

# The Relationship Between the Family Environment and Community Context on LGBTQ+ Youth's Disordered Eating Behaviors

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## Abstract

Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) youth experience disparate rates of disordered eating behaviors (DEB; purging, restricting food intake, and binge eating) compared with cisgender and/or heterosexual youth. Yet we have limited data examining the mechanisms that contribute to DEB among LGBTQ+ youth. This study examined associations among family acceptance and rejection and community context (acceptance, support, involvement, and bullying) on LGBTQ+ youth DEB, using data from the LGBTQ National Teen Survey ( $N = 7,901$ ) collected in 2017. Findings indicate that DEB for weight control and binge-eating DEB were positively related to family rejection and LGBTQ+-based bullying and negatively related to LGBTQ+ community acceptance and support. Findings from this study have implications for individual-, family-, and community-level interventions to support LGBTQ+ youth.

## Keywords

regression analysis, quantitative research, methods and analytics, community practice, modes of practice, LGBTQ issues, subjects of practice, family systems and functioning, eating disorders, mental health and differential diagnoses

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Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) youth experience compromised mental health compared with cisgender and/or heterosexual youth (Russell & Fish, 2016), including higher levels of depression, suicidality, substance use, and eating disorders (ED; Day et al., 2017; Diemer et al., 2015; Fish, 2019; Marshal et al., 2011; Watson et al., 2017). Minority stress theory illustrates how heightened health disparities are often associated with

and explained by stigma, oppression, and victimization related to sexuality and/or gender (Meyer, 2003). Related research demonstrates how disparities in depression, anxiety, suicidality, and ED among LGBTQ+ youth are also explained, in part, by high levels of anti-LGBTQ+ stigma, discrimination, and victimization (Brewster et al., 2019; Hatzenbuehler, 2011; Mason et al., 2018; Pacey et al., 2019; Ryan et al., 2010). However, fewer studies have targeted mechanisms

associated with ED and disordered eating behaviors (DEB) among LGBTQ+ youth, with attention to the social environments in which they are situated (e.g., families, schools, and communities). As key contexts of youth development and health, these social environments warrant consideration in ED and DEB research among LGBTQ+ youth. This study aimed to address this gap in the literature by examining the associations between family and community contexts on DEB among a large sample of LGBTQ+ youth in the United States.

## ED and DEB

ED include diagnoses of anorexia nervosa, bulimia nervosa, binge-eating disorder, and other specified feeding or eating disorder (Nagata et al., 2020). DEB include behaviors often associated with ED (binge eating, purging, restricting calories, excessive exercise, and using diet pills; Nagata et al., 2020). ED are associated with high mortality rates, poor quality of life, and comorbidity with other serious health issues (de la Rie et al., 2005; Klump et al., 2009). The lifetime prevalence of ED diagnoses is estimated to be about 8% for women and 2% for men; the rate of past-year ED prevalence was about 2% for women and <1% for men (Galmiche et al., 2019). These rates reference ED diagnoses and not DEB more broadly, which would likely result in higher prevalence with similar health-related complications. In addition, these prevalence rates do not account for variations in sexual orientation or gender identity.

## Prevalence of ED and DEB Among LGBTQ+ Youth

Several studies have compared sexual orientation differences in rates of ED diagnoses and/or DEB. One study examined lifetime prevalence estimates of ED between lesbian, gay, bisexual, and queer (LGBQ) and heterosexual adults, using diagnostic criteria for anorexia nervosa, bulimia nervosa, and binge-eating disorder (Kamody et al., 2020); LGBQ adults were two times more likely to have an ED diagnosis than heterosexual adults. LGBQ youth report higher rates of DEB, such as fasting, using diet pills, and purging, than heterosexual youth (Diemer et al., 2015; Hadland et al., 2014; Parmar et al., 2021). In a study with a large sample of youth, nearly 8% of LGBQ youth reported DEB compared with about 2% of heterosexual youth (Parmar et al., 2021). Another study compared the prevalence of DEB between LGBQ and heterosexual youth over time (1999–2013), finding that the disparities between lesbian and heterosexual youth widened during this time period (Watson, Adjei, et al., 2017).

Disparities in ED and DEB are also noted by gender identity. Compared with cisgender youth, transgender youth report higher past-year ED diagnosis (Diemer et al., 2015) and past-month DEB (Diemer et al., 2015; Guss et al., 2017). Transgender youth also have higher rates of ED diagnosis compared with LGBQ youth (Roberts et al., 2022). In one study, compared with cisgender heterosexual female youth, transgender youth were more than four times as likely to report an ED diagnosis and about twice as likely to report diet

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pill or laxative use in the past month (Diemer et al., 2015). One study found that nearly half of transgender youth reported bingeing and/or purging in the past year, with the highest rates among transgender girls and women (Watson, Veale, et al., 2017).

### ***Mechanisms Underlying ED and DEB Among LGBTQ+ Youth***

Although there are clear disparities in the prevalence of ED and DEB between LGBTQ+ and cisgender and/or heterosexual youth, research surrounding the mechanisms underlying these disparities is limited. Some studies have explored the sociodemographic or individual factors that are associated with ED and DEB among LGBTQ+ youth. Higher DEB is associated with depression, stress, and having disclosed one's sexual or gender identity (Roberts et al., 2022), whereas feeling positive about one's sexual or gender identity was associated with lower DEB (Roberts et al., 2022). For transgender youth, DEB may be aimed at weight loss to suppress characteristics of one's sex assigned at birth (e.g., to lose curves, suppress menstruation) and/or to accentuate one's gender identity (e.g., associating thinness with femininity; Algars et al., 2012).

There is also a small but growing research base demonstrating an association between minority stressors in the environment and ED and DEB among LGBTQ+ youth (Brewster et al., 2019; Mason et al., 2018). Experiencing harassment and discrimination are associated with higher levels of DEB among transgender youth (Watson, Veale, et al., 2017) and LGBQ adult women (Gordon et al., 2018). Kamody et al. (2020) examined the prevalence and odds of ED among LGBQ adults by whether they had experienced discrimination. LGBQ adults who reported experiencing discrimination had a significantly higher prevalence of anorexia nervosa, but not bulimia nervosa or binge-eating disorder, than LGBQ people who did not report discrimination.

The social environments in which LGBTQ+ youth are situated may be sites of stigma and/or support and serve as risk or

protective factors for ED or DEB. Lessard et al. (2021) found that LGBTQ+ youth who felt safer at school also reported fewer DEB than those who felt unsafe; this association was stronger for transgender youth than cisgender LGBQ youth. Watson, Veale, et al. (2017) found that family and school connectedness buffered the effects of stigma on DEB among transgender youth, providing evidence for these sites as protective factors. Although there is limited research on the relationship between stigma and support and DEB and ED among LGBTQ+ youth, related research supports the relationship between families, schools, and communities and depression, anxiety, and suicidality (Hatzenbuehler, 2011; McConnell et al., 2016; Paceley et al., 2019).

### **Current Study**

Given high rates of ED and DEB among LGBTQ+ youth, it is essential to identify the mechanisms within LGBTQ+ youth's social environments that contribute toward these disparities, with the goal of intervening to better support LGBTQ+ youth. Therefore, this study utilized data from the LGBTQ National Teen Survey (Watson et al., 2019) to examine the relationship between DEB and family and community contexts among LGBTQ+ youth. This study addresses important gaps and limitations in the literature by (a) examining DEB to understand mechanisms that contribute to these behaviors even if youth do not receive an ED diagnosis; and (b) exploring the family and community contexts contributions toward understanding how these contexts harm and/or support LGBTQ+ youth. The study protocol was approved by the University of Connecticut Institutional Review Board.

### ***Participant Recruitment***

Youth were eligible to participate if they were ages 13 to 17 years, English speaking, and lived in the United States. Youth were recruited to participate in an anonymous online survey through social media (e.g., Twitter, Reddit)

and community partner advertisements through email, social media, or individual communication. Interested youth accessed the survey through Qualtrics.com, using a link on the Human Rights Campaign (HRC) website. The survey took an average of 43 min to complete. All participants were offered a six-pack of HRC wristbands and entered into a drawing for one of 10 Amazon gift cards.

### Data Source and Sample

A total of 29,291 youth began the survey; 8,985 (30.7%) were not eligible. Of the 20,306 who remained, 3,006 were excluded because they completed less than 10% of survey items. The survey had built-in self-report items to prevent bots or ineligible responders from completing the survey by removing them after indicating ineligibility. In addition, researchers utilized a plan for post hoc analyses to remove false responders (e.g., those who were not eligible and/or may be completing the survey to skew results or obtain a gift card; Robinson-Cimpian, 2014) by examining responses across items to assess for inconsistencies or nonsensical responses. These analyses were conducted on the 17,300 participants who remained in the sample and 74 were removed. Additional cleaning procedures included reviewing open-ended responses for nonsensical responses and removing duplicate surveys, resulting in removal of an additional 175 cases. This left a final sample of 17,051, of whom 9,156 completed less than 50% of the survey items, including variables of interest for these analyses, and were dropped from the sample.

The final analytic sample for this study was  $N = 7,895$  LGBTQ+ youth across the United States. Participants were, on average, aged 15.6 years. The majority identified as gay or lesbian (37.0%) or bisexual (31.9%), cisgender girl/female (42.2%), white (68.9%), and lived in the South (35.7%). See Table 1 for a full description of demographics.

### Measures

**Family Environment.** The family environment included a measure of LGBTQ+-specific

**Table 1.** Demographics ( $N = 7,895$ ).

Demographic variable	<i>n</i>	<i>M (SE)/%</i>
Age		15.6 (.01)
Sexual orientation		
Gay or lesbian	2,986	37.87%
Bisexual	2,511	31.85%
Heterosexual	141	1.79%
Queer	387	4.91%
Pansexual	1,144	14.51%
Asexual	398	5.05%
Questioning	153	1.94%
Other	164	2.08%
Gender identity		
Cisgender boy/male	1,563	19.82%
Cisgender girl/female	3,324	42.16%
Transgender boy/male	762	9.67%
Transgender girl/female	94	1.19%
Transmasculine/ nonbinary	1,948	24.71%
Transfeminine/ nonbinary	193	2.45%
Race/ethnicity		
White	5,430	68.87%
Black	302	3.83%
Native American	35	0.44%
Asian	255	3.23%
Hispanic/Latino/a/x	705	8.94%
Middle Eastern/Arab	21	0.27%
Multiracial	1,113	14.12%
Other	23	0.29%
Geographic region of the United States		
Northeast	1,456	18.44%
Midwest	1,870	23.69%
South	2,822	35.74%
West	1,747	22.13%

acceptance and rejection from parents or caregivers (Abreu et al., 2023), modified from the original Family Acceptance and Rejection scale (Ryan et al., 2010). The survey asked, "How often do your parents or caregivers . . ." with a list of behaviors indicating rejecting or accepting behaviors. Response options included *never* = 0, *rarely* = 1, *sometimes* = 2, *often* = 3, or *does not apply to me*. Four questions assessed rejecting behaviors and included "Taunt or mock you because you are an LGBTQ person" and "Say bad things about LGBTQ people in general." Four questions assessed acceptance and included behaviors,

such as “*Say they were proud of you for being an LGBTQ person*” and “*Get involved in the larger LGBTQ community.*” A continuous family rejection score was calculated by reverse coding the four rejection items and averaging them ( $\alpha = .87$ ). Higher numbers represented higher rejection. A continuous family acceptance score was calculated by averaging the four acceptance items ( $\alpha = .81$ ); higher numbers represented more acceptance.

**Community Context.** The community context included four separate variables: community climate, LGBTQ+ involvement, LGBTQ+ support, and past-year LGBTQ+-based bullying. Given the lack of established measures related to community context, youth members who were part of HRC programs, constituents at HRC, and project researchers created items to assess the community context for LGBTQ+ individuals. Community climate was assessed with one question: “Do you believe things are getting better or worse in your community in terms of accepting LGBTQ people?” Response options included *getting much worse* = 0, *getting sort of worse* = 1, *not changing* = 2, *getting sort of better* = 3, or *getting much better* = 4. Responses were re-coded into three categories: *getting worse* = 0, *no change* = 1, and *getting better* = 2. One question asked about community involvement: “Are you involved in events or organizations that promote the rights of LGBTQ individuals?” Response options included *definitely no* = 0, *somewhat no* = 1, *somewhat yes* = 2, or *definitely yes* = 3. Responses were re-coded into two categories: *no involvement* = 0, *some involvement* = 1. Support was assessed by asking, “Do you have access to support groups for LGBTQ adolescents?” with response options of *definitely no* = 0, *somewhat no* = 1, *somewhat yes* = 2, or *definitely yes* = 3. Responses were re-coded into two categories: *no support* = 0, *some support* = 1. Finally, past-year LGBTQ+-based bullying included the question “Sometimes, young people are treated in one of these ways because of who they are. Have you ever been teased or bullied because of your actual or perceived LGBTQ identities at school?”

Response options included *no* = 0; *yes, because I am LGBTQ and I have told others* = 1; *yes, because someone thought I was LGBTQ* = 2; or *not sure*. Responses were re-coded into three categories: *no bullying* = 0, *yes bullying* = 1, and *not sure* = 2. All community context variables were treated as categorical.

**DEB.** DEB were assessed with questions related to behaviors that focused on weight control and behaviors related to binge eating.

**Weight Control.** Weight control DEB were assessed with one question that asked, “How often have you done each of the following things to lose weight or to keep from gaining weight during the past year?” (Neumark-Sztainer et al., 2002). Response options included *never* = 0, *rarely* = 1, *sometimes* = 2, or *on a regular basis* = 3. Items included *Fasted*, *Ate very little food*, *Took diet pills*, *Made myself throw up (vomit)*, *Used laxatives*, *Used diuretics*, *Used food substitute (power/special drink)*, *Skipped meals*, and *Smoked more cigarettes*. A mean score was calculated for each participant; however, upon assessing skewness and kurtosis, this variable violated the assumptions for linear regression. Therefore, the variable was re-coded to be categorical: *no weight control DEB* = 0, *any weight control DEB* = 1.

**Binge Eating.** One item assessed binge eating: “In the past year, have you eaten so much food in a short period of time that you would be embarrassed if others saw you (binge-eating)?” (Neumark-Sztainer et al., 2006). Response options included *no* = 0 or *yes* = 1.

**Covariates.** Covariate variables included those shown to be associated with variation in mental health concerns among LGBTQ+ youth.

**Sexual Orientation.** Sexual orientation was assessed with one question: “How do you describe your sexual identity?” Response options included *Gay or lesbian*, *Bisexual*, *Straight*, or *Something else*. Participants who selected *Something else* were provided a list



of additional response options that included *Queer*, *Pansexual*, *Asexual*, *Questioning*, and *Other*. Participants who selected *Other* were asked to write-in their sexual orientation. Any participant who wrote in an identity with a response option provided previously was re-coded into that category. New categories were created if a substantial number of youths wrote in that identity (e.g., demisexual) and a multiple identities category was created.

**Gender Identity.** A survey item asked participants whether they identified as *Male*, *Female*, *Transgender boy/girl*, *Genderqueer*, or *Something else* with a write-in option. Participants could check all that applied. In addition, participants indicated their sex assigned at birth as either *female* or *male*. From these two items, a gender identity variable was created. Participants whose sex assigned at birth and gender identity were concordant were coded as either (cisgender) male or (cisgender) female. Participants who indicated a binary transgender identity different from their sex assigned at birth were coded as transgender boy or transgender girl. Participants who checked more than one transgender identity or solely a nonbinary identity were coded as nonbinary female assigned at birth youth or nonbinary male assigned at birth youth.

**Race/Ethnicity.** To assess race/ethnicity, one survey item asked participants to mark all that apply in response to the question, "How would you describe yourself?" with response options: *white, non-Hispanic; Non-Latino Black or African American; American Indian or Alaska Native; Asian or Pacific Islander; Latino, Hispanic, or Mexican American; Middle Eastern/Arab*, and *Other*. Participants who selected one category were coded as that race/ethnicity. Participants who selected more than one category were coded as *Multiple Identities*. Participants who selected *Other* and wrote in an identity were coded either as a category that matched or left as *Other*.

**Age.** Participants indicated their month and year of birth. Age was calculated based on these categories and the start date the

participant began the survey. Age categories included 13, 14, 15, 16, and 17 years.

**Region of the United States.** Participants indicated their state of residence at the time of the survey. States were re-coded into four regions of the United States: Northeast, Midwest, South, and West.

## Data Analysis

Two logistic regression models tested the effects of family environment and community context on (a) disordered eating weight control behaviors, and (b) binge-eating behaviors. Following, logistic regression models tested interactions between past-year LGBTQ-based bullying and each of the following variables: family acceptance, LGBTQ community climate, LGBTQ community involvement, and LGBTQ community support on weight control DEB and binge eating.

## Results

Logistic regression models testing the association between weight control DEB or binge eating and family environment and community context adjusted for sexual orientation, gender identity, race/ethnicity, age, and geographic location are displayed in Table 2. Weight control DEB was positively related to family rejection and past-year LGBTQ+-based bullying. Specifically for every one-unit increase in family rejection, youth had 1.42 greater odds of weight control DEB. Compared with not experiencing LGBTQ+-based bullying, experiencing bullying increased the odds of weight control DEB by 84%. Alternatively, weight control DEB was negatively related to LGBTQ+ community climate and LGBTQ+ community support. Compared with community climates that are getting worse for LGBTQ+ people, climates that are staying the same were associated with 27% lower odds of engaging in weight control DEB and climates that are getting better were associated with 16% lower odds of engaging in weight control DEB. Finally, compared with receiving no LGBTQ+ community support, having some

**Table 2.** Associations Between Family Environment and Community Context on Disordered Eating Weight Control and Binge-Eating Behaviors.

Independent variables	Disordered eating: Weight control behaviors			Disordered eating: Binge-eating behaviors		
	aOR	95% CI	p	aOR	95% CI	p
Family environment						
Family rejection	1.420	[1.32, 1.52]	<.001	1.220	[1.15, 1.29]	<.001
Family acceptance	0.996	[0.93, 1.07]	.908	0.905	[0.85, 0.96]	.002
Community context						
Community climate						
Worse (ref)						
No change	0.729	[0.61, 0.88]	.001	0.816	[0.70, 0.95]	.008
Better	0.837	[0.72, 0.98]	.026	0.781	[0.69, 0.89]	<.001
LGBTQ+ community involvement						
None (ref)						
Some	1.071	[0.95, 1.20]	.241	1.035	[0.94, 1.14]	.493
LGBTQ+ community support						
None (ref)						
Some	0.766	[0.68, 0.86]	<.001	0.950	[0.86, 1.05]	.311
Past-year LGBTQ+-based bullying						
No (ref)						
Yes	1.840	[1.62, 2.08]	<.001	1.693	[1.51, 1.89]	<.001
Not sure	1.168	[0.99, 1.38]	.070	1.391	[1.19, 1.62]	<.001
Sexual orientation						
Gay or lesbian (ref)						
Bisexual	1.162	[1.02, 1.33]	.026	1.205	[1.07, 1.35]	.001
Heterosexual	1.010	[0.65, 1.56]	.968	0.721	[0.50, 1.04]	.078
Queer	1.077	[0.83, 1.41]	.583	1.483	[1.18, 1.86]	.001
Pansexual	1.175	[0.98, 1.41]	.083	1.331	[1.14, 1.55]	<.001
Asexual	0.956	[0.74, 1.23]	.731	0.962	[0.77, 1.20]	.731
Questioning	1.326	[0.88, 2.00]	.181	1.282	[0.91, 1.80]	.151
Other	1.827	[1.15, 2.90]	.011	1.234	[0.89, 1.72]	.213

(continued)

Table 2. (continued)

Independent variables	Disordered eating: Weight control behaviors			Disordered eating: Binge-eating behaviors		
	aOR	95% CI	p	aOR	95% CI	p
<b>Gender identity</b>						
Cisgender boy/male (ref)						
Cisgender girl/female	1.826	[1.58, 2.11]	<.001	1.249	[1.09, 1.43]	.001
Transgender boy/male	2.174	[1.71, 2.77]	<.001	1.519	[1.25, 1.85]	<.001
Transgender girl/female	1.052	[0.66, 1.67]	.829	1.216	[0.79, 1.88]	.377
Transmasculine/nonbinary	1.879	[1.58, 2.24]	.000	1.433	[1.23, 1.67]	<.001
Transfeminine/nonbinary	1.072	[0.77, 1.50]	.681	1.351	[0.99, 1.84]	.056
<b>Race/ethnicity</b>						
White (ref)						
Black	1.370	[1.02, 1.84]	.037	1.093	[0.86, 1.39]	.470
Native American	2.217	[0.76, 6.48]	.146	0.822	[0.41, 1.63]	.575
Asian/Asian American	1.078	[0.80, 1.45]	.621	0.733	[0.56, 0.95]	.021
Hispanic/Latino/a/x	1.524	[1.24, 1.88]	<.001	1.165	[0.99, 1.37]	.068
Middle Eastern/Arab	1.378	[0.44, 4.28]	.580	1.427	[0.58, 3.53]	.440
Multiracial	1.115	[0.95, 1.31]	.178	1.085	[0.95, 1.24]	.229
Other	1.348	[0.48, 3.79]	.572	0.892	[0.58, 3.53]	.440
Age	0.984	[0.94, 1.03]	.480	0.933	[0.90, 0.97]	<.001
<b>Region of the United States</b>						
Northeast (ref)						
Midwest	1.016	[0.86, 1.19]	.851	1.104	[0.96, 1.27]	.171
South	1.094	[0.94, 1.27]	.240	0.947	[0.83, 1.08]	.415
West	1.070	[0.91, 1.26]	.419	1.077	[0.93, 1.24]	.311
Intercept	0.944	[0.44, 2.02]	.881	1.433	[0.75, 2.74]	.278

Note. Bolded items are statistically significant at  $p < .05$ . CI = confidence interval; LGBTQ = lesbian, gay, bisexual, transgender, and queer.



LGBTQ+ community support was associated with 23% lower odds of engaging in weight control DEB.

Binge eating was positively related to family rejection and past-year LGBTQ+ based bullying. For every one-unit increase in family rejection, the odds of binge eating increased by 22% and, compared with not experiencing LGBTQ+-based bullying, experiencing bullying increased the odds of binge eating by 69% while not being sure about experiencing LGBTQ+-based bullying increased the odds of binge eating by 39%. Alternatively, binge eating was negatively related to family acceptance and LGBTQ+ community climate. For everyone one-unit increase in family acceptance, the odds of binge eating decreased by 9%. Compared with LGBTQ+ community climates that were getting worse, climates that were staying the same were associated with 18% lower odds of engaging in binge eating and climates that were getting better were associated with 22% lower odds of engaging in binge eating.

Logistic regression models also tested interaction effects between past-year LGBTQ+-based bullying and family acceptance, LGBTQ+ community climate, LGBTQ+ community involvement, and LGBTQ+ community support on weight control DEB and binge eating. There were statistically significant interactions between bullying and family acceptance,  $W(2) = 8.22, p = .01$ , and LGBTQ+ community support,  $W(2) = 12.48, p = .002$ , on weight control DEB and binge eating, family acceptance:  $W(2) = 7.64, p = .02$ ; community support:  $W(2) = 11.80, p = .003$ ). Specifically, each interaction indicated that family acceptance and LGBTQ+ community support served as protective factors for decreasing weight control DEB and binge eating, but only in the presence of no past-year LGBTQ+-based bullying. When LGBTQ+-based bullying was present, family acceptance and LGBTQ+ community support no longer had a significant impact on weight control DEB or binge eating.

## Discussion

This study examined the relation among DEB and family and community contexts among

LGBTQ+ youth. Findings indicate that families and communities are important environments that contribute to DEB. Families are a key site of stigma and/or support, demonstrated through a strong relationship between rejection and increased DEB among LGBTQ+ youth. Communities also played a critical role in DEB among LGBTQ+ youth, such that community climate and support were associated with lower rates of DEB, whereas bullying was associated with higher rates of DEB. Importantly, the protective factors of family acceptance and LGBTQ+ community support were no longer significant in the presence of LGBTQ+-based bullying, providing important and concerning implications for LGBTQ+ youth, as discussed in the following. Findings provide important contributions to the literature on LGBTQ+ youth DEB and an understanding of families, communities, and minority stress theory.

### *Family Acceptance and Rejection and DEB*

The family is a critical social context for LGBTQ+ youth development and well-being (McConnell et al., 2016; Ryan et al., 2010). Family support and acceptance are key protective factors and contributors to increased resilience, greater self-esteem, lower levels of depression and loneliness, and decreased feelings of hopelessness and suicidality among LGBTQ+ youth (McConnell et al., 2015; Milton & Knutson, 2021; Ryan et al., 2010). In one study, acceptance and support from the family of origin was the strongest predictor of lower levels of depression among LGBTQ+ youth, compared with support from peers, friends, and chosen families (Milton & Knutson, 2021). This study adds to this literature, demonstrating how LGBTQ+ accepting behaviors from parents or caregivers is associated with lower levels of binge eating among LGBTQ+ youth.

Conversely, family rejection of LGBTQ+ youth correlates with negative health outcomes and behaviors, including substance abuse, engaging in unprotected sex, and attempting suicide (Klein & Golub, 2016;

McConnell et al., 2015, 2016; Ryan et al., 2009). Findings from this study add to the literature as it relates to DEB. Family rejection had one of the strongest associations with DEB among LGBTQ+ youth in this study, increasing their odds of DEB by 22% (binge eating) or 42% (weight control DEB). These findings make sense, given the importance of family on development and well-being of LGBTQ+ youth (McConnell et al., 2016; Ryan et al., 2010) and the co-occurrence of ED with other mental health concerns (Gadalla & Piran, 2007).

### ***Community Context and DEB***

The communities in which LGBTQ+ youth are growing up are also important sites of stigma and support (Paceley et al., 2020). Numerous studies identify relationships between community climate and mental and behavioral health outcomes, such as substance use (Hatzenbuehler et al., 2012), depression (Paceley et al., 2019), anxiety (Paceley et al., 2019; Woodford et al., 2015), and suicidality (Hatzenbuehler, 2011). The relationship between the community context and ED or DEB have been studied less often than other mental health concerns, but with similar findings. For example, Watson, Veale, et al. (2017) found that transgender youth who experienced high levels of stigma in their community, through experiences such as feeling unsafe, bullying, and harassment, had a 71% probability of developing DEB. Perceived support from family and peer networks partially alleviated the impacts of stigma they experienced in the community. This study's findings further contribute to this literature, demonstrating how LGBTQ+ community support and climate are associated with lower DEB, whereas LGBTQ+ related bullying was associated with higher DEB. In addition, the inclusion of multiple measures of community (climate, support, involvement, and bullying) provide complexity to an understanding of community beyond examining climate as hostile, tolerant, or supportive.

Although the family context had a large impact on DEB among LGBTQ+ youth in this study, the importance of community cannot be understated. This is especially true, given the

contexts were modeled together, illustrating their unique effects on DEB. When parents or caregivers display rejecting behaviors, LGBTQ+ youth may need support and acceptance in their communities to an even greater extent (Hackimer & Proctor, 2014). These resources may include LGBTQ+ community-based organizations, gender and sexuality alliances at school, and other LGBTQ+ individuals (Paceley, 2016). Even when parents are accepting, if they are heterosexual and/or cisgender, they may be not able to relate to their LGBTQ+ child through a "shared stigmatized identity," as may be the case with other stigmatized identities based on race, ethnicity, class, or religion (Klein & Golub, 2016, p. 1).

Finally, an important finding from this study was that in the presence of LGBTQ+-based bullying in the past year, the protective mechanisms of family acceptance and LGBTQ+ community support no longer have the effect of decreasing weight control DEB or binge eating. This speaks to the deleterious impact of anti-LGBTQ+ bullying on LGBTQ+ youth, who are at greater risk of biased-based bullying than cisgender and heterosexual peers (Moyano & Sánchez-Fuentes, 2020). These experiences increase LGBTQ+ youth's risks of adverse outcomes, including increased suicidal ideation (Ybarra et al., 2015) and depression (Kosciw et al., 2020), and poor school outcomes, such as truancy and lower grades (Kosciw et al., 2020; Moyano & Sánchez-Fuentes, 2020). This study adds to this literature, demonstrating the relationship between experiencing anti-LGBTQ+ bullying and engaging in DEB and how this relationship remains strong even with other protective factors in place, such as family acceptance and LGBTQ+ support.

### ***Limitations***

The findings from this study make important contributions toward understanding the mechanisms underlying DEB among LGBTQ+ youth. The study is strong in its use of survey methods to reach a large, diverse, and national sample of LGBTQ+ youth and the data cleaning procedures used to eliminate bots and illegible responders; however, there are

important limitations to note. First, the gender identity measure asked participants to identify their gender as male, female, transgender boy/girl, genderqueer, or something else, rather than a more inclusive set of options such as cisgender boy, cisgender girl, transgender boy, transgender girl, or nonbinary/gender queer. An updated version of the survey distributed in 2022 has this more inclusive set of gender options for participants. In addition, whereas the sample is large and diverse, it is not a probability sample, which limits the ability to draw conclusions that are representative of the broader LGBTQ+ youth population. Finally, given the collaboration with the HRC on measure development, study items related to community context lacked prior validation and replication.

### *Implications*

Despite these limitations, the findings from this study have important implications for research and practice. The following sections indicate areas for scholars and practitioners to intervene within communities and families to prevent or mitigate DEB among LGBTQ+ youth.

*Implications for Research.* It is critical for scholars to address issues of DEB among LGBTQ+ populations through a minority stress lens that recognizes the influence of stigma and violence on the mental health of LGBTQ+ people (Meyer, 2003). Simply including sexual orientation and gender identity as covariates is insufficient as it leads to conclusions that do not reflect the full picture, whereas including the family environment and community contexts provides a more holistic examination of the factors associated with LGBTQ+ youth health. Research on DEB among LGBTQ+ populations should consider the oppression, stress, and support experienced in their environments. For example, although this study's findings illustrated connections between the family and community contexts and DEB among LGBTQ+ youth, the effect sizes in the models were small, with 6% of the variance explained in the DEB weight control model and 4% of the

variance explained in the DEB binge-eating model. This suggests that, although statistically and clinically significant, the models are missing factors critical to having a holistic understanding of LGBTQ+ youth DEB. Given the strong association between LGBTQ+-based bullying and DEB, future research should include constructs such as school anti-bullying policies with weight enumeration (Lessard et al., 2021) and school connectedness (Watson, Veale, et al., 2017). Relations with internalized and experienced weight stigma and minority stressors should also be examined. For example, future studies could include general risk factors for DEB alongside LGBTQ+-related minority stressors to identify how minority stressors may exacerbate more universal risk factors.

*Implications for Practice.* In practice with LGBTQ+ youth, it is essential that practitioners understand the mechanisms underlying DEB. Practitioners may assume that, because a marginalized group has a significantly higher risk of a mental health concern, it is their identity that leads to that disparity, rather than experiences of stigma and oppression. Through a minority stress lens, however, heterosexism and cissexism are, at least in part, contributors to mental health disparities among LGBTQ+ youth. This study's findings indicate that there are numerous factors, external to the LGBTQ+ youth themselves, at play when it comes to DEB.

Given that family rejection is positively associated with DEB, practitioners should incorporate an understanding of complex family dynamics into the treatment of their LGBTQ+ clients. This could include having family involved in the treatment, rethinking definitions of family, offering psychoeducation to families, and identifying other ways that the relationship(s) a client has with their family may influence their experiences around DEB. Especially when it comes to the LGBTQ+ community, family of origin can be a fraught subject; exploring ideas around chosen family could be especially supportive to those who have experienced rejection. Furthermore, interventions involving the family must be sensitive to differences such as race, ethnicity, religion,

and others that may influence familial involvement and what the client considers best for their treatment (Puhl et al., 2013).

Another key contributor to increased DEB in this study was experiencing LGBTQ+-based bullying in the past year; this finding was significant even with protective factors in the family and community in place. Practitioners should work to assess LGBTQ+ youth's history of being bullied and provide individual-level supports to address those impacts. When practitioners are working with LGBTQ+ youth who have experienced bullying, they should also be mindful to assess for potential DEB. Importantly, practitioners should also advocate for LGBTQ+-inclusive anti-bullying and nondiscrimination policies, and their enforcement at school, local, and state levels. A key aspect of this work may be in providing trainings and resources for school staff, teachers, and administrators to reduce biased-based bullying and support LGBTQ+ youth.

Another important finding in this research was that access to LGBTQ+ support groups was negatively associated with DEB. Practitioners should consider partnering with local LGBTQ+ community centers, schools, and community partners to help provide groups if their organization is not able to offer them. It is essential that group leaders be well versed in supporting the LGBTQ+ community. If possible, having subsets of these groups, such as a queer/trans people of color-specific group, could help to address those living at the intersection of multiple marginalized identities.

At a broader level, community climate of LGBTQ+ individuals was negatively associated with DEB, indicating a need for practitioners to be advocates for the LGBTQ+ community at all levels. This means working within institutions and organizations to ensure policies are LGBTQ+ affirming, as well as advocating for policy shifts at the city, county, and state levels. Consider getting youth involved: having an advisory board at your organization made up of LGBTQ+ young people to support your commitment to inclusion can be empowering and move toward actual change.

## Conclusion

This study provides an important contribution to an understanding of DEB among LGBTQ+ youth. By examining the critical relationships between family and school contexts on DEB behaviors among LGBTQ+ youth, the findings illuminate important mechanisms underlying DEB and contribute to potential pathways to disrupt the development of DEB or provide more holistic treatments to this population. It is essential that scholars and practitioners working toward LGBTQ+ youth health equity consider the multifaceted and interdependent nature of contexts on LGBTQ+ youth health, including DEB.

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