Why do white americans oppose race-targeted policies? Clarifying the impact of symbolic racism. *Political Psychology, 30*(5), 805–828.

Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review, 10*(4), 336–353.

Schmitt, M. T., & Branscombe, N. R. (2002). The meaning and consequences of perceived discrimination in disadvantaged and privileged social groups. *European Review of Social Psychology, 12*(1), 167–199.

Sears, D. O. (1988). Symbolic Racism. In P. A. Katz & D. A. Taylor (Eds.), *Eliminating Racism: Profiles in Controversy* (pp. 53–84). Springer, US.

Sharrow, E. A. (2021). Sports, transgender rights and the bodily politics of cisgender supremacy. *Laws, 10*(3), 63.

Sirin, C. V., Valentino, N. A., & Villalobos, J. D. (2016). Group empathy theory: The effect of group empathy on US intergroup attitudes and behavior in the context of immigration threats. *The Journal of Politics, 78*(3), 893–908.

Sirin, C. V., Valentino, N. A., & Villalobos, J. D. (2017). The social causes and political consequences of group empathy. *Political Psychology, 38*(3), 427–448.

Sirin, C. V., Valentino, N. A., & Villalobos, J. D. (2021). *Seeing us in them: Social divisions and the politics of group empathy*. Cambridge University Press.

Sniderman, P. M., & Hagendoorn, L. (2009). *When Ways of Life Collide: Multiculturalism and Its Discontents in the Netherlands*. Princeton University Press.

Stephan, W. G., Ybarra, O., & Bachman, G. (1999). Prejudice toward immigrants. *Journal of Applied Social Psychology, 29*(11), 2221–2237.

Tadlock, B. L., Flores, A. R., Haider-Markel, D. P., Lewis, D. C., Miller, P. R., & Taylor, J. K. (2017). Testing contact theory and attitudes on transgender rights. *Public Opinion Quarterly, 81*(4), 956–972.

Tajfel, H. (1974). Social identity and intergroup behavior. *Social Science Information, 13*(2), 65–93.

Tajfel, H. (1981). *Human groups and social categories*. Cambridge University Press.

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology, 33*(1), 1–39.

Tajfel, H., and Turner, J. (1979). An integrative theory of intergroup conflict. In W. G. Austin and S. Worchel (Eds.), *The social psychology of intergroup relations, pp.* 33– 47. Monterey, CA: Brooks/Cole

Taylor, J. K., Haider-Markel, D. P., & Lewis, D. C. (2018a). *The Remarkable Rise of Transgender Rights*. University of Michigan Press.

Taylor, J. K., & Lewis, D. C. (2014). The Advocacy Coalition Framework and Transgender Inclusion in LGBT Rights Activism. In J. K. Taylor & D. P. Haider-Markel (Eds.), *Transgender Rights and Politics: Groups, Issue Framing, and Policy Adoption* (pp. 108–134). Oxford University Press.

Taylor, J. K., Lewis, D. C., Flores, A. R., Haider-Markel, D. P., Miller, P. R., & Tadlock, B. L. (2018b). Public Opinion about Transgender People and Policies. In J. K. Taylor, D. C. Lewis, & D. P. Haider-Markel (Eds.), *The Remarkable Rise of Transgender Rights* (pp. 61–86). University of Michigan Press.

TransAthlete.com. (2023). High School Transgender Athlete Policies. TransAthlete. Accessed May 25, 2023. https://www.transathlete.com/k-12

Tuch, S. A., & Hughes, M. (1996). Whites' racial policy attitudes. *Social Science Quarterly, 77*(4), 723–745.

Vanaman, M. E., & Chapman, H. A. (2020). Disgust and disgust-driven moral concerns predict support for restrictions on transgender bathroom access. *Politics and the Life Sciences, 39*(2), 200–214.