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Multilevel Stigma and Depression Among a National Sample of Black and Latinx LGBTQ+ Adolescents in the United States

Skyler D. Jackson[1], Tyler D. Harvey[2], Ryan J. Watson[3], Kobe Pereira[4], and Kirsty A. Clark[5]

[1] Department of Social and Behavioral Sciences, Yale School of Public Health
[2] Department of Internal Medicine, SEICHE Center for Health and Justice, Yale School of Medicine
[3] Department of Human Development and Family Sciences, University of Connecticut
[4] Department of Sociomedical Sciences, Columbia Mailman School of Public Health, Columbia University
[5] Department of Medicine, Health, and Society, Vanderbilt University

Limited research has examined how multiple forms of oppression (e.g., racism, heterosexism, transphobia)—manifesting across multiple levels (e.g., interpersonal, structural)—can place Black and Latinx lesbian, gay, bisexual, transgender, queer, and other sexual/gender minority (LGBTQ+) adolescents at increased risk for internalizing psychopathology, including depression. Utilizing a national sample of 2,561 Black and Latinx LGBTQ+ adolescents (aged 13–17), we examined associations among depressive symptoms and several adolescent-focused manifestations of stigma, including: (a) interpersonal racial/ethnic bullying, (b) interpersonal sexual orientation bullying, (c) nine state-level forms of structural stigma or protection for LGBTQ+ adolescents, and (d) a new adolescent-focused composite index of state-level anti-LGBTQ+ structural stigma. Racial/ethnic bullying and sexual orientation bullying were found to be prevalent among the sample and were associated—both independently and jointly—with increased depressive symptoms. One harmful state-level anti-LGBTQ+ structural stigma indicator (i.e., anti-LGBTQ+ community attitudes) and seven protective state-level anti-LGBTQ+ structural stigma indicators (e.g., conversion therapy bans) were associated with odds of depressive symptoms, in the expected directions. Black and Latinx LGBTQ+ adolescents residing in states with greater overall anti-LGBTQ+ structural stigma reported increased depressive symptoms, even when adjusting for racial/ethnic and sexual orientation bullying. Additionally, Black and Latinx LGBTQ+ adolescents living in the most stigmatizing states demonstrated 32% increased odds of depressive symptoms, as compared to those living in the most LGBTQ+ affirming states. Multilevel, intersectional interventions could have optimal effects on the mental health and resilience of Black and Latinx LGBTQ+ adolescents.

Skyler D. Jackson https://orcid.org/0000-0002-0353-7992

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Correspondence concerning this article should be addressed to Skyler D. Jackson, Department of Social and Behavioral Sciences, Yale School of Public Health, 60 College Street, New Haven, CT 06510, United States. Email: skyler.jackson@yale.edu

General Scientific Summary

The mental health problems of U.S. Black and Latinx lesbian, gay, bisexual, transgender, queer, and other sexual/gender minority (LGBTQ+) adolescents may be driven, in part, due to their exposure to multiple, interlocking forms of oppression (e.g., racism, heterosexism, transphobia) manifesting at multiple levels (e.g., interpersonal, structural). This study finds that depressive symptoms among Black and Latinx LGBTQ+ adolescents (aged 13–17) are predicted by (a) their exposure to racial/ethnic and sexual orientation bullying and (b) the level of anti-LGBTQ+ structural stigma (e.g., low density of Gender–Sexuality Alliances, absence of a conversion therapy ban, lack of nondiscrimination legislation) in their state.

Keywords: structural stigma, LGBTQ+ adolescents, Black and Latinx adolescents, bullying, depression

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In recent decades, social scientists have generated a substantial body of scholarship underscoring the deleterious relationship between stigma and mental health (Meyer, 2003; Pascoe & Smart Richman, 2009; Valentine & Shipherd, 2018). Taken together, this work has advanced the scientific understanding of the populations most impacted by stigma's reach—and the myriad pathways through which it can drive and exacerbate mental health disorders, such as depression (Clark et al., 1999; Hatzenbuehler, 2009). Such scholarship highlights that the compromised health outcomes often demonstrated by marginalized populations—including lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities (LGBTQ+) and people of color—are driven, in part, by their elevated exposure to stigmatization at various levels (Hatzenbuehler, 2014; Paradies, 2006). In other words, not only does stigma occur across multiple dimensions (e.g., racism, sexism, homophobia, transphobia), but also at multiple levels of society, including but not limited to interpersonal stigma (e.g., everyday discrimination, bias-motivated violence) and structural stigma (e.g., oppressive laws and community norms; Link & Phelan, 2001).

Adolescents are not immune to the health-eroding effects of stigma (Hatzenbuehler & Pachankis, 2016; Russell et al., 2012). To the contrary, by virtue of their dependent legal status and sensitive developmental stage, young people are vulnerable to the detrimental psychological effects of interpersonal and structural stigma (Earnshaw et al., 2022; Erikson, 1994; Gee et al., 2012). Given their multiple marginalized statuses, Black and Latinx LGBTQ+ individuals are at elevated risk for experiencing stigma during adolescence (Grollman, 2012)—a period when identity and belonging are paramount and threats to either are particularly damaging (Russell & Fish, 2019; Tarrant et al., 2001). Black and Latinx LGBTQ+ adolescents may also be navigating important—albeit stressful—identity management milestones during adolescence, such as resolving identity conflicts between their existing (e.g., race/ethnicity, religion) and emerging (e.g., gender identity, sexual orientation) social identities (Jackson et al., 2021; Sarno et al., 2015) and potential threats to belonging as they come out to peers or family members as LGBTQ+ (Russell & Fish, 2019). Unfortunately, research suggests stigma-related stressors endured by racial/ethnic and sexual/gender minorities during the early stages of life are determinants of psychological adjustment in young adulthood and across the lifespan (Gee et al., 2012; Mustanski et al., 2016), including among Black and Latinx LGBTQ+ people (Díaz et al., 2001; Quinn, 2022). The deleterious and far-reaching mental health influence of discrimination during adolescence highlights the critical need for greater investment in stigma-health research among multiply marginalized adolescent populations in the United States.

Scholars of intersectionality (Collins, 1990; Crenshaw, 1989) implore those interested in understanding the harms of stigma to grapple with the complex ways multiple systems of power and oppression interact to jointly construct the lives of marginalized populations. However, little research examines the associations between multiple forms of oppression and depressive symptoms among Black and Latinx LGBTQ+ adolescents (A. B. Mallory & Russell, 2021). Particularly absent are studies examining how oppression manifests across multiple levels to place Black and Latinx LGBTQ+ adolescents at increased risk for depression (English et al., 2022). The present study aims to address these research gaps by (a) examining whether various forms of stigma—manifesting across multiple domains (e.g., race/ethnicity, sexual orientation) and levels (e.g., interpersonal, structural)—are associated with depression among a large national sample of Black and Latinx LGBTQ+ adolescents and (b) developing and testing a new, adolescent-focused composite index of state-level LGBTQ+ structural stigma.

Stigma as a Fundamental Cause of LGBTQ+ Adolescent Mental Health Disparities

LGBTQ+ adolescents are at heightened risk for experiencing depression as compared to cisgender and heterosexual adolescents (Argyriou et al., 2021; Valentine & Shipherd, 2018). Studies of adolescent mental health disparities demonstrate that sexual minority adolescents are nearly three times more likely to report depression than heterosexual adolescents (Lucassen et al., 2017). Similarly, compared to their heterosexual cisgender counterparts, heterosexual transgender adolescents are three times more likely to report past-year depression; transgender adolescents who identify as lesbian, gay, or bisexual (LGB) are six times more likely to do so (Guz et al., 2021).

Disparities based on sexual orientation and gender identity are explained in part by theories of LGBTQ+ stigma-related stress (V. R. Brooks, 1981; Hatzenbuehler, 2009; Hendricks & Testa, 2012; Meyer, 2003), which posit that LGBTQ+ individuals are exposed to health-eroding forms of stigma-related stressors that are not experienced by cisgender heterosexual individuals (e.g., anti-LGBTQ+ discrimination). Accumulating evidence supports these conceptual models, demonstrating that stigma-related stress plays a critical role in producing and maintaining poor mental health

outcomes among LGBTQ+ young people (Hatzenbuehler & Pachankis, 2016). Today, it is widely accepted that stigma has a far-reaching influence over the well-being of LGBTQ+ adolescents via these modifiable stigma-related pathways.

Critical gaps exist within the current body of research on stigma and mental health. Research examining stigma as a determinant of health among LGBTQ+ individuals has disproportionately focused on individual and interpersonal manifestations of stigma—overlooking the role of structural stigma (Hatzenbuehler, 2014). Additionally, despite increasing calls for LGBTQ+ mental health research that encompasses the multiple manifestations of stigma that shape the health outcomes of LGBTQ+ people of color (English et al., 2022; A. B. Mallory & Russell, 2021; Thoma & Huebner, 2013), such investigations typically assess one aspect of stigma (e.g., heterosexism) in isolation from other relevant forms of stigma (e.g., racism). These gaps—and the research beginning to address them—are discussed below.

Anti-LGBTQ+ Structural Stigma

Within the United States, recent decades have featured numerous sociopolitical battles—as well as significant state-level legislative changes and rapid attitudinal shifts—concerning the rights and inclusion of LGBTQ+ people (Russell & Fish, 2019). As a result, substantial state-level variation exists concerning the structural conditions for LGBTQ+ adolescents. For example, community-level norms and attitudes about the acceptability of LGBTQ+ people differ by state (Hatzenbuehler, 2014). Additionally, many states include sexual orientation and gender identity within their nondiscrimination and antibullying policies (Movement Advancement Project, 2021). Some states have introduced bans against conversion therapy, the pseudoscientific practice of attempting to change one's sexual orientation to heterosexual or gender identity/expression to cisgender (C. Mallory et al., 2019). On the other hand, select states have introduced legislation that may be harmful to the mental health of LGBTQ+ adolescents, such as laws that restrict or prohibit LGBTQ+ inclusive curriculum and discussion of LGBTQ+ issues in schools (e.g., "Don't Sat Gay" legislation; Rosky, 2017).

Few investigations have focused on anti-LGBTQ+ structural stigma and depression, in part because, until recently, few measures of anti-LGBTQ+ structural stigma existed (Hatzenbuehler, 2017). However, the emergence of such measures has illuminated that LGBTQ+ people residing in states with greater anti-LGBTQ+ structural stigma (and fewer LGBTQ+ structural protections) demonstrate worse mental health (Hatzenbuehler et al., 2009; Perez-Brumer et al., 2015). Unfortunately, this effect extends to LGBTQ+ young people, with research demonstrating that structural stigma is related to increased depression and suicidality among LGBTQ+ adolescents (Colvin et al., 2019; Hatzenbuehler, 2011).

However, research on structural stigma among LGBTQ+ adolescents is underdeveloped (Watson et al., 2021). First, with very few exceptions (Hatzenbuehler, 2011), studies assessing structural stigma among LGBTQ+ adolescents have not relied upon comprehensive, multidimensional structural stigma measures. Rather, many studies of structural stigma among LGBTQ+ adolescents rely on a single structural variable (e.g., attending a school with a Gender–Sexuality Alliance [GSA]; Heck et al., 2014)[1] or a circumscribed context (e.g., LGBTQ+ structural protections at school; Colvin et al., 2019). Such investigations do not capture the broader scope and impact of structural factors manifesting within the lives of LGBTQ+ adolescents. Second, research on LGBTQ+ structural stigma has relied upon predominantly White LGBTQ+ samples. This limitation obscures the scientific understanding of the ways anti-LGBTQ+ structural stigma may differentially predict depression among LGBTQ+ individuals across various racial/ethnic subgroups (English et al., 2022).

Multiple Minority Stress Among LGBTQ+ People of Color

Adolescents with multiple stigmatized statuses not only report greater stigma but also more dimensions of stigma. Unfortunately, adolescents who report experiencing multiple forms of stigma demonstrate higher levels of depression compared to adolescents reporting only one form of stigma (Grollman, 2012). LGBTQ+ people of color exemplify this precarious situation, as they are vulnerable to the health-eroding effects of anti-LGBTQ+ stigma and racial/ethnic stigma (Díaz et al., 2001; Jackson et al., 2022). Research suggests that racism and homophobia—at both the interpersonal and structural levels—are associated with depression among sexual minorities of color (English et al., 2022; Hightow-Weidman et al., 2011; A. B. Mallory & Russell, 2021; Reisen et al., 2013; Thoma & Huebner, 2013). For example, at the structural level, anti-LGBTQ+ policies and structural racism are associated with depression among Black sexual minority adolescent males but not among White sexual minority adolescent males (English et al., 2022). Further, systems of oppression compound and interlock with one another to produce unique intersectional mental health risks among Black and Latinx LGBTQ+ populations (Jackson et al., 2022). For example, interpersonal racial and sexual orientation stigma not only have unique associations with depression (Reisen et al., 2013; Thoma & Huebner, 2013), but have also been shown to have a multiplicative effect on depression symptoms among sexual minority adolescents of color (A. B. Mallory & Russell, 2021).

The vulnerability of Black and Latinx LGBTQ+ adolescents to multiple forms of stigma during the sensitive period of adolescence may help explain why many sexual orientation and racial/ethnic-based mental health inequities emerge during adolescence and early adulthood (Fish et al., 2019; Lindsey et al., 2019). Thus, assessing one form of stigma in isolation (e.g., anti-LGBTQ+ stigma) provides only a partial window into the stigma-related stressors that shape the lives of Black and Latinx LGBTQ+ adolescents (Hightow-Weidman et al., 2011; Thoma & Huebner, 2013). Research with an increased focus on how systems of power produce disparities among populations possessing multiple marginalized identities, such as Black and Latinx LGBTQ+ adolescents, is needed to inform effective multilevel mental health interventions.

Interpersonal Bullying Based on Race/Ethnicity and Sexual Orientation

Bullying, a range of undesirable behaviors that are repeated against a single target over time (e.g., violence, harassment, spreading rumors), remains pervasive among adolescents (Modecki et al., 2014). A robust literature documents the harmful effects of bullying

[1] Formerly known as Gay–Straight Alliances.

on adolescent mental health outcomes (Klomek et al., 2007; Vaughn et al., 2010). Racial and sexual minority adolescents often report elevated rates of bullying (Berlan et al., 2010; Kessel Schneider et al., 2015; Lutrick et al., 2020). The most plausible explanation for this is that—in addition to general bullying—youth from marginalized backgrounds are at risk of experiencing stigma-based bullying (e.g., racist bullying, anti-LGBTQ+ bullying). When compared to general bullying, stigma-based bullying has been found to be especially harmful to adolescent well-being, and bullying based on race/ethnicity and sexual orientation, respectively, is associated with depression (Russell et al., 2012).

Although research on the impact of bullying among Black and Latinx LGBTQ+ adolescents is limited, research suggests that bullying based on race/ethnicity and sexual orientation are each associated with depression among adolescent Black and Latinx sexual minority men (Hightow-Weidman et al., 2011). However, more research is needed to examine whether this effect extends to gender-diverse samples of LGBTQ+ adolescents. Additionally, multilevel stigma research is warranted to simultaneously examine interpersonal manifestations of stigma (e.g., identity-based bullying) alongside manifestations of structural stigma as predictors of depression.

The Current Study

Little research has considered the ways in which multiple forms of stigma (e.g., racism, heterosexism, transphobia) and multiple levels of stigma (e.g., interpersonal, structural) might intersect to drive health outcomes among Black and Latinx LGBTQ+ adolescents. These gaps are due, in part, to the fact that many contemporary approaches to testing structural-level hypotheses require a large sample size—and Black and Latinx LGBTQ+ adolescents in the United States remain a hard-to-reach population (DeBlaere et al., 2010). Research in this area is also hampered by a reliance on predominantly White LGBTQ+ samples and limited measures to assess structural stigma, particularly in a manner that is resonant with the adolescent experience (e.g., laws that solely or disproportionately impact LGBTQ+ adolescents).

The first goal of this study is to test the associations between two forms of interpersonal stigma-based bullying (i.e., based on race/ethnicity and based on sexual orientation) and depression among a national sample of Black and Latinx LGBTQ+ adolescents. We predict that racial/ethnic and sexual orientation bullying will demonstrate independent, unique, and interaction-based associations with depressive symptoms. Second, we aim to examine the associations between indicators of state-level anti-LGBTQ+ structural stigma and depressive symptoms among the sample. Here, we hypothesize that adolescent-relevant indicators of LGBTQ+ structural support (e.g., conversion therapy bans, density of GSAs) will be associated with decreased odds of depression, whereas similarly relevant indicators of anti-LGBTQ+ structural stigma (e.g., "Don't Say Gay" legislation, community attitudes toward sexual minorities) will be associated with increased odds of depression. Third, to evaluate the overall state-level structural stigma environment, we will develop an adolescent-focused composite index of anti-LGBTQ+ structural stigma and test its association with depression. We posit that Black and Latinx LGBTQ+ adolescents residing in states with more anti-LGBTQ+ structural stigma will report more depressive symptoms compared to those in states with less anti-LGBTQ+ structural stigma. Finally, we hypothesize that this association between state-level structural stigma and depression will remain significant even after controlling for both forms of interpersonal stigma-based bullying.

Method

Participants

Our sample is composed of participants of the lesbian, gay, bisexual, transgender, and queer (LGBTQ) National Teen Survey, which was administered in collaboration with the Human Rights Campaign (HRC) between April and December 2017. Recruitment for survey completion occurred through the social media accounts of HRC and influential celebrities, email distribution, and direct communication via HRC partner organizations (e.g., Trevor Project, Planned Parenthood). Eligible respondents included those who were English-speaking, identified as LGBTQ+, were between the age of 13 and 17, and resided in the United States. Those who participated in the survey were offered a wristband or raffle entry for an Amazon gift card as compensation. This study was approved by the Institutional Review Board at the University of Connecticut, which approved a waiver of parental consent.

In total, 17,112 respondents were deemed eligible for inclusion criteria in the larger survey, completed more than 10% of survey questions, and were assessed to have provided valid survey responses (for additional procedures, refer to Watson et al., 2020). Given the goals of this study, we further limited our sample to only include respondents who (a) identified as Black and/or Latinx, (b) were nonheterosexual, and (c) completed our measure of depressive symptoms. Our final analytic sample included 2,561 Black and Latinx LGBTQ+ adolescents.

Measures

Depressive Symptoms

Respondents completed 10 items of the original 11-item Kutcher Adolescent Depression Scale (S. J. Brooks et al., 2003), a valid and reliable scale that assesses the frequency and severity of depressive symptoms over the past week. We excluded an item regarding suicidality given the anonymous nature of survey and the waiver of parental consent. Respondents were asked, "Over the last week, how have you been "on average" or "usually" regarding the following items," with items including low mood, irritability, sleep, interest in social activities, feelings of worthlessness and fatigue, and concentration. Response options included: 0 (*hardly ever*), 1 (*much of the time*), 2 (*most of the time*), and 3 (*all of the time*). We averaged participants' responses to the 10 items and then dichotomized respondents into those reporting an average score of less than 2 (75.4%) versus greater than or equal to 2 (24.6%), with the latter indicating moderate-to-severe depressive symptoms. Cronbach's alpha within the present study was 0.89. The validity of the Kutcher Adolescent Depression Scale has been supported through its positive associations with other validated depression measures (S. J. Brooks et al., 2003), including among adolescents of color (Lowe et al., 2018).

Racial/Ethnic and Sexual Orientation Bullying

To assess experiences of stigma-based bullying related to race/ethnicity and sexual orientation, respondents completed an adapted version of the Perception of Teasing Scale, a valid and reliable

extension of the Physical Appearance Related Teasing Scale (Thompson et al., 1995). Respondents were presented with a definition of bullying. Then, they were asked, "How often have you been teased or treated badly by other students at your school because of your…" and responded to scales corresponding to several identity domains, including "race/ethnicity" and "sexuality." Response options included 0 (*never*), 1 (*rarely*), 2 (*sometimes*), 3 (*often*), and 4 (*very often*). Respondents who reported 1 or greater to the racial/ethnic item or sexual orientation item were considered to have experienced racial/ethnic bullying or sexual orientation bullying, respectively. For select analyses, these scores were combined to create a four-level bullying variable, denoting the following response combinations: Endorsed neither type of bullying, endorsed racial/ethnic bullying alone, endorsed sexual orientation bullying alone, or endorsed both types of bullying.

Anti-LGBTQ+ Structural Stigma: Individual State-Level Indicators

We conceptualized anti-LGBTQ+ structural stigma via nine state-level indicators (Table 1). We selected these indicators after (a) reviewing best practices in constructing measures of structural stigma (e.g., including nonlegislative indicators, selecting variables with adequate state-level variation), (b) building upon existing psychometrically sound measures of anti-LGBTQ+ structural stigma, and (c) considering which manifestations of anti-LGBTQ+ structural stigma are likely to be most relevant to adolescents (Hatzenbuehler, 2011, 2017). Our approach included seven protective structural stigma indicators, including antibullying legislation, conversation therapy bans, protections for LGBTQ+ youth in foster care, LGBTQ+ nondiscrimination legislation, state-level support for protective LGB policies, density of Gender–Sexuality Alliances, and representation of openly LGBTQ+ public officials. We also included two harmful structural stigma measures, including the presence of "Don't Say Gay" laws and state-level implicit anti-LGBTQ+ attitudes. Below we describe each anti-LGBTQ+ structural stigma indicator in further detail. Additional information about each indicator can be found in Table 1.

Policies and Laws Related to Sexual Orientation and Gender Minority Discrimination. We include five state policies and laws related to sexual orientation and gender minority discrimination, using data from the index of the Movement Advancement Project's (2021) State Sexual Orientation Equality Profiles. Protective laws and policies included were state bans on conversion therapy, legislation focused on antibullying measures for LGBTQ+ youth, protections for LGBTQ+ youth in foster care, and nondiscrimination legislation. We included one harmful indicator, the presence of a "Don't Say Gay" law (i.e., legislation that bans education and discussion pertaining to LGBTQ+ issues in schools).

Support for Policies and Laws That Protect LGB Individuals. Using data from 41 randomly sampled national public opinion polls (Lax & Phillips, 2009), we assessed state-level attitudes toward LGBTQ+ issues related to: Adoption rights for same-sex couples, inclusion of sexual orientation in hate crime laws, health insurance and other employee benefits for same-sex spouses, laws protecting sexual minorities from discrimination in housing, laws protecting sexual minorities from job discrimination, legality of same-sex marriage, legality of same-sex sexual relationships, and legality of same-sex civil unions with accompanying rights equal to married couples. Based on the mean-aggregated percentage of respondents surveyed who supported each policy, a mean percentage of support score was calculated and dichotomized into upper and lower 50th percentiles.

Implicit Attitudes Toward Sexual Minorities. To assess implicit attitudes toward sexual minority people, we utilized data from Project Implicit (Project Implicit Demo Website Datasets, 2018). Project Implicit administers the sexual orientation version

Table 1
Description of State-Level Indicators of Anti-LGBTQ+ Structural Stigma

Structural indicators	Description	Data source/year	Expected health impact
Support for policies and laws that impact LGB individuals	Data collected from 41 randomly sampled national opinion polls measuring support for eight laws and policies focused on rights of LGB individuals and same-sex couples.	Lax and Phillips, 1999–2008	Protective
LGBTQ+ public officials	Weighted proportion of openly LGBTQ+ elected government officials in various levels of governments (e.g., Governor, U.S. Congress, Mayor).	The Victory Institute, 2018	Protective
Density of GSAs	Proportion of public high schools that have GSAs.	Centers for Disease Control and Prevention, School Health Profiles, 2016	Protective
Antibullying legislation	Antibullying laws and policies including LGBTQ+ youth/students.	Movement Advancement Project, 2015	Protective
Nondiscrimination legislation	Nondiscrimination laws and policies including LGBTQ+ youth/students.	Movement Advancement Project, 2015	Protective
State conversion therapy bans	Laws banning conversion therapy for LGBTQ+ youth.	Movement Advancement Project, 2015	Protective
Protections for LGBTQ+ youth in foster care	Laws and protections for LGBTQ+ youth in the child welfare system.	Movement Advancement Project, 2015	Protective
"Don't Say Gay" legislation	Laws banning or restricting educators from discussing LGBTQ+ individuals or issues in schools.	Movement Advancement Project, 2015	Harmful
Implicit attitudes toward sexual minorities	Implicit Association Test results toward sexuality.	Project Implicit Demo Website Datasets, 2018	Harmful

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities; LGB = lesbian, gay, and bisexual; GSAs = Gender–Sexuality Alliances.

of the Implicit Association Test (IAT) online to volunteers. By evaluating response latencies during a computer-administered categorization task, this IAT measures associations between two concepts (gay vs. heterosexual people) and two attributes (good vs. bad). Individual-level IAT scores of 504,291 respondents were mean-aggregated at the state level, and state scores were dichotomized into upper and lower 50th percentiles.

Density of Gender–Sexuality Alliances. To examine the state-level proportion of public high schools with GSAs (i.e., student organizations that provide a safe, supportive community for LGBTQ+ students and their allies), we obtained data from the 2016 CDC School Health Profiles. Data on the density of GSAs were available for all states other than Colorado, Iowa, and Washington, DC. This variable was dichotomized using a median split into upper and lower 50th percentiles.

Proportion of LGBTQ+ Public Officials. Using data from the Victory Institute's (2018) Out for America interactive map, we computed the proportion of elected government officials who were openly LGBTQ+ across seven domains of government: Governor, U.S. Congress, state legislature, mayor, local government positions, judicial positions, and other statewide elected offices (e.g., attorney general). The seven positions were weighted by their political influences, including judicial positions (0.25), local government (0.5), state legislature (0.75), mayor (1.0), other statewide elected positions (1.25), U.S. Congress (1.5), and governor (1.75). The weighted scores for the seven positions were summed to give a total state score, with higher scores reflecting greater representation and political power of LGBTQ+ officials. We dichotomized this score into upper and lower 50th percentiles.

Anti-LGBTQ+ Structural Stigma: State-Level Composite Index Score

To create an adolescent-focused composite index score of anti-LGBTQ+ structural stigma, we summed the dichotomized variable for each indicator. Specifically, each harmful indicator was dichotomized into 0 or 1, with the presence of a harmful indicator receiving a 1. Each protective indicator was dichotomized into 0 or −1, with the presence of a protective indicator receiving a −1. Summing these values for each indicator together, the composite index ranged from −7 (lowest structural stigma) to 2 (highest structural stigma). The higher the composite index, the more anti-LGBTQ+ structural stigma (i.e., the structural features of the state, overall, are less supportive of and more hostile to LGBTQ+ adolescents). Six states (Colorado, Hawaii, Iowa, Louisiana, Mississippi, and South Dakota) and Washington, DC were missing one of the nine structural stigma indicators; in such cases, a score of 0 (neutral) was assigned. Figure 1 details the composite index scores given to each state.

Analytic Strategy

Analyses were conducted in SAS version 9.4 and proceeded in four steps. First, to evaluate the association between interpersonal forms of stigma and depression, multivariable logistic generalized estimating equations (GEEs) clustered by state-modeled associations between sexual orientation and racial/ethnic bullying, individually and then together, and moderate-to-severe depressive symptoms. Second, to evaluate the individual associations between structural stigma indicators and depression, separate GEEs modeled associations between each individual structural stigma indicator and moderate-to-severe depressive symptoms. Third, to evaluate the dose-dependent relationship between level of structural stigma and depression, we trichotomized the anti-LGBTQ+ index into low structural stigma (−7 to −4), moderate structural stigma (−3 to −1), and high structural stigma (0 to 2), with the reference group set as low structural stigma, and evaluated its association with moderate-to-severe depressive symptoms. Fourth, to evaluate the association between structural stigma and depression in the context of interpersonal stigma, we modeled associations between the anti-LGBTQ+ structural stigma index and moderate-to-severe depressive symptoms while controlling for both sexual orientation and racial/ethnic bullying. All multivariable GEE models were clustered by state and adjusted for sex assigned at birth, race/ethnicity, sexual orientation, gender identity, and birth year. A complete case analysis was used for all analyses. Statistical significance was evaluated at $p < .05$ and we present adjusted odds ratios (aORs) with 95% confidence intervals (95% CIs).

Transparency and Openness Statement

This study adheres to the Transparency and Openness Promotion Guidelines, as endorsed by the American Psychological Association and adopted by the *Journal of Psychopathology and Clinical Science*. To request access to the dataset, syntax, or research materials associated with the LGBTQ National Teen Survey, contact the third author, who oversees and coordinates data sharing for the project. The data used in this study to serve as indicators of structural stigma are publicly available via the sources cited within the article. The first author can coordinate access to the syntax used to test the present study's hypotheses. Access to the final dataset of the present investigation can also be facilitated by the first author; however, this access requires prior authorization from the aforementioned data custodian of the LGBTQ National Teen Survey.

Results

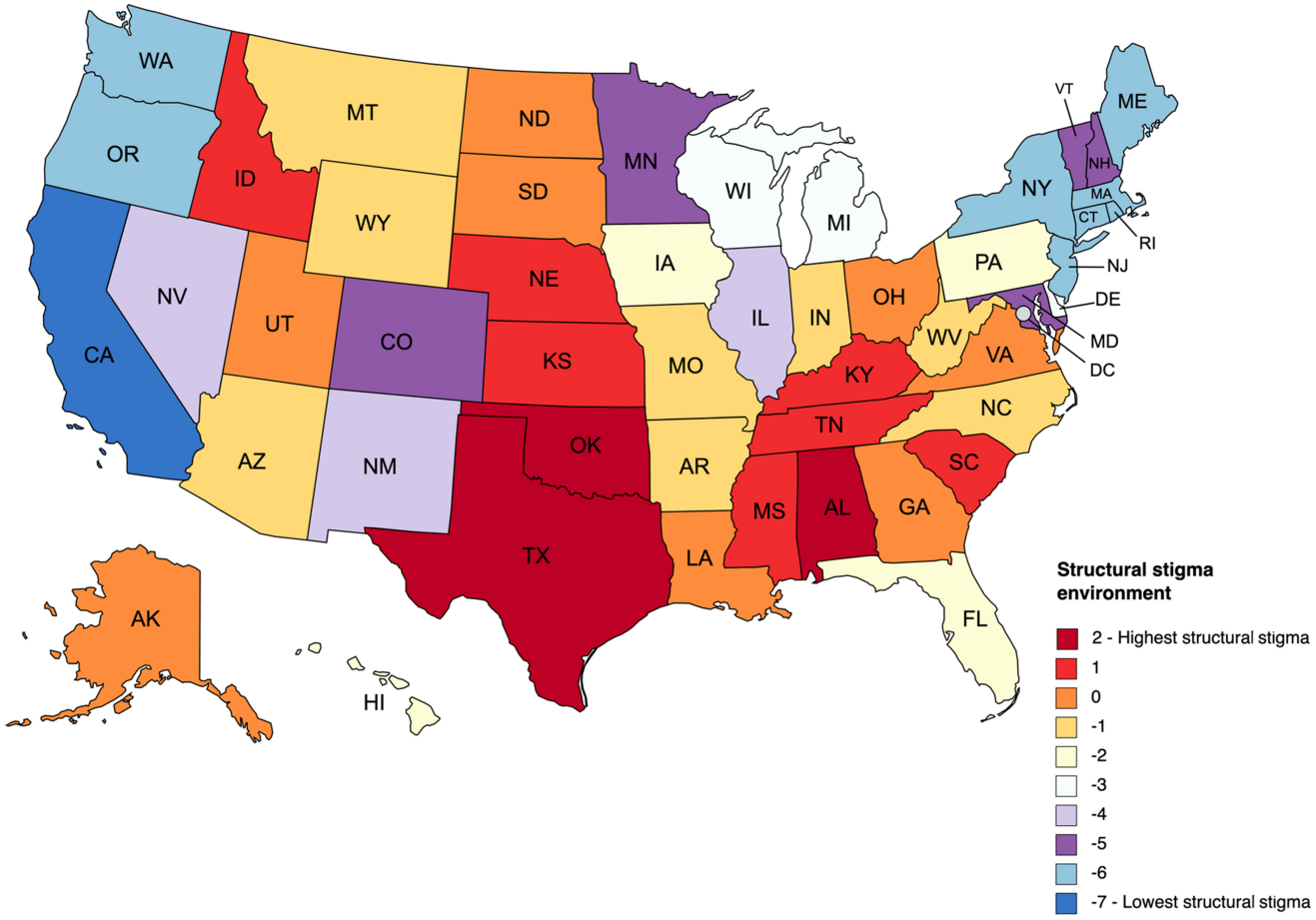
Our sample consisted of 2,561 Black and Latinx LGBTQ+ adolescents. Approximately 70% identified as Latinx and 35.7% as Black. Thirty-six percent identified as gay or lesbian, 37.9% as bisexual, and 25.8% as "other." The majority were assigned female at birth (72.5%), and 50.6% identified as female as their current gender identity. Table 2 provides additional demographic information on this sample.

In general, states with higher anti-LGBTQ+ structural stigma were in the South and Midwest parts of the United States (e.g., Alabama, Kansas, Oklahoma, Texas), while states with lower anti-LGBTQ+ structural stigma were in the Northeastern and Western regions of the country (e.g., Maine, New York, California, Oregon). Table 3 provides the distribution of LGBTQ+ Black and Latinx adolescents in this sample across the states by composite index score.

Endorsement of past experience of school-based bullying based on race/ethnicity (aOR: 1.53, 95% CI [1.31–1.79]) and sexual orientation (aOR: 1.88, [1.53–2.31]) was independently associated with reporting moderate-to-severe depressive symptoms. When analyzed together, both forms of bullying remained significantly associated with depressive symptomology (Table 4), and nearly 50% of

Figure 1

Distribution of Composite Index Scores Documenting State-Level Anti-LGBTQ+ Structural Stigma Environment



Note. See the online article for the color version of this figure.

adolescents (48.5%) endorsed experiencing both types of bullying. Further, adolescents who experienced both types of bullying, compared to those who did not experience bullying, reported more than twofold increased odds of reporting moderate-to-severe depressive symptoms (aOR: 2.40, [1.83–3.15]).

As presented in Table 5, all seven individual-level protective indicators of anti-LGBTQ+ structural stigma were associated with decreased odds of moderate-to-severe depressive symptoms, including antibullying legislation (aOR: 0.77, 95% CI [0.70–0.84]), conversation therapy bans (aOR: 0.81, [0.73–0.89]), protections for LGBTQ+ youth in foster care (aOR: 0.83, [0.71–0.96]), nondiscrimination legislation (aOR: 0.85, [0.73–0.99]), state policy support for LGBTQ+ issues (aOR: 0.79, [0.71–0.88]), density of GSAs (aOR: 0.78, [0.72–0.86]), and proportion of LGBTQ+ public officials (aOR: 0.81, [0.70–0.92]). One harmful anti-LGBTQ+ structural stigma indicator, implicit anti-LGBTQ+ attitudes, was significantly associated with 18% increased odds of experiencing depressive symptoms (aOR: 1.18, [1.01–1.39]). Although the indicator for "Don't Say Gay" laws was associated with higher odds of depressive symptomology and the point estimate and 95% CI trended away from the null, this result did not reach statistical significance (aOR: 1.13, [0.98–1.30]).

Overall, anti-LGBTQ+ structural stigma was significantly associated with depressive symptoms (Table 5), such that each unit increase on the anti-LGBTQ+ structural stigma composite index was associated with 3% increased odds of experiencing moderate-to-severe depressive symptoms (95% CI [1.03–1.04]). We found an additional dose-dependent relationship between anti-LGBTQ+ structural stigma and depression. Our composite index shows that Black and Latinx LGBTQ+ adolescents residing in states with the *most* anti-LGBTQ+ structural stigma experienced (a) 32% increased odds of reporting moderate-to-severe depressive symptoms compared to Black and Latinx LGBTQ+ adolescents living in the U.S. states with the *least* structural stigma (aOR: 1.32, [1.22–1.43], Table 6) and (b) 21% increased odds of reporting moderate-to-severe depressive symptoms compared to Black and Latinx LGBTQ+ adolescents living in the U.S. states with the *moderate* structural stigma (aOR: 1.21, [1.03–1.42], Supplemental Table 1 in the online supplementary materials). Finally, after controlling for both measures of stigma-based bullying, anti-LGBTQ+ structural stigma remained significantly associated with moderate-to-severe depressive symptoms among the sample (aOR: 1.03, [1.02–1.05], Table 7). As an additional test of this result, we conducted a sensitivity analysis, in which depressive symptoms were modeled as a continuous variable (Supplemental Table 2 in

Table 2
Demographic Characteristics of National Sample of Black and Latinx LGBTQ+ Adolescents (N = *2,561*)

Characteristic	*n* (%)
Sexual orientation	
Gay or lesbian	929 (36.3)
Bisexual	971 (37.9)
Other	661 (25.8)
Sex at birth	
Female	1,857 (72.5)
Male	704 (27.5)
Gender identity[a]	
Male	764 (29.8)
Female	1,295 (50.6)
Trans male/trans boy	294 (11.5)
Trans female/trans girl	28 (1.1)
Nonbinary	294 (11.5)
Genderqueer/gender nonconforming	244 (9.5)
Other	105 (4.1)
Birth year	
1999	238 (9.3)
2000	786 (30.7)
2001	650 (25.3)
2002	460 (18.0)
2003	320 (12.5)
2004	107 (4.2)
Race/ethnicity	
Black	914 (35.7)
Latinx	1,772 (69.2)
Multiracial[b]	964 (37.6)
English as first language	2,111 (82.4)
Lived in the United States	
Always	2,341 (91.4)
More than 4 years	170 (6.6)
Less than 4 years	50 (2.0)

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities. [a]Totals are greater than 100% given that respondents could select multiple answer options. [b]Mulitracial refers to respondents who identified as Black or Latinx but also indicated at least one other race/ethnicity.

the online supplementary materials). These analyses are consistent with those using the dichotomized depression variable.

Discussion

This is among the first mental health studies to include measures across multiple domains of stigma (e.g., race/ethnicity, sexual orientation) and multiple levels of stigma (e.g., interpersonal, structural) as predictors of depression among a large, national sample of Black and Latinx LGBTQ+ adolescents. As hypothesized, two distinct forms of stigma-based bullying (i.e., based on race/ethnicity and based on sexual orientation) uniquely and jointly predicted depressive symptoms among the sample. Additionally, seven protective LGBTQ+ structural indicators and one harmful anti-LGBTQ+ structural indicator were associated with depression. Finally, after combining all indicators of anti-LGBTQ+ structural stigma to create a single, multidimensional composite index, Black and Latinx LGBTQ+ adolescents living in states with greater levels of anti-LGBTQ+ structural stigma had higher odds of reporting depressive symptoms—and this effect remained even after controlling for interpersonal experiences of stigma (i.e., stigma-based bullying).

Our findings corroborate research suggesting that experiences of interpersonal stigma based on race/ethnicity and sexual orientation are harmful for the mental health of Black and Latinx LGBTQ+ adolescents (Hightow-Weidman et al., 2011; A. B. Mallory & Russell, 2021). Stigma-based bullying—whether based on race/ethnicity or sexual orientation—explained unique variance in depressive symptoms among Black and Latinx LGBTQ+ adolescents. Alarmingly, compared to Black and Latinx LGBTQ+ adolescents who did not experience bullying, those who reported a history of both racial/ethnic bullying and sexual orientation bullying demonstrated more than twofold increased odds of moderate-to-severe depressive symptoms. These findings have important implications for preventing and mitigating the effects of bullying experiences among this population. Specifically, these associations suggest that interventions that focus on a single form of bullying (e.g., anti-LGBTQ+ bullying)—ignoring how it may overlap, compound, or interlock with other forms of bullying (e.g., racial/ethnic bullying)—will only partially address the health-eroding effects of bullying that put U.S. Black and Latinx LGBTQ+ adolescents at risk for depression.

As hypothesized, all seven protective LGBTQ+ structural indicators were associated with decreased odds of depressive symptoms among Black and Latinx LGBTQ+ adolescents. There could be several pathways by which such protections decrease depressive symptoms among Black and Latinx LGBTQ+ youth. First, it could be that such structural protections effectively prevent the negative health-eroding experiences they are designed to prohibit. For example, research suggests that adolescents living in states with LGBTQ+ equity laws (e.g., antibullying legislation) report less bullying experiences (Watson et al., 2021). Indeed, state-level nondiscrimination

Table 3
Distribution of Survey Respondents by State-Level Anti-LGBTQ+ Structural Stigma Composite Index Score

	Anti-LGBTQ+ Structural Stigma Composite Index Score	Frequency of Respondents	Percent of Respondents	Cumulative Frequency of Respondents	Cumulative Percent of Respondents
States with Most Anti-LGBTQ+ Structural Stigma	2	478	18.7%	478	18.7%
	1	136	5.3%	614	24.0%
	0	294	11.5%	908	35.5%
	−1	247	9.6%	1155	45.1%
	−2	278	10.9%	1433	56.0%
	−3	132	5.2%	1565	61.1%
	−4	148	5.8%	1713	66.9%
	−5	152	5.9%	1865	72.9%
	−6	333	13.0%	2198	85.9%
States with Least Anti-LGBTQ+ Structural Stigma	−7	363	14.2%	2561	100.0%

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities.

Table 4

Associations Between Interpersonal Experiences of Stigma-Based Bullying and Moderate-to-Severe Depressive Symptoms in a National Sample of Black and Latinx LGBTQ+ Adolescents (N = *2,561*)

Predictor	OR[a]	95% CI	*p* value	aOR[b]	95% CI	*p* value
Individual associations						
Endorsed racial/ethnic bullying	1.53	[1.31–1.79]	<.001	1.56	[1.35–1.81]	<.001
Endorsed sexual orientation bullying	1.88	[1.53–2.31]	<.001	1.98	[1.59–2.45]	<.001
Combined associations						
Endorsed racial/ethnic bullying	1.33	[1.14–1.56]	<.001	1.33	[1.15–1.55]	<.001
Endorsed sexual orientation bullying	1.74	[1.42–2.14]	<.001	1.81	[1.45–2.25]	<.001
Interaction associations						
Endorsed neither racial/ethnic nor sexual orientation bullying	Ref	Ref	Ref	Ref	Ref	Ref
Endorsed racial/ethnic bullying alone	1.26	[0.80–1.99]	.319	1.33	[0.88–2.00]	.180
Endorsed sexual orientation bullying alone	1.66	[1.21–2.30]	<002	1.80	[1.34–2.41]	<.001
Endorsed both racial/ethnic and sexual orientation bullying	2.28	[1.72–3.04]	<.001	2.40	[1.83–3.15]	<.001

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities; OR = odds ratio; aOR = adjusted odds ratio; CI = confidence interval. [a] Models clustered by state. [b] Models clustered by state and adjusted for sex assigned at birth, race/ethnicity, sexual orientation, gender identity, and birth year.

legislation may have protected youth in our sample against the mental health effects of everyday discrimination (A. B. Mallory & Russell, 2021; Thoma & Huebner, 2013), and state-level conversion therapy bans may have protected youth who would have otherwise experienced conversion therapy and its documented impact on mental health (C. C. Mallory et al., 2019).

Alternatively, structural protections may also reduce depression by serving as symbols of affirmation. Just as high-profile anti-LGBTQ+ events can symbolically communicate hostility toward LGBTQ+ status and compromise their psychological well-being (Jackson, 2017), visible LGBTQ+ protections may signify affirmation to Black and Latinx LGBTQ+ adolescents and help to ameliorate their mental health. For example, the presence of a GSA on a school campus attenuates the relationship between gay-based victimization and suicide attempts by reducing hopelessness (Davis et al., 2014). It is plausible that GSAs transmit hope to LGBTQ+ adolescents who do not attend GSA meetings but know of the group's presence at their school.

Lastly, it could be that certain structural protections serve as proxies for unmeasured factors that support Black and Latinx LGBTQ+ adolescent well-being. For example, the presence of state-level foster care protections for LGBTQ+ youth was associated with lower odds of depression, even though a small minority of our sample is likely to have had experience within the foster care system. It could be that state-level foster care protections are highly correlated with other, more proximal health-supporting factors among Black and Latinx LGBTQ+ adolescents (e.g., greater LGBTQ+ affirming social services). The above pathways are not mutually exclusive. For example, the density of same-sex couples could provide increased access to LGBTQ+ mentors, provide opportunities for symbolic affirmation by seeing LGBTQ+ individuals in one's neighborhood, or serve as a proxy for other state-level factors (e.g., parental exposure to LGBTQ+ individuals). Future research clarifying the mechanisms through which structural protections impact the mental health of Black and Latinx LGBTQ+ adolescents is warranted.

Contrary to our expectation, although Black and Latinx LGBTQ+ youth residing in states with "Don't Say Gay" laws reported greater odds of depressive symptoms, this effect was not significant. At the time of this study, only five states (i.e., Alabama, Louisiana, Mississippi, Oklahoma, and Texas) had "Don't Say Gay" laws, which could have limited our power to detect the negative impact

Table 5

Associations Between Anti-LGBTQ+ Structural Stigma and Depressive Symptoms in a National Sample of Black and Latinx LGBTQ+ Adolescents (N = *2,561*)

Descriptor	*Anti-LGBTQ+ structural stigma indicators (individual models)*	OR[a]	95% CI	*p* valu	aOR[b]	95% CI	*p* value
	Antibullying legislation	0.83	[0.78–0.89]	<.001	0.77	[0.70–0.84]	<.001
	Conversion therapy ban	0.82	[0.79–0.86]	<.001	0.81	[0.73–0.88]	<.001
	Protections for LGBTQ youth in foster care	0.88	[0.78–0.98]	.021	0.83	[0.71–0.96]	.012
Protective	Nondiscrimination legislation	0.88	[0.79–1.00]	.055	0.85	[0.73–0.99]	.035
	State policy support upper 50th percentile	0.85	[0.79–0.92]	<.001	0.79	[0.71–0.88]	<.001
	Gender–Sexuality Alliance density upper 50th percentile	0.84	[0.78–0.91]	<.001	0.78	[0.71–0.86]	<.001
	LGBTQ public officials upper 50th percentile	0.83	[0.79–0.88]	<.001	0.81	[0.70–0.92]	.002
Harmful	Don't say gay laws	1.07	[0.97–1.20]	.187	1.13	[0.98–1.30]	.082
	Implicit anti-LGBTQ attitudes upper 50th percentile	1.13	[1.00–1.27]	.045	1.18	[1.01–1.39]	.039
	Anti-LGBTQ+ structural stigma composite index (summed index of individual indicators)	OR[a]	95% CI	*p* value	aOR[b]	95% CI	*p* value
Composite	Anti-LGBTQ+ structural stigma environment	1.02	[1.02–1.03]	<.001	1.03	[1.03–1.04]	<.001

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities; OR = odds ratio; aOR = adjusted odds ratio; CI = confidence interval. [a] Models clustered by state. [b] Models clustered by state and adjusted for sex assigned at birth, race/ethnicity, sexual orientation, gender identity, and birth year.

Table 6

Associations Between Anti-LGBTQ+ Structural Stigma and Moderate-to-Severe Depressive Symptoms in a National Sample of Black and Latinx LGBTQ+ Adolescents (N = *2,561*)

Anti-LGBTQ+ structural stigma composite index (by level)	OR[a]	95% CI	*p* value	aOR[b]	95% CI	*p* value
Most anti-LGBTQ+ structural stigma environment	1.19	[1.10–1.28]	<.001	1.32	[1.22–1.43]	<.001
Moderate anti-LGBTQ+ structural stigma environment	1.07	[0.92–1.25]	<.001	1.09	[0.92–1.30]	.314
Least anti-LGBTQ+ structural stigma environment	Ref	Ref	Ref	Ref	Ref	Ref

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities; OR = odds ratio; aOR = adjusted odds ratio; CI = confidence interval. [a] Models clustered by state. [b] Models clustered by state and adjusted for sex assigned at birth, race/ethnicity, sexual orientation, gender identity, and birth year.

of these laws on depressive symptoms. Future research—particularly investigations relying on population-based samples—should further examine this relationship, especially as many states have proposed "Don't Say Gay" legislation since these data were collected (Movement Advancement Project, 2021).

Our composite index of overall anti-LGBTQ+ structural stigma was independently associated with higher odds of reporting moderate-to-severe depressive symptoms, even after controlling for interpersonal experiences of stigma-based bullying. Particularly, we document 32% increased odds of reporting depression among Black and Latinx LGBTQ+ adolescents living in the most stigmatizing states compared to those living in the least stigmatizing states. Such findings suggest that interventions are most needed in states with high anti-LGBTQ+ structural stigma, which are largely in the South where there is a greater number of Black and Latinx LGBTQ+ individuals, but fewer resources promoting their mental health.

Given these findings, we propose several avenues for future research that will elucidate the understanding of structural stigma as one driver of racial/ethnic mental health disparities among LGBTQ+ adolescents. First, the present hypotheses should be extended to assess the relations between these stigma variables and additional aspects of mental health (e.g., suicidality, anxiety). Second, this study illuminates links between specific aspects of interpersonal stigma (i.e., based on race/ethnicity and sexual orientation) and depressive symptomology. Future research may include other relevant measures of interpersonal stigma (e.g., based on gender identity/expression), including measures of intersectional stigma that have been shown to predict mental health among LGBTQ+ people of color (e.g., LGBTQ+ people of color microaggressions, racism within the LGBTQ+ community, homophobia within one's racial/ethnic community; Balsam et al., 2011; Jackson et al., 2020; Sarno et al., 2015). A strength of our work is the development of an adolescent-focused index of anti-LGBTQ+ structural stigma; however, further research is needed to rigorously evaluate the psychometric properties of this index. Last, future research could focus on the biopsychosocial mechanistic nature of how interpersonal and structural stigma influences biological responses and psychiatric symptomology. For example, what are the mechanisms by which specific laws, community attitudes, and density measures impact depressive symptoms among Black and Latinx LGBTQ+ adolescents? Natural experiments may be particularly helpful in answering this question (e.g., monitoring how Black and Latinx LGBTQ+ adolescent mental health changes as community attitudes and laws change). Such insights could inform clinical intervention development and implementation.

Opportunities for Clinical and Structural Interventions

Our findings suggest several potential points of intervention for Black and Latinx LGBTQ+ adolescents. Many individual-level therapeutic interventions have been designed and tested to promote resilience and positive coping among LGBTQ+ adolescents (for a review, see Layland et al., 2020). Stigma-coping interventions that improve mental health by building resilience against multiple forms of stigma are warranted. Though rare, intersectional stigma-coping treatments have demonstrated acceptability, feasibility, and preliminary efficacy among young Black and Latinx LGBTQ+ adults (Jackson et al., 2022). Further research is required to establish the evidence base for such interventions and to develop effective, age-appropriate intersectional stigma-coping treatments for Black and Latinx LGBTQ+ adolescents. Given our findings on the unique roles of both interpersonal and structural stigma in predicting depressive symptoms among Black and Latinx LGBTQ+ adolescents, individual-level therapeutic interventions designed to facilitate positive coping and resilience should be paired with interventions combating the effects of structural forces, as such multilevel interventions are rare and inconsistently efficacious, at present (Rao et al., 2019).

In addition to efforts to combat the depressogenic effects of bullying and anti-LGBTQ+ structural stigma among Black and Latinx LGBTQ+ adolescents, efforts are needed to promote environments in which interpersonal and structural stigma do not occur in the first

Table 7

Associations Between Anti-LGBTQ+ Structural Stigma and Moderate-to-Severe Depressive Symptoms in a National Sample of Black and Latinx Youth (N = *2,561*) *Controlling for Interpersonal Experiences of Stigma-Based Bullying*

Predictor	OR[a]	95% CI	*p* value	aOR[b]	95% CI	*p* value
Anti-LGBTQ+ structural stigma environment	1.02	[1.01–1.03]	<.001	1.03	[1.02–1.05]	<.001
Endorsed racial/ethnic bullying	1.34	[1.15–1.57]	<.001	1.34	[1.15–1.56]	<.001
Endorsed sexual orientation bullying	1.74	[1.41–2.14]	<.001	1.79	[1.44–2.23]	<.001

Note. LGBTQ+ = lesbian, gay, bisexual, transgender, queer, and other sexual/gender minorities; OR = odds ratio; aOR = adjusted odds ratio; CI = confidence interval. [a] Models clustered by state. [b] Models clustered by state and adjusted for sex assigned at birth, race/ethnicity, sexual orientation, gender identity, and birth year.

place. One particularly important place for such interventions would be schools, given the amount of exposure adolescents have to the school context and the importance of peers during this developmental period. Notably, however, the interventions designed to reduce stigma at its source (e.g., peer victimization at school) tend to focus on one aspect of minority stress in isolation from other distressing forms of stigma (Chaudoir et al., 2017; Grapin et al., 2019; Layland et al., 2020). Importantly, fostering healthy environments for Black and Latinx LGBTQ+ adolescents not only involves reducing prejudice and bullying from peers, but also from teachers, administrators, and school staff—as well as changing the structures of the school environment through external forces (e.g., antibullying legislation implemented by state governments).

Study Limitations

The present study has several limitations. First, our study tests the theorized causal link between various forms of anti-LGBTQ+ structural stigma and depressive symptoms, by examining their associations, including covariates to control for potential confounders. Although experimental designs are often required to infer causality, as one cannot randomly assign participants to various conditions of anti-LGBTQ+ structural stigma, the present method is among the most commonly used practices in establishing causal inferences in the contemporary study of structural stigma (Hatzenbuehler, 2017). Second, our sample of Black and Latinx LGBTQ+ adolescents was a nonprobability-based sample and does not produce nationally representative findings. Also, the current study focuses on Black and Latinx LGBTQ+ adolescents but excludes LGBTQ+ adolescents of other racial/ethnic minority subgroups (e.g., Asian American, Native American) who also warrant such stigma-health research.

Notably, at the time of conducting the present research, no measure of structural racism existed that was (a) multidimensional, as recommended by contemporary structural stigma literature (Hatzenbuehler, 2011), (b) adolescent focused, to correspond to the unique manifestations of structural stigma in the lives of young people, and (c) composed of U.S. state-level data. As a result, we were unable to simultaneously assess structural racism as a unique and intersecting driver of mental health disparities among Black and Latinx LGBTQ+ adolescents. Not including a measure of structural racism within the present analyses ensures that—even as this investigation encompasses multiple domains and levels of stigma—the intersectional picture we paint remains partially incomplete. Indeed, there is no scientific evidence that structural racism is any less detrimental to the mental health and well-being of Black and Latinx LGBTQ+ adolescents than anti-LGBTQ+ structural stigma. To the contrary, emerging recent research emphasizes the critical influence of structural racism on the mental health of LGBTQ+ adolescents of color (English et al., 2022). Further structural stigma research is needed to investigate the deleterious effects of structural racism—both alone and in intersection with other axes of oppression—among Black and Latinx LGBTQ+ adolescents. Critically important to this goal is the development of a state-level, adolescent-focused, structural racism index. We hope the present study serves to motivate and guide future scholarship in this area.

Finally, the structural indicators used in this investigation were limited by the data available. First, to mirror the temporal order of our causal stigma-health theory, we intentionally calculated the structural stigma indicators using data that was collected before the adolescents' depression was assessed in 2017. Such data were not available for two structural indicators (i.e., LGBTQ+ Public Officials and Implicit Attitudes Toward Sexual Minorities), so for these two indicators 2018 data were used. Although these variables—and their influence on LGBTQ+ adolescents—are unlikely to fluctuate substantially from year-to-year, future studies focusing on the mental health impact of structural stigma should ensure that all structural-level indicators rely on data collected prior to the assessment of the individual-level outcome to further enhance causal inference. Second, whereas most of our structural indicators encompass the stigma faced by sexual minorities and gender minorities (e.g., Protections for LGBTQ+ Youth in Foster Care, LGBTQ+ Public Officials), based on the data available, some focused solely on sexual orientation (i.e., implicit attitudes related to sexual orientation, policy support for same-sex couples). Thus, our index should be enhanced as more robust state-level data on structural transphobia becomes available (e.g., state-level laws restricting trans youth from participating in sports based on their sex assigned at birth).

Conclusion

Decades of mental health research have made it clear that stigma drives and exacerbates depression via multiple pathways. Yet, research is needed that examines how these myriad pathways (e.g., multiple forms of stigma and multiple levels of stigma) might collide to shape health among populations that are disproportionally marginalized. Our study provides a new multidimensional, adolescent-focused index of state-level anti-LGBTQ+ structural stigma. Our results suggest that interventions that hope to address the stigma-induced burden of depression among Black and Latinx LGBTQ+ adolescents must contend with the various ways that stigma manifests in their lives.

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