LGBTQ Youth-Serving Organizations: What Do They Offer and Do They Protect Against Emotional Distress?

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School-based support organizations for lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) youth have been well studied as a protective factor, but little research has explored LGBTQ youth-serving organizations in community settings, which may be similarly beneficial. The current study describes the features and services of community-based LGBTQ youth-serving organizations and tests how the extent of LGBTQ youth-serving organizational resources is associated with emotional distress among LGBQ youth in those communities. Data from the 2013 Minnesota Student Survey were merged with community-level data from the LGBTQ Environment Inventory for multilevel logistic regression, to test whether living in an area (i.e., 15-minute drive-time buffer) with some or many LGBTQ organizational resources was associated with lower odds of internalizing symptoms, self-harm, suicidal ideation, and suicide attempts among 2454 LGBQ youth in 81 communities. Website searching identified 25 LGBTQ youth-serving organizations in the state, offering an average of 3.8 conveniences and services (range: 1–6). Approximately three-quarters of LGBQ youth lived in an area with no LGBTQ youth-serving organizations and approximately 15% had many organizational resources. Living in an areas with resources was associated with lower odds of emotional distress, even after adjusting for metropolitan location. For example, the odds of high internalizing symptoms were significantly lower for girls living in communities with many LGBTQ youth organization resources compared to those living in areas with no resources (OR = 0.83, CI = 0.70–0.99). Findings suggest that living in an area with organizational resources for LGBTQ may be beneficial for the emotional well-being of LGBQ adolescents in those areas.

Keywords: sexual minorities; adolescence; emotional distress; social environment

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PUBLIC HEALTH SIGNIFICANCE

LGBQ youth who live in areas with an LGBTQ youth-serving organization have lower odds of emotional distress than those in areas without this resource. Findings suggest that increasing the number of communities served by LGBTQ youth organizations may contribute to the well-being of LGBQ adolescents in those areas.

INTRODUCTION

Emotional health problems that adversely and disproportionately affect lesbian, gay, bisexual, and queer/questioning (LGBQ) youth are well-documented: population-based research has found higher rates of depressive symptoms, self-harming behaviors, suicidal ideation, and suicide attempts among LGBQ youth compared to their heterosexual counterparts.[1–7] For example, in a national study of U.S. high school students, 60.4% of LGB students reported feeling sad or helpless almost every day for two or more weeks in a row, compared to 26.4% of heterosexual students.[2] Similarly, the rate of past-year suicide attempts was over 4.5 times higher among LGBQ students than among heterosexual students.[2] However, in spite of the aforementioned evidence of disparities, many LGBQ young people report *not* having these experiences and are resilient in the face of discrimination, marginalization, and other adversities.[1–7] Research has turned to health-promoting protective factors that can support young people—even those in vulnerable, stigmatized groups—as they navigate their adolescence.[8–15]

According to the Minority Stress Theory, LGBQ people face stigma and stressors unique to their sexual orientation, including discrimination, bullying, and other types of violence and harassment, in addition to stressors experienced by heterosexual people.[16,17] High rates of bullying and related victimization among LGBQ young people have been found in several studies,[18–20] and contribute to poor emotional and behavioral health outcomes for this population.[15,21–28] Importantly, the relationship between minority stress and mental health may be mitigated by coping skills and social support.[16,17] The Minority Stress Model has been supported empirically,[29] including in studies of youth.[30–32] Additionally, social ecological research frameworks posit that factors at multiple social levels (including peers, family, organizations such as schools, communities, and society) may provide needed support and contribute to improved health behaviors and well-being,[33,34] including to those affected by minority stress. Theorists and researchers have noted the importance of placing individual health behaviors and experiences in a broader social context, and specifically recommend this multilevel approach for research involving adolescents,[35] including LGBQ youth.[1]

In this vein, a growing body of research has examined the role of school-based gender/sexuality or gay/straight alliances (GSAs) in supporting the emotional well-being of LGBQ students. The availability of a GSA in school has been shown to protect LGBQ youth against harassment and emotional distress,[36–41] with some differences by sex (where tested).[37,41] The bulk of this work focuses on the presence of a GSA in school, regardless of whether an individual participates in that group or its activities. In studies where both presence and participation are addressed, findings indicate that the beneficial presence of a GSA extends to students regardless of whether they themselves participated in the GSA.[36,42,43]

Of course, many schools do not offer a GSA, and community-based LGBTQ[1] youth organizations have a long history of providing similar resources, connections, and supports. In contrast to school GSAs, community-based LGBTQ youth organizations have been the focus

of only a handful of studies regarding their characteristics, offerings, and associations with well-being.[44–48] What constitutes an LGBTQ youth-serving organization varies in different studies, but reports have documented that they are more common in metropolitan areas and communities with more accepting climates,[45,46] tend to be part of LGBTQ community organizations serving people of all ages (i.e., not solely youth-focused),[44,45,48] and offer a variety of programs including drop-in centers, peer support groups, Pride events, youth advocacy, social activities, and referrals to additional LGBTQ-supportive services.[44,45] In one recent study, Fish et al. found that youth of color and youth who were assigned male at birth, transgender, or receiving free-or-reduced lunch were more likely than their counterparts to participate in community-based LGBTQ organizations, and that participation was associated with better emotional health.[47] Although this recent study provides critical new insights into the potential protective effect of community-based LGBTQ organizations, the authors note some important limitations. First, their sample was entirely from metropolitan areas, with no representation from youth in smaller towns or rural areas; the authors specifically call for further research with youth from diverse settings. Second, their participants were recruited through community-based LGBTQ youth-serving organizations and related events. This approach favors inclusion of young people who are already connected to resources and, as such, likely to have better mental health at the outset than those who could not be reached by this recruitment method. Research drawing on a broader cross-section of youth, including those not connected to any community supports, is needed to further explore the potential of these organizations.

The Current Study

This research is part of the Research and Education on Protective and Supportive Environments for Queer Teens (RESPEQT) Project, a cross-sectional examination of community resources and well-being among LGBQ adolescents.[49–52] The current analysis builds on empirical research demonstrating the protective effects of community resources on the well-being of LGBQ youth, even when youth do not directly interact with such resources (e.g., GSAs at schools in the state, same-sex couples in the county, hate crimes in the neighborhood[9,53,54]). Further, this work mirrors research on GSAs by focusing on the presence of organizational and community resources, rather than direct involvement in activities or programs, and advances the literature by including a school-based sample of youth from diverse settings. We aim to describe the features and services of community-based LGBTQ youth-serving organizations in one Midwestern state, and test how the extent of LGBTQ youth-serving organizational resources is associated with emotional distress among LGBQ youth in those communities. We hypothesize that LGBQ youth in areas with more organizational resources will report less emotional distress than LGBQ youth in areas with no such resources and that this association will be maintained after accounting for metropolitan/nonmetropolitan location. We examine relationships separately for boys and girls, based on previous research indicating differences in the protection conferred by community and organizational resources.[37,41,51,55,56]

METHODS

Project RESPEQT examined the social environment of LGBQ youth attending 81 schools throughout Minnesota. To be included in Project RESPEQT, schools met three criteria: (1) participation in the 2013 Minnesota Student Survey (MSS); (2) participation in the CDC's 2014 School Health Profiles Survey[57] (used in other parts of Project RESPEQT[51]); and (3) at least 10 students who identified as LGBQ (as measured on the MSS). Because school participation in the MSS is very high statewide (84% of districts) and schools were randomly selected

to participate in the School Health Profiles Survey, the school sample approximates a random sample. These 81 schools included 2454 LGBQ students.

Two sources of data were merged for multilevel analysis: the LGBTQ Supportive Environments Inventory[50] for data on organizational resources in communities, and the 2013 MSS[58] for student data. The University of Minnesota Institutional Review Board exempted this analysis from review due to use of existing anonymous student data and publicly available organizational and institutional (i.e., nonhuman) data.

Defining Communities

Communities were defined around 81 schools. "Communities" for this research were defined as the area accessible within a 15-minute drive from the participating school. Although students may not live within 15 minutes of their school, it is a hub of their daily activities and provides a reasonable proxy for student location (as individual residential addresses were not available). This geographical space was chosen to balance access to resources and an area in which adolescents conduct their daily lives, as well has having consistency across metropolitan and nonmetropolitan locations. School addresses were geocoded using Environmental Systems Research Institute (Esri) ArcGIS Desktop 10.4.1 software. The 15-minute community buffer was created using the "Create Drive-Time Areas" tool in ArcGIS Online.[59]

LGBTQ Youth-Serving Organizations

As part of the LGBTQ Environment Inventory,[50] study team members identified LGBTQ youth-serving organizations in these 81 communities, and detailed the resources and services they provided. Organizational data were collected via website searching, in keeping with the ways in which youth would seek out information about local resources, using an extensive protocol designed for this study, with search terms such as "LGBTQ youth" and [city name].[50] When critical information was not available online, one coder would make a telephone or email inquiry, depending on the contact information available, to attempt to obtain the information. Two coders (from a team of 13) independently collected data for each community, and the project director (ALG) reviewed the data to match resources coded by both people and reconcile any discrepancies in scores. LGBTQ youth-serving organizations that were identified in online searching by at least one coder were included, in order to create the most comprehensive list. Inventory data collection occurred from 2016 to 2017 and included organizations that were operating between 2010 and 2017.

For this paper, we defined LGBTQ youth-serving organizations as those which met at least one of the following criteria: (1) their primary mission includes working with LGBTQ youth; (2) they serve LGBTQ people, with one or more services specifically for LGBTQ youth; (3) they serve youth, with one or more services specifically for LGBTQ youth. Each organization's name, address, and website were recorded, along with a qualitative assessment of the organization's "orientation." Orientation was described as primarily problem focused (e.g., support, services, or resources for mental health problems, violence, substance use), primarily healthy youth development-focused (e.g., opportunities to hang out, engage in community, practice leadership), or a combination of both, based on review of the organization's website and social media presence. Each organization was then coded for the presence or absence of nine characteristics reflecting *convenience* [including offering weekend hours; being located within

500 meters of public transit; providing information on social media; street visibility of the LGBTQ-focused nature of the organization (e.g., a rainbow flag in the window, assessed with Google maps street view)] and *service* provision [including confidential services; mental health services provided by a licensed provider; social activities; special events (e.g., Queer Prom); and population-specific activities (e.g., for African American LGBTQ youth, transgender youth)]. One point was given for each characteristic, and where more than one community organization had a street address inside a community buffer, points were summed across organizations on each characteristic. Three community-level summary scores were created for use in analysis: convenience total, service total, and total resource score (i.e., the sum of convenience and service totals).

Minnesota Student Survey

The Minnesota Departments of Education, Health, Human Services, and Public Safety conduct the MSS every three years in grades 5, 8, 9, and 11.[58] All public school districts in the state are invited to participate in this anonymous surveillance program. 84% of districts had at least one eligible grade complete surveys in 2013, yielding data from approximately 67% of all students enrolled in these grades statewide. Parental notification and student assent were used, in accordance with relevant laws. In order to improve validity, approximately 2% of surveys were discarded due to inconsistencies in reporting, a pattern of responses suggesting exaggeration, or other evidence of mischievous response.[60,61] Only students in grades 9 and 11 received questions about sexual orientation, so the current analysis is restricted to these grades.

Two items were used to measure sexual orientation: "Which of the following best describes you?" (with response options of heterosexual (straight), bisexual, gay or lesbian, and not sure (questioning)); and "During the last 12 months, with how many different [male/female] partners have you had sexual intercourse?" (response options ranged from none to 6 or more persons). The first item was given priority in identifying the sample, as many youth are not yet sexually active with a partner, and identity development in adolescence is critical to both well-being and connection to resources and supports for LGBQ people. However, students who indicated they were heterosexual but also reported past-year same-sex sexual experience were also included, based previous research demonstrating that the health profile of this group is more similar to non-heterosexuals than to heterosexuals, including our work with the MSS.[62–66] Lesbian, gay, bisexual, questioning, and heterosexual youth with same-sex experience are referred to here as LGBQ. The MSS did not include a measure of gender identity, so transgender/gender diverse youth could not be explicitly included in analysis.

Four emotional distress variables were included in this analysis. *Internalizing problems* in the past year were assessed using five items (i.e., significant problems with feeling sad, lonely, depressed, or hopeless; sleep trouble; feeling very anxious, nervous, tense, or panicked; becoming distressed when something reminded you of the past; thinking about ending your life). These items were adapted from the short form of the Global Appraisal of Individual Needs, a standardized and validated biopsychosocial assessment tool.[67,68] Each item had a yes/no response. This screener had high internal reliability among all MSS participants (Cronbach's $\alpha = 0.80$). Participants who marked "yes" on three or more problems were considered to have a high likelihood of an internalizing disorder (and contrasted with those reporting fewer than three problems), as recommended by the screener developers.[67] Intentional *self-harming*

incidents (e.g., self-cutting, bruising, burning) in the past year were measured with one item, with response options ranging from 0 to 20+ times. Results were dichotomized to compare those reporting any self-harm experience to those with none, due to extreme skewness in the distribution. Two separate items asked about *suicidal ideation* ("seriously considered attempting suicide") and *suicide attempts*. Responses for each included "no," "yes, during the last year," and "yes, more than a year ago." Those who marked either "yes" response were contrasted with those who marked "no." Suicidal ideation and suicide attempts were used as separate dependent variables.

Data Analysis

Descriptive statistics are provided for the youth organizations, communities, and LGBQ students. Because only 15 community buffers included any LGBTQ youth-serving organizations (resulting in a highly skewed distribution), we created three groups for analysis: those living in communities with no such organizations, those in communities with some resources (1–7 points, i.e., below the median number of resources), and those in communities with many resources (8+ points; i.e., at or above the median number of resources).

We then estimated multilevel logistic regression models for each of the emotional distress variables, generating odds ratios for those with (1) some LGBTQ organizational resources and (2) many resources, using those in communities with no such organizations as the reference group. Models were stratified by sex (male/female, as assessed on the MSS) based on previous research showing gender differences in the protective association of social factors among LGBQ youth[37,41,51,56] (with more effects typically found for girls[37,51,56]), and controlling for location within the Twin Cities metropolitan area vs. elsewhere in the state. Given potential differences in the ability of 9th grade and 11th grade students to access community resources such as LGBTQ youth-serving organizations, we tested for effect modification by grade level. These tests of interaction were not significant in any case and we therefore proceeded with the full analytic sample. Because students were nested within communities, multilevel regression models further accounted for within-cluster correlation, using SAS PROC GENMOD with a random intercept for community buffer. P-values less than .05 were used to determine statistical significance.

RESULTS

Website searching identified 25 LGBTQ youth-serving organizations, shown in Figure 1. The majority (72.0%) were located in the Twin Cities metropolitan area and the remainder were in other areas of the state (Table 1). Almost half (44.0%) of the organizations were general youth organizations that offered at least one service or program targeting LGBTQ adolescents; only one-third (32.0%) were focused specifically on LGBTQ youth. A similar proportion of organizations were problem oriented (28.0%) and healthy youth development oriented (32.0%). Most organizations were on or near public transit (73.9%) and provided information on social media (88.0%); few had LGBTQ words or symbols visible from the street (9.5%). The most common services described on organizations' websites were social activities and special events (48.0% for each). Confidential services and mental health services were less common. Out of nine possible resources assessed here, the actual range among these 25 organizations was 1 to 6, with a mean of 3.8.
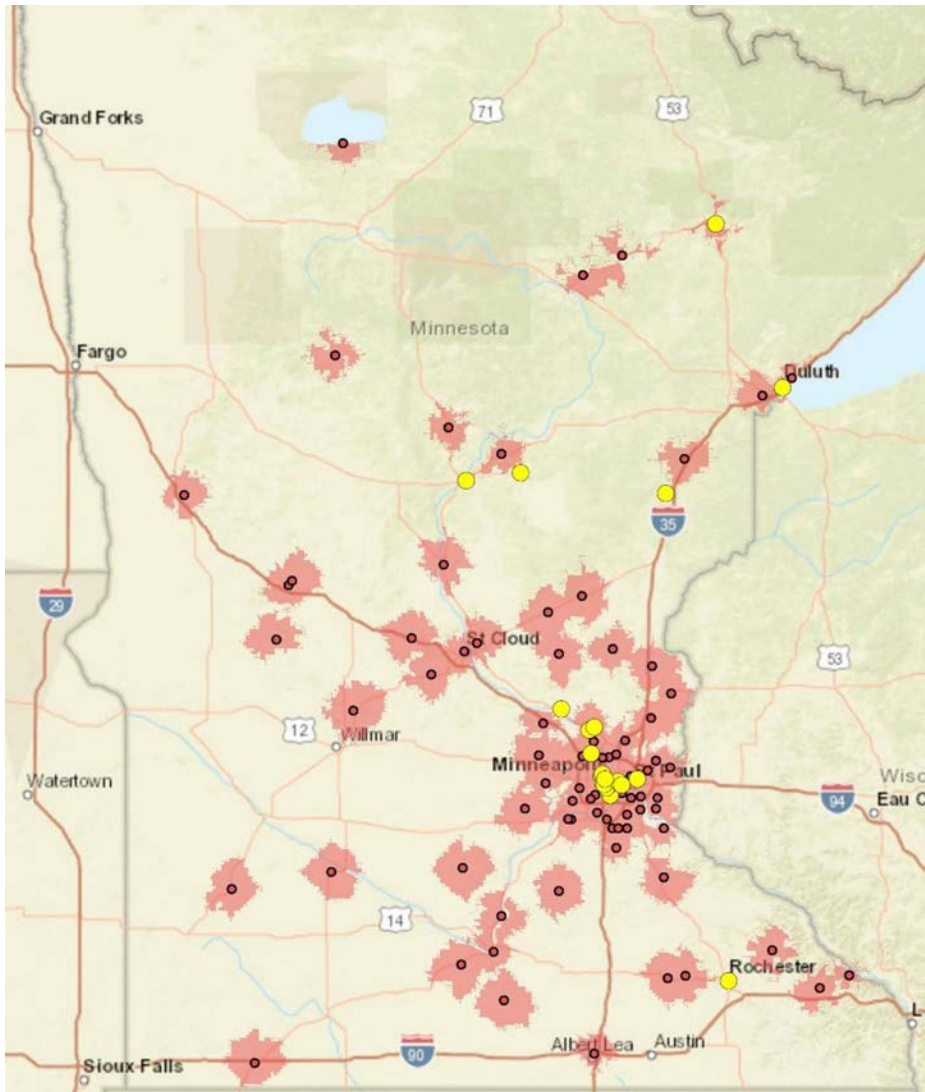
Figure 1. Map of Minnesota communities ($N = 81$, red dots at center of pink community buffers) and lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) youth-serving organizations ($N = 25$, yellow dots)

TABLE 1.   Characteristics of LGBTQ Youth-Serving Organizations in Minnesota ($N = 25$)

Characteristic	N	%
Location		
Twin Cities metropolitan area	18	72.0
Elsewhere in the state	7	28.0
		(*Continued*)

TABLE 1.   Characteristics of LGBTQ Youth-Serving Organizations in Minnesota (*N* = 25) (*Continued*)

Characteristic	*N*	%
Type		
LGBTQ youth-serving organization (specific focus)	8	32.0
LGBTQ organization, with ≥1 youth program or service	6	24.0
Youth organization with ≥1 LGBTQ program or service	11	44.0
Orientation		
Problem focused	7	28.0
Neutral/both/other	8	32.0
Healthy youth development focused	10	40.0
Resources		
Convenience		
Weekend hours	8	32.0
On/near public transit (*n* = 23[a])	17	73.9
Information on social media	22	88.0
Street visibility (*n* = 21[a])	2	9.5
Services		
Confidential services	5	20.0
Mental health services	7	28.0
Social activities	12	48.0
Special events	12	48.0
Population-specific activities	10	40.0
	Mean	*SD*
Resources score (range = 1–6)	3.80	1.53

[a]Two organizations did not have physical addresses so could not be mapped to transit. Two additional organizations were not mapped by Google Street View and could not be "seen" through this tool.

Of the 81 communities in the sample, 66 did not have any LGBTQ youth-serving organizations within their 15-minute buffers. Table 2 summarizes the resources in the 15 communities that had at least one such organization. On average, communities with any LGBTQ youth-serving organizations had 2.4 within their boundaries (range = 1–5). Average convenience totals ranged from 1 to 10 in communities with any LGBTQ youth-serving organizations, with a mean of 5.0; average service totals ranged from 0 to 10 in communities with any LGBTQ youth-serving organizations, with a mean of 4.1. Total resource scores ranged from 2 to 20, with a mean of 9.1, across the 15 communities that had any LGBTQ youth-serving organizations. Additional details of particular resources in these communities are shown in Table 2.

Among the 2454 LGBQ adolescents, approximately three-quarters did not have any organizational resources within their 15-minute community buffer; approximately 15% had numerous resources (Table 3). A high proportion of LGBQ youth reported each of the emotional distress indicators. For example, almost one-third of boys had three or more internalizing

TABLE 2.   Characteristics of Minnesota Communities with Regard to their LGBTQ Youth-Serving Organizations, *n* = 15 Communities with any LGBTQ Youth-Serving Organizations

Characteristic	Mean	*SD*	Range
Average number of LGBTQ youth-serving organizations	2.4	1.4	1–5
Resources and services			
Convenience total	5.0	2.9	1–10
Weekend hours	0.9	0.7	0–2
On/near public transit	2.1	1.4	0–5
Information on social media	1.9	1.1	1–5
Street visibility	0.1	0.4	0–1
Services total	4.1	2.9	0–10
Confidential services	1.0	0.8	0–3
Mental health services	0.9	0.9	0–3
Social activities	0.4	0.6	0–2
Special events	0.8	1.0	0–4
Population-specific activities	1.0	0.7	0–2
Total resource score	9.1	5.6	2–20

TABLE 3.   Characteristics of LGBQ Adolescents in Minnesota (*N* = 2454)

	Boys (*n* = 1,129)		Girls (*n* = 1,325)	
	N	%	*N*	%
LGBTQ organizational resources in the community				
None	898	79.5	1009	76.2
Some resources	68	6.0	109	8.2
Many resources	163	14.4	207	15.6
Location				
Twin Cities metropolitan area	682	60.4	831	62.7
Elsewhere in the state	447	39.6	494	37.3
Emotional distress				
Internalizing symptoms (3+)	332	32.7	772	62.8
Self-harm (past year)	233	22.9	627	51.1
Suicidal ideation (ever)	297	29.3	714	58.4
Suicide attempt (ever)	131	12.8	352	28.8

symptoms; over half of girls reported self-harming in the past year (51.1%) and ever seriously considering suicide (58.4%).

Results of multilevel logistic regression models are shown in Table 4. Among boys living in communities with some organizational resources, the odds of experiencing suicidal ideation were significantly lower than the odds among boys living in communities with no such resources (OR = 0.68; CI = 0.49–0.95), after adjusting for metropolitan location and

TABLE 4.   Adjusted Odds Ratios (and 95% Confidence Intervals) of Emotional Distress Among LGBQ Youth in Communities with Some LGBTQ Youth Org Resources and many LGBTQ Youth org Resources (Compared to those in Communities with no Organizations)[a]

	Internalizing Symptoms (3+)	Self-Harm (Past Year)	Suicidal Ideation (Ever)	Suicide Attempt (Ever)
Boys				
Some org resources	1.24 (0.85, 1.81) p = .265	0.98 (0.66, 1.47) p = .927	**0.68 (0.49, 0.95)** p = .022	0.93 (0.42, 2.07) p = .859
Many org resources	1.00 (0.89, 1.12) p = .974	1.25 (0.98, 1.59) p = .069	0.96 (0.74, 1.24) p = .747	1.08 (0.82, 1.42) p = .595
Girls				
Some org resources	0.83 (0.56, 1.23) p = .355	0.86 (0.55, 1.34) p = .499	0.82 (0.59, 1.14) p = .237	0.88 (0.61, 1.27) p = .485
Many org resources	**0.83 (0.70, 0.99)** p = .036	0.87 (0.74, 1.02) p = .085	0.93 (0.79, 1.11) p = .428	0.99 (0.84, 1.17) p = .900

Note. Boldface indicates p <.05.
[a]Models adjusted for metropolitan location and clustering by community.

clustering of students within communities. Similarly, among girls, the odds of three or more internalizing symptoms were significantly lower for those living in communities with many LGBTQ youth organization resources compared to those living in areas with no resources (OR = 0.83, CI = 0.70–0.99); odds of self-harming behavior were marginally lower (OR = 0.87, CI = 0.74, 1.02; p = **.**085). Odds ratios from four additional models (comparing girls in communities with some organizational resources to girls with no resources on internalizing symptoms, self-harm, suicidal ideation, and suicide attempts) were of similar magnitude (ORs = 0.82–0.88), but did not approach statistical significance (p ≥.10).

DISCUSSION

Results of this study indicate that community-based LGBTQ youth-serving organizations offer a variety of types of programs, program orientations, and services, and these are available in the large metropolitan area, and to a lesser extent in nonmetropolitan areas. However, most LGBQ youth do not have any such organizations in their immediate area (i.e., 15-minute driving radius), which may reflect a social climate that does not prioritize this population or have supports in place to help them avoid and manage stigma and stressors in their lives. Living in proximity to an LGBTQ youth-serving organization may be beneficial for the emotional health of LGBQ adolescents, with some differences noted by gender.

Interestingly, although we found evidence of this protective effect in several models, findings did not suggest the expected dose-response relationship, that is, that associations would be stronger for tests of many resources vs. none compared to some resources vs. none. The one significant association found among boys was for those living in areas with some resources. Among girls, the magnitude of associations was similar for four models testing some resources and two models testing many resources (although only tests of many resources were statistically significant or near significant). This pattern of findings deserves further consideration in longitudinal studies that can account for the preexisting need for and expansion of services. For

example, if resources were added in communities where distress among LGBQ youth was particularly high, a protective effect of increasing resources would be obscured. The present study was not able to explore this possibility.

The present findings are consistent with previous research showing a variety of types of resources offered by community-based LGBTQ youth-serving organizations, such as social activities and special events,[44,45] but extends previous work by describing several aspects of convenience of the services provided (e.g., proximity to public transportation). The few significant results also parallel existing studies of in-school organizations (i.e., GSAs), showing that the presence of an organization may be associated with less emotional distress, and this benefit is not restricted to those who take advantage of the organization's resources or services.[36–40,42,43] This work also builds on Fish et al.'s previous findings that involvement in an LGBTQ youth-serving organization was associated with fewer mental health problems,[47] but extends the associations to those who live in proximity to an organization.

As expected, some differences by gender were noted. Specifically, significant findings and nonsignificant trends were in the expected directions and of fairly consistent magnitude among girls, as we have seen in our previous work examining social influences on well-being among LGBQ youth.[51,55,56] Although one significant protective association was found for boys, no other models were suggestive of this effect. Our significant findings also differed in the severity (under the umbrella of emotional health) of the dependent variable—internalizing symptoms for girls, and suicidal ideation for boys. The reason for these differences by gender and severity are not clear. It may be that girls are more attuned to subtleties of social climate or are more aware of (and perhaps involved in) community resources than boys. Stratifying by sex is recommended in order to continue to explore social influences, nuances in severity, and mechanisms of action.

Factors at outer levels of the social ecological model (e.g., organizational, community, social) have the capacity to affect a large number of people, but the effects are relatively small, and this presents a challenge within the field of population health.[69] The effects of a community organization or a somewhat nebulous social climate may, in fact, be too small to detect in a study of this size (with statistical power derived from 81 clusters), resulting in the few statistically significant findings noted here (but the pattern of nonsignificant odds ratios in the expected direction, among girls). Further research with a larger number of groups is needed to replicate and extend this work. However, it is also important to consider that the relatively few significant findings noted here may be spurious, and no actual protective association exists.

Of note, student data used in this study were collected in 2013, and prevalence rates of emotional distress indicators may have changed since then. Likewise, online information about LGBTQ youth-serving organizations may be out of date. However, it is important to note that the theorized associations explored here—that having LGBTQ youth-serving organizational resources in the community would be protective against emotional distress among LGBQ youth—is not expected to have changed in recent years. We therefore believe findings still have relevance for communities, organizations, and LGBQ youth today.

Limitations and Strengths

Findings should be interpreted in light of several limitations. We selected a 15-minute drive time to reflect the geographic space in which young people are expected to conduct many of their usual activities; however, young people may travel much farther in order to access resources they particularly need, as has been reported with youth attending LGBTQ activities.[44] As such, our estimates of resources in this 15-minute drive time may be lower than the

resources LGBQ youth may choose to access farther away, which would bias findings toward the null. We also limited the school sample to those with at least 10 LGBQ students, in order to further protect students' anonymity. Smaller schools may therefore be under-represented in this analysis, and findings may not be generalizable to those settings. The number of communities available for this analysis may have limited power for multilevel analyses (which is determined largely by the number of clusters rather than the total number of individuals). For girls in particular, modest associations were not statistically significant in some models, but were in others, perhaps resulting from limited statistical power. This study also relied on self-reported data both from student survey participants and from organizations (as information posted by the organization on the organizational website), which may contain inaccuracies. It is also important to note that data come from a school-based sample; as such, youth not present in school (e.g., due to illness, truancy, dropout) are not included in the sample, and may represent the most vulnerable youth, including LGBQ youth experiencing significant distress and/or school bullying. Finally, this study did not include an assessment of whether participants engaged with the LGBTQ youth-serving organizations in their area, which would have enabled further exploration of whether proximity to or utilization of services is the active ingredient in the associations observed here.

This study also includes several strengths. Using existing data, we were able to include a large number of students (including both those who were and were not "out" and/or connected to an LGBTQ organization, through which this population is often accessed). Additionally, LGBTQ organization data were collected online, reflecting the way many young people access information about LGBTQ issues and resources in their communities.[70]

CONCLUSIONS

Findings from the present study suggest that LGBQ youth who live in areas with an LGBTQ youth-serving organization may have lower odds of emotional distress than those in areas without this resource. Increasing the number of communities served by LGBTQ youth organizations may therefore contribute to the well-being of LGBQ adolescents in those areas.

Similar to the accumulating body of research regarding GSAs, future research on community-based LGBTQ youth-serving organizations should simultaneously examine both availability of and participation in these programs. Such an approach will discern the most salient aspects of these community resources and indicate more nuanced approaches to prevention strategies (e.g., develop additional organizations and expand resource offerings, or increase youth involvement in programs) in order to best meet the emotional health needs of LGBQ youth.

NOTE

[1] The abbreviation LGBTQ includes transgender and gender diverse youth because they are also served by organizations and other resources for LGBQ youth, who are the focus of this study.

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