



Published in final edited form as:

J Youth Adolesc. 2019 December ; 48(12): 2418–2431. doi:10.1007/s10964-019-01129-5.

LGBTQ Youth-Serving Community-Based Organizations: Who Participates and What Difference Does it Make?

Jessica N. Fish¹, Raymond L. Moody², Arnold H. Grossman³, Stephen T. Russell⁴

¹Department of Family Science, School of Public Health, University of Maryland, 1142 Valley Drive, College Park, MD 20742, USA

²Health Psychology and Clinical Science, Department of Psychology, City University of New York, 365 Fifth Avenue, New York, NY 10016, USA

³Department of Applied Psychology, Steinhardt School of Culture, Education, and Human Development, New York University, 246 Greene Street, New York, NY 10003, USA

⁴Human Development and Family Sciences, University of Texas at Austin, 108 E. Dean Keeton St. Stop A2702, Austin, TX 78712, USA

Abstract

LGBTQ youth are at greater risk for compromised health, yet large-scale health promotion programs for LGBTQ young people have been slow to develop. LGBTQ community-based organizations—which provide LGBTQ-focused support and services—have existed for decades, but have not been a focus of the LGBTQ youth health literature. The current study used a contemporary sample of LGBTQ youth (age 15–21; $M = 18.81$; $n = 1045$) to examine who participates in LGBTQ community-based organizations, and the association between participation and self-reported mental health and substance use. Youth who participated in LGBTQ community-based organizations were more likely to be assigned male at birth, transgender, youth of color, and accessing free-or-reduced lunch. Participation was associated with concurrent and longitudinal reports of mental health and substance use. LGBTQ community-based organizations may be an underutilized resource for promoting LGBTQ youth health.

Keywords

Sexual and gender minority; LGBTQ; Youth; Mental health; Substance use; Community programs; Health promotion

✉ Jessica N. Fish, jnfish@umd.edu.

Authors' Contributions J.N.F. conceived of the current study design, conducted all data analysis, participated in the interpretation of the results, and drafted the manuscript; R.L.M. participated in an earlier iteration of the paper, provided input on the current study design, and assisted in drafting the manuscript; A.H.G. conceived and carried out the original data collection and provided substantial feedback the study design and manuscript; S.T.R. conceived and carried out the original data collection, participated in the conception of the current study design and interpretation of results, and contributed to the drafting of the manuscript. All authors read and approved the final manuscript.

Data Sharing Declaration The manuscript data will not be deposited.

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (include name of committee + reference number) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Introduction

Sexual and gender minority (i.e., lesbian/gay, bisexual, transgender, and questioning [LGBTQ]) youth, as a population, experience disproportionate mental and behavioral health burdens than heterosexual, cisgender youth (Plöderl and Tremblay 2015; Russell and Fish 2016). LGBTQ youth are not inherently more vulnerable to poor health; instead their experiences with stigma, harassment, and anti-LGBTQ discrimination and victimization across contexts (i.e., school, family, and community; Katz-Wise and Hyde 2012; Ryan et al. 2009; Toomey and Russell 2016) place them at greater risk for poor mental health (Russell et al. 2012) and maladaptive coping strategies, such as substance use (Goldbach et al. 2014). Given relatively pervasive experiences of stigma among LGBTQ youth (Katz-Wise and Hyde 2012), school and community-based programs that affirm and provide safe spaces for LGBTQ young people offer critical support for positive development and wellbeing, particularly for those who do not receive it elsewhere.

Anecdotally, LGBTQ youth-serving community-based organizations have been a bastion for sexual and gender diverse young people for decades (Herdt and Boxer 1996; The National GLBTQ Youth Foundation 2010; Shilo et al. 2015). These programs have become increasingly more important given that modern cohorts of LGBTQ people are coming out at younger ages than ever before (Russell and Fish 2016; Floyd and Bakeman 2006). Despite the presence and longevity of these programs, there is limited understanding of the programs, patronage, and associated impact of LGBTQ youth-serving community-based organizations (c.f., Allen et al. 2012; Herdt and Boxer 1996; Williams et al. 2019). This study uses a prospective sample of LGBTQ youth to address two research questions about LGBTQ youth-serving community-based organizations: Who among LGBTQ youth participate? And what difference does it make? These questions were addressed by examining characteristics of youth who reported participating in LGBTQ youth-focused community-based organizations, and whether their participation in these programs was associated with concurrent and longitudinal markers of mental and behavioral health.

Theoretical Perspectives on Community Involvement and Positive Development for LGBTQ Young People

The approach to this study lies at the nexus of three guiding frameworks: minority stress, intersectionality, and positive youth development. The minority stress framework is a theoretical casual model that explains how stigma experienced by LGBTQ people—in the form of structural barriers to health equity as well as experiences of discrimination, victimization, violence, and internalized homophobia—compromise the health and wellbeing of LGBTQ people across the life course (Meyer 2003). Along with defining experiences and processes by which stigma impacts health, minority stress frameworks (Hatzenbuehler 2009; Meyer 2003) also theorize that access to support and integration into the LGBTQ community may help to mitigate and buffer the negative influence of minority stress on health.

Intersectionality emphasizes the interconnectedness and mutually constructed nature of identity (Collins 1989; Crenshaw 1989). These perspectives are essential for understanding

how interlocking systems of power and oppression converge to create unique experiences for youth who embody numerous forms of diversity. There have been recent calls to better incorporate and integrate intersectional perspectives into the developmental sciences (Santos and Toomey 2018). These perspectives provide a more accurate view of youth development, and the ways in which research, programs, and practices can help to identify and foster the positive development and health of youth who sit at the interchange of various life-influencing systems of oppression. Although intersectionality has been used to help frame the experiences of LGBTQ people of color (Bowleg 2008; Toomey et al. 2017), it has been infrequently used to guide developmental science (Santos and Toomey 2018) and, in particular, youth engagement at the intersection of LGBTQ status, race/ethnicity, economic precarity, and disability status, among other diverse identities (Frost et al. 2019). Intersectional perspectives are particularly relevant for understanding the lives of LGBTQ youth, who may experience multiple forms of oppression (Toomey and Russell 2016). And as reviewed further below, youth program participation, and LGBTQ community participation, both vary across social statuses, suggesting that LGBTQ youth program participation may be best understood from an intersectional vantage point.

The positive youth development framework provides further guidance on how programs can enhance youth's strength and resilience in ways that help them thrive (Lerner et al. 2009). Positive youth development recognizes that adolescence is a critical time in the life course to promote health and wellness through creating safe spaces, establishing consistent rules and expectations, fostering supportive relationships with peers and adults, promoting positive behaviors and good decisions making, and encouraging autonomy and leadership. Research suggests that youth who engage with programs that implement these strategies demonstrate a host of positive outcomes, including higher academic achievement, lower substance use, and greater mental health (Lerner et al. 2009).

Together, these frameworks ground the circumstances under which diverse LGBTQ youth experience compromised health, the need for LGBTQ-specific programs, and how—through community engagement and support—LGBTQ community-based organizations offer potential strategies for fostering positive psychosocial outcomes among LGBTQ young people.

Youth-Focused Organizations and Youth Well-Being

Research on the role of community organizations in supporting youth development has emerged over recent decades, documenting the important roles that such programs can have in a broad range of developmental opportunities and outcomes for young people (Eccles and Gootman 2002). The benefits of community programs are often situated within a positive youth development framework (Lerner et al. 2009), focusing on the ways that community organizations and program activities provide positive engagement and yield positive outcomes for youth. At the same time, participation in youth-focused community organizations has been identified as a protective factor for risk behaviors such as alcohol and substance use, as well as for depression and self-esteem (Erdem et al. 2016; Iachini et al. 2016).

Studies in which youth participate in community youth programs show a range of participation patterns, linked largely to the variability of community programs that have been the focus of prior studies. Some studies compare all out-of-school time to activities at school, whereas other studies examine or compare religious groups, scouting or 4-H, YM/WCA programs, or sports activities. In one of the few studies of the motivations for youth community program participation that included attention to sexual minority youth, sexual minority youth were more likely to report social problems with their prior engagement in community youth programs, and were more likely to say they had never joined certain youth activities compared to heterosexual youth (McGuire et al. 2016). Apart from sexual minority status, studies identify persistent gender differences, with boys reporting more sports involvement (Seefeldt and Ewing 1997) and girls more involvement in out-of-school clubs (Theokas and Bloch 2006). Regarding race and ethnicity, White youth generally participate in more out-of-school activities than Black/African American youth; Latino youth participate the least frequently (Theokas and Bloch 2006). A study using data from the National Educational Longitudinal Study found that White youth were more likely than other racial/ethnic groups to participate in religious groups, and more likely than Latino and Asian American youth to participate in sports. However, Black/African American youth were more likely than White youth to participate in boys' and girls' clubs, scouting, 4-H, and YM/WCA programs (Frisco et al. 2004). In one national study of participants of youth-serving organizations, Black/African American youth were more likely to feel safe and have positive relations with adults compared to other youth participants (Lee et al. 2009). Finally, regarding social class, youth from families with higher socioeconomic status are more likely to participate in a range of out-of-school programs than youth from families with lower socioeconomic status (Frisco et al. 2004; Theokas and Bloch 2006), although youth from poor families are more likely to participate in some programs that specifically reach out to them (e.g., 4-H; Frisco et al. 2004).

Research on school clubs such as gay-straight alliances (GSAs; more recently referred to as gender and sexuality alliances) demonstrates the positive impact these clubs have on school climate and youth development (Marx and Kettrey 2016; Poteat 2017). Yet, unlike school-based clubs or programs, the majority of community-based organizations exist as part of non-profit organizations and thus are not constrained by the policies and contingencies that restrict schools. School policies, for example, may thwart the implementation of culturally relevant education or programs for LGBTQ youth (Allen et al. 2012). Thus, historically, LGBTQ-focused community-based organizations have filled a void in the lives of sexual and gender minority young people, playing a distinctive role in their positive social and psychological development that may not be available to them at home or through school programs (Allen et al. 2012).

Community-Based Organizations and LGBTQ Youth

Broadly, community-based organizations have played an important role in nurturing the health and well-being of LGBTQ people over the last 50 years (The Institute of Medicine 2011; Martos et al. 2017). Although these programs were not traditionally youth-focused, community-based organizations were designed to meet the unique and often unaddressed health and social needs of the LGB (and later, transgender and queer) community. Beginning

in the mid-to-late 1980s, changes in social visibility and the increasingly younger ages of youth awareness and disclosure of their LGBTQ identities brought an impetus for LGBTQ youth-specific community programs and organizations (Herdt and Boxer 1996). Notably, many early and formative studies of sexual and gender minority youth development and health used LGBTQ youth community-based organizations in major US cities for recruitment (see D'Augelli et al. 2001), although the impact of these organizations on the health and wellbeing of LGBTQ youth was not assessed. Fast-forward to today and there are now more than 200 formally recognized LGBTQ community-based organizations that are registered with CenterLink, the national coalition for LGBTQ community centers (CenterLink and Movement Advancement Project [MAP] 2016). CenterLink's most recent biennial report showed that LGBTQ community-based organizations report that a large proportion of their participants are male, people of color, transgender, and report lower income relative to the general population (CenterLink and MAP 2016).

Despite the historical presence of LGBTQ community-based organizations, empirical studies of LGBTQ youth-focused community programs and organizations are limited. CenterLink's most recent report showed that although the majority (82%) of LGBTQ community-based organizations offer youth-focused services, only a small fraction of these centers (11%) are solely dedicated to youth and their needs (CenterLink and MAP 2016). In 2010, the National GLBTQ Youth Foundation was able to identify 119 LGBTQ community-based organizations offering youth programs that were estimated to serve over 5 million youth across the United States. This report offers a glimpse of the potential reach and influence of LGBTQ youth programs, and underscored the need for more evidenced-based social support programs for LGBTQ young people. In a more recent study, Allen et al. (2012) identified the presence of and programs offered by LGBTQ youth community-based organizations. In phone-interviews with 61 US-based LGBTQ programs that offered youth-based services, they found that the majority of these organizations report drop-in hours, peer support groups, educational programming as well as psychological and medical referrals for LGBTQ youth; services provided for sexual minority youth were more prominent than those for gender minority youth. Results also showed that many youth traveled great distances in order to access these services. Findings suggest the potential for these programs to reach a large number of LGBTQ youth around the country and the degree to which their services address the needs of LGBTQ young people.

Even in the absence of a strong empirical base on LGBTQ youth-serving community-based organizations, studies indicate the need for such programs. Over 20 years ago, Herdt and Boxer (1996) documented the crucial role of a community organization in providing space where lesbian and gay youth could find peers and solidarity in their sexual identities. In a recent qualitative study of sexual and gender minority youth in nonmetropolitan communities, Pacey (2016) noted several themes related to a lack of safe spaces designated for LGBTQ young people. Participants voiced a desire for space to meet other LGBTQ youth and that such a space would support their own wellbeing by alleviating feelings of isolation. One participant noted, "It would be a good thing to have a place or a designated area or something to where we could just go there and not be afraid of being shunned or cut out from people's lives. It would be so amazing." (Pacey 2016, p. 81). Findings also highlighted youths' self-reported need for LGBTQ-specific services and resources related to

mental health, identity development, and issues surrounding family (Paceley 2016), and another study suggests that these needs may be particularly unmet in nonmetropolitan communities (Paceley et al. 2019).

Considering the long-standing tradition of LGBTQ youth community-based organizations in major cities around the country (CenterLink and MAP 2016; Williams et al. 2019) as well as their need in rural areas (see Paceley 2016; Paceley et al. 2019), an empirical investigation of who participates in LGBTQ youth community-based organizations as well as the short- and long-term associations with mental and behavioral health is timely and warranted. Though studies have started to document the presence and activities of LGBTQ youth programs, researchers still lack knowledge of who among LGBTQ youth participate in these programs, and what measurable difference it might make in their lives. This information is vital to sustain and increase youth involvement within LGBTQ youth community-based organizations and to reach youth who are in need of, but currently not accessing, these services and programs.

The Current Study

The broader research literature on who participates in youth programs provide some expectations regarding LGBTQ youth participation in LGBTQ youth-focused community-based organizations. At the same time, the very reason that these organizations exist is to serve LGBTQ youth who may not feel safe and supported in other out-of-school programs for youth. Among existing programs, non-sports and non-religious community-based organization are likely most comparable to LGBTQ youth-focused community-based organizations (groups like youth programs at YM/WCAs). Among LGBTQ youth, because gay and lesbian identities have been historically central within LGBTQ communities, and due to issues of bisexual erasure and invisibility within those communities (Elia 2014; Roberts et al. 2015), it was expected that youth who identify with historically traditional labels (i.e., gay and lesbian) will be more likely to participate in LGBTQ youth-focused community-based organizations. Despite the fact that girls are more likely to participate in general community-based clubs, evidence that males are more likely to participate in LGBTQ community centers suggests that assigned males may be more likely to participate in LGBTQ youth-focused community-based organizations than assigned females. Given racial/ethnic differences in youth participation (Frisco et al. 2004) and adult participation in LGBTQ centers (CenterLink and Map 2016), it was also hypothesized that LGBTQ youth of color would be more likely than White LGBTQ youth to participate in LGBTQ community-based organizations. Additionally, regarding social class, although studies of general youth participation suggest that social class is positively correlated with participation, evidence from LGBTQ adult community organization participation (CenterLink and Map 2016) leads to the expectation that LGBTQ youth from lower socioeconomic status backgrounds may be more likely to participate in LGBTQ youth-focused community-based organizations.

Finally, the ultimate intent of LGBTQ youth-focused community-based organizations is to provide a context for support and affirmation for youth, and to prevent negative adjustment that is known to be more prevalent among LGBTQ youth compared to their cisgender heterosexual peers. It was expected that LGBTQ youth participation in community-based

organizations would be associated with positive mental health and lower substance use, both concurrently and longitudinally. These hypotheses were tested using a contemporary, longitudinal sample of diverse, LGBTQ young people from three U.S. cities.

Method

Data and Sample Description

Data are from a larger, longitudinal four-year panel study of the risk and protective factors of suicide among lesbian, gay, bisexual, transgender, and questioning (LGBTQ) and same-sex attracted youth in three cities one each in the Northeast, Southwest, and West Coast of the United States ($N=1061$; see Baams et al. 2015 for additional information). Eligible youth ages 15–21 were largely recruited from community-based agencies frequented by LGBTQ youth, LGBTQ events, and by referral from earlier participants. Youth assent and consent forms and procedures were approved; and youth advocates were used in lieu of obtaining parental consent to protect youth from undue disclosures with parents that can leave them vulnerable to verbal or physical harm. A federal certificate of confidentiality was obtained to protect youths' identities relative to the data. Youth received a cash incentive for participation at each wave of data collection. Data collection processes, storage, and reporting were approved by the New York University and the University of Arizona institutional review boards. The methodological approach presented here was intentionally designed to report sample size determination, all manipulations, and all measures in the study.

The current study used two different analytic samples. The first subsample, to study who participates in LGBTQ youth-focused community-based organizations, includes all eligible participants from Wave 1 of the data collected in 2011–2012 who were not missing on measures of community-based organization participation ($n=1045$). The second subsample was used to examine the longitudinal association between youth community-based organization participation and well being, and includes youth who provided eligible data in both Wave 1 and Wave 2 ($n=545$; Wave 2 was collected in 2012–2013). Demographic characteristics of each subsample are presented in Table 1.

Measures

Community-based organization participation—At Waves 1 and 2 youth were asked, “Are you a member of” or “do you go to” a named (varying by recruitment area) local youth community-organization ($yes=1$, $no=0$). Of the total Wave 1 to Wave 2 sample ($n=545$): 48.3% were consistently uninvolved with community-based organizations; 36.9% were consistently involved in community-based organizations; 7.9% were involved at Wave 1, but not at Wave 2; 7.0% were not involved in a community-based organization at Wave 1 but became involved by Wave 2. Among those who were in community-based organizations at Wave 1, 82.0% remained in a community-based organization at Wave 2. Of those who did not attend a community-based organization at Wave 1, 12.6% joined a community-based organization by Wave 2.

Demographic characteristics—Demographic characteristics of interest included age, race (White, Black, Asian American, Other), ethnicity (Hispanic/Latino, non-Hispanic/Latino, not specified), sex assigned at birth (male, female), gender identity (cisgender, transgender), sexual identity (gay, lesbian, bisexual, other), participation in free-or-reduced lunch (yes, no) and data collection region (Northeast, Southwest, and West Coast).

Self-esteem—The 10-item Rosenberg Self-Esteem Scale (Rosenberg 1989) was used to assess youth self-esteem. Example items include: “I feel that I am a person of worth, at least on an equal plane with others” and “All in all, I am inclined to feel that I am a failure” (reverse coded) on a four-point Likert scale from *strongly agree* = 1 to *strongly disagree* = 4. Items were summed and averaged so that higher scores reflect greater self-esteem ($\alpha = 0.87$ at Wave 1 for both subsamples).

Depressive symptoms—Youth’s depressive symptoms were measured using the 20-item Beck Depression Inventory-Youth [BDI-Y] (Beck, 1996). Example items include, “I have trouble doing things” and “I have trouble sleeping”. Likert scale response options ranged from *never* = 0 to *always* = 3. Items were summed and averaged so that higher scores reflect greater depressive symptomatology ($\alpha = 0.95$ for subsample 1 [Wave 1] and $\alpha = 0.94$ for subsample 2 [Wave 1 and 2]).

Suicidal ideation—Eight items from the Negative Suicide Ideation Subscale of the larger Positive and Negative Suicide Inventory (Muehlenkamp et al. 2005) were used to assess suicidal ideation. Example items include “During the past 2 weeks, including today, how often have you seriously considered killing yourself because you could not live up to the expectations of other people?” and “Felt hopeless about the future and you wondered if you should kill yourself?”. Response options were on a 5-point Likert scale from *none of the time* = 1 to *most of the time* = 5. Scores were summed and reversed coded so that higher scores reflect greater suicidal ideation ($\alpha = 0.94$ for both subsamples at both Waves).

Substance abuse—Part I (18 items) of the Personal Experience Screening Questionnaire (PESQ; Winters 1992) was used to assess substance abuse. Items reflect substance use frequency of substance use across contexts (e.g., “How often have you used alcohol or other drugs:” “at home” and “at places on the street where adults hang around”), specific drug-related behaviors (e.g., “How often have you:” “made excuses to your parents about your alcohol or drug use” and “gotten drugs from a dealer”), and substance use related consequences (e.g., “When using alcohol or other drugs, how often have you:” “spent money on things you wouldn’t normally buy” and “found out things you said or did while using or drinking that you did not remember”). Response options ranged from *never* = 1 to *often* = 4. Items were averaged, where higher scores reflect more severe substance use ($\alpha = 0.93$ for subsample 1 and $\alpha = 0.92$ for subsample 2 at Wave 1; $\alpha = 0.90$ for Wave 2).

Alcohol and marijuana use—In addition to problematic substance use, measures also captured the degree to which youth engage in the use of alcohol and marijuana—two commonly used substances among adolescence in the U.S. Two independent items were used to assess the frequency of alcohol use and marijuana use: “During the past 12 months, how many times (if any):” “Have you had alcohol beverages (including beer, wine, and

liquor) to drink?” and “Have you used marijuana (grass, pot) or hashish (hash, hash oil)?” Response options ranged from *never* = 0 to *40 or more times* = 7. Alcohol and marijuana were correlated at $r = 0.61$, $p < 0.001$ at Wave 1 and $r = 0.43$, $p < 0.001$ at Wave 2.

Analysis Plan

First, to examine the characteristics of youth who participated in LGBTQ youth community-based organizations chi-square test of independence were used to compare demographic characteristics as well as mental and behavioral outcomes between participants and non-participants in both subsamples (see Table 1). Next, logistic regression models were used to identify demographic characteristics associated with LGBTQ youth community-based organization participation. Next, adjusted logistic regression models tested whether community-based organization participations were associated with mental and behavioral health concurrently (Wave 1) and over time (from Wave 1 to Wave 2). All analyses and data management procedures were conducted using Stata 15.1 (StataCorp 2017). Multiple imputation was applied to account for missing data (<2% across all variables).

Results

Community-Based Youth Organizations: Who Participates?

Chi-square test of independence indicated that Wave 1 community-based organization participation varied by sexual identity, sex assigned at birth, gender identity, race, ethnicity, socioeconomic status, and data collection region (see Table 1). With regard to the first hypothesis, bivariate results showed that a larger proportion of gay/lesbian youth participated in community-based organizations than bisexual and other sexual minority youth. Youth who were assigned male at birth and transgender youth were more likely to be participants than youth assigned female at birth and cisgender youth, respectively. Compared to White youth, youth of color and those who did not report their race had higher rates of participation, as did Hispanic/Latino youth relative to non-Hispanic/Latino youth. Youth who receive free-or-reduced lunch were more likely to participate than youth who did not receive these services. Older youth were also more likely to attend LGBTQ community-based organizations than younger youth. Finally, youth in the Northeast and Southwest were more likely to participate than those on the West Coast. Bivariate associations between Wave 1 community-based organization participation and concurrent mental and behavioral health outcomes indicated that, compared to those not involved with a community-based organization, youth who attended community-based organizations had higher self-esteem, less depressive symptoms, lower rates of substance abuse, and less frequent alcohol and marijuana use. Community-based organization participation was unrelated to suicidal ideation.

Among Wave 2 participants, community-based organization participation differed on the basis of sex assigned at birth, race, ethnicity, socioeconomic status, and data collection region, where patterns of participation mirrored those in Wave 1. Bivariate associations between Wave 2 community-based organization participation and Wave 2 outcomes indicated that youth involved in community-based organizations concurrently reported higher self-esteem, lower levels of depression, and less frequent alcohol use.

Next, multivariate logistic regression models were estimated to test which sociodemographic characteristics were most predictive of community-based organization participation (see left column of Table 2). Results indicated that youth of color, youth assigned male at birth, transgender youth, and youth who receive free-or-reduced lunch were those most likely to report community-based organization participation. Youth who lived in the Northeast and Southwest were also significantly more likely to report community-based organization participation than youth from the West Coast.

Given differences in community-based organization participation by data collection site, several sensitivity analyses were conducted to assess whether demographic characteristics were differentially associated with community-based organization participation across cities (see Table 2). Given the sociodemographic differences in participation by site, models that account for data collection site attenuate findings in multivariate models. As a follow up sensitivity analysis, linear regression models (see Table 3) were analyzed with data collection site as a predictor in place of sociodemographic covariates (results not shown, but available upon request). Under these conditions, the findings and inferences remained unchanged. Therefore, data collection site was removed as a covariate for multivariate analyses and, consistent with the substantive focus, adjusted for sociodemographic differences.

Community-Based Youth Organizations: What Difference Does it Make?

Adjusted ordinary least squares regression models testing the association between Wave 1 community-based organization participation and Wave 1 outcomes are presented in the left side of Table 3. Consistent with the second hypothesis, community-based organization participation was statistically associated with less substance abuse, alcohol use, and marijuana use. Cross-sectional associations between community-based organization participation and self-esteem, suicidal ideation, and depressive symptomology were not statistically significant (data not shown, but available upon request).

Associations between patterns of Wave 1 to Wave 2 community-based organization participation and outcomes are presented on the right side of Table 3. Results from adjusted longitudinal models indicated that youth who were consistently involved in a community-based organization had higher self-esteem and less frequent alcohol and marijuana use at Wave 2.

Discussion

Although LGBTQ youth-focused community-based organizations have been providing programs to foster the positive development and well-being of LGBTQ youth for decades, there remains limited information on who among LGBTQ youth participate in these community-based organizations, or empirical evidence of the short- and long-term health outcomes of youths' participation in these programs. This study is an initial investigation into such programs and outcomes: data from a diverse cohort of sexual and gender minority young people were used to assess who among LGBTQ youth are most likely to attend and participate in LGBTQ youth community-based organizations and whether this participation is associated with concurrent and future mental and behavioral health indicators.

With regards to participation, youth who reported LGBTQ community-based organization participation were more likely to be assigned male at birth, transgender, youth of color, and accessing free-or-reduced lunch. This pattern of findings is notable; it is consistent with the known patterns for adult LGBTQ program participation (CenterLink and Map 2016), whereas it distinctly differs from the research on program participation in the general youth population, which shows: girls participate in community clubs more than do boys; White youth participate the most and Latino youth participate the least; and where youth from lower socioeconomic status backgrounds participate less.

Many LGBTQ community organizations have their origins in groups that addressed HIV/AIDS, with historic emphasis on gay men (Martos et al. 2017). Perhaps because of a history of serving a minority group, LGBTQ youth-serving community-based organizations appear to do a better job than general youth programs in reaching youth who are under-represented not only based on their sexual or gender minority status, but also their race/ethnicity and social class—at least among the youth in this study and these community sites. Notably, the pattern of those who attended LGBTQ youth community-based organizations varied across site: This geographical variation may reflect the demographic differences of youth in these regions, but may also reveal variability across states in the groups of youth who are most in need of services based on the availability of policies, school programs, and social services for LGBTQ youth.

From an intersectional lens, these findings suggest that experiences and motivations for participation in LGBTQ youth-serving community-based organizations may be unique for LGBTQ youth of color and LGBTQ youth who experience economic precarity. This understanding could inform community-based organization program priorities: if LGBTQ young people experiencing economic hardship are more likely to engage in services, LGBTQ youth-serving community-based organizations might consider programs that address economic vulnerabilities (e.g., food shelves) in addition to services that focus on LGBTQ-related stress and identity. Similarly, if LGBTQ youth of color are engaging with services at high rates, there is likely a need to address intersectional experiences of stigma through identity-based support groups and programs (e.g., Queer Youth of Color Support Groups), which many organizations offer (Williams et al. 2019).

Youth community-based organization participation was also related to concurrent and longitudinal measures of health and wellbeing, especially when youth were participants at both the first and second waves of the study. Bivariate associations are generally encouraging, although attenuated in full multivariate analyses. There is longstanding evidence of sexual orientation-related mental health disparities (Plöderl and Tremblay 2015; Russell and Fish 2016), and it is promising to see evidence that consistent program participation (at both Waves 1 and 2) is associated with higher self-esteem for LGBTQ youth. Similarly, given the mounting body of research which demonstrates substantial substance use disparities between LGBTQ youth and heterosexual and cisgender peers (Day et al. 2017; Marshal et al. 2008), community-based organizations may play a unique role in mitigating LGBTQ youth substance use. Interestingly, some adult studies indicate an increase in alcohol and other substance use as community affiliation rises (Baiocco et al. 2010; Green and Feinstein 2012; Rosario et al. 2004). Bars and clubs had historically been

one of the few spaces where LGBTQ people could gather and meet one another, a factor which has been implicated in a link between community affiliation and participation with substance use among LGBTQ people (Hughes et al. 2016). But this appears to not be the case for sexual and gender minority youth engaged in LGBTQ community-based programs. In fact, it would appear that consistent participation in such programs may redirect youth social networks to gather in safe spaces that are free from drugs and alcohol instead of bars, youth clubs, and other spaces where substance use may be more common.

These results offer encouraging evidence that research focused on understanding how LGBTQ youth engage with community-based organizations may provide promising strategies for curbing substance use and abuse among LGBTQ young people. It would be helpful to document the ways LGBTQ community-based programs implement existing evidence-based strategies for positive youth development, as well as for substance use and abuse prevention. Although not systematically studied, many of the programs offered by LGBTQ community-based organizations reflect positive youth development strategies, such as fostering positive relationships with peers and adults through support groups and mentoring, and community engagement and leadership through Pride events and volunteerism (see Williams et al. 2019). These strategies have been shown to have positive outcomes for young people outside of LGBTQ community-based programs. If current LGBTQ community-based programs already emphasize some positive youth development strategies, it may require small changes from directors and program staff to address other evidence-based positive youth development strategies to improve LGBTQ health and wellness.

Despite progress in understanding the ways in which school policies and program contribute to the wellbeing of LGBTQ youth (e.g., GSAs; Russell and Horn 2017), there remains limited understanding of how LGBTQ youth-serving community-based organizations impact LGBTQ young people in their communities (Allen et al. 2012). In fact, many people are unaware that such programs exist. Overall, the results show that LGBTQ community-based organizations have a positive impact on the development and mental health of LGBTQ youth. These benefits have been suggested in prior research (Allen et al. 2012; Pacey 2016; Shilo et al. 2015) but never explicitly tested. Notably, the number of young people who identify as LGBTQ is larger than in previous generations (Newport 2018; Phillips et al. 2019) and LGBTQ people are coming out at younger ages than ever before (Russell and Fish 2016, 2019). Given recent evidence that sexual orientation disparities in mental and behavioral health have not declined amid improved social attitudes and policies for LGBTQ people (Fish and Baams 2018; Peters et al. 2017), there is urgent need to develop and invest in programs that promote health and resilience of sexual and gender minority young people. The findings offer preliminary evidence that LGBTQ community-based organizations may be an underutilized resource for improving sexual and gender minority youth health and deserves further research attention.

Given the absence of previous research examining the influence of LGBTQ community-based organizations on adjustment of the youth they serve, the present study is an important step to understanding the associations between participation and health outcomes for vulnerable youth. However, there are several limitations to the present study that highlight

important directions for future research. Though diverse in many ways, the current sample is limited to metropolitan areas in three US cities and may not be representative of youth in other regions of the country and nonmetropolitan youth. The youth in the present study were recruited from cities and the protocol did not collect information on whether youth in rural areas were able to access these specific community-based organizations. Youth who live in cities are more likely to have access to LGBTQ serving community-based organizations (CenterLink and MAP 2016; Pacey et al. 2019), but it is possible that access to community-based organizations for rural youth would have a significant positive impact because these youth lack access to other forms of supportive LGBTQ services (Pacey 2016). Alternatively, LGBTQ community-based organizations in rural areas may lack adequate funding necessary to provide the necessary availability of services to provide the observed benefits (CenterLink and MAP 2016). Future research should examine benefits of LGBTQ community-based organizations in rural areas and also identify specific services that have the greatest impact for these youth.

Comparisons between youth who were and were not engaged with LGBTQ youth programs already showed differences in mental health and substance use at Wave 1. That is, youth were already attending these programs and likely already reaping the benefits of these safe spaces. Studies that capture youth prior to entering these programs would likely have a better understanding of how these programs impact the health and wellbeing of youth over time. It is possible that youth who participate in LGBTQ community-based organizations are advantaged, better enabling them to access spaces provided by community-based organizations. Further, the data used for the current study did not collect specifics on the types of services youth received from these community-based organizations (e.g., STI testing, social support groups, legal services), which could influence mental health and substance use outcomes. It is also possible youth were accessing other health promoting services, such as GSAs, that could be contributing to the beneficial outcomes. GSAs play an important role in providing a safe space for LGBTQ youth at school (where many of these youth spend the majority of their time) and there is considerable evidence to suggest that GSAs promote perceptions of school safety and have beneficial effects on the health and adjustment of LGBTQ youth (Russell and Horn 2017). However, community-based organizations may also play distinct role, particularly when GSAs are no longer accessible to these youth (e.g., summer breaks, completion of high school) and at times when youth may be more susceptible to stressors. As such, community-based organizations provide an important space for LGBTQ youth during these times and may extend the benefits of GSAs and other school-based LGBTQ spaces into emerging adulthood. In fact, the findings suggest that those who are involved in community-based organizations experience similar benefits in terms of improved mental health and reduced substance use as youth who report involvement in GSAs.

Finally, though longitudinal data analyses provide a clearer understanding of the impact of community-based organization participation over time, the Wave 1 to Wave 2 retention was 52% for community-based organization participants, suggesting that cross-sectional and longitudinal comparison should be interpreted with caution. This high- lights the need for data collection and collaboration across community-based organizations to more clearly identify benefits experienced by youth (and adults) through participation. Further, research

has identified that the lack of data on programming and outcomes, along with competing demands for limited funds for programming, often means the priorities and services of community-based programs frequently shift (Ramanadhan and Viswanath 2013). It is recommended that directors of these organizations collect data and collaborate with other organizations to identify the priority needs for the communities they serve.

Conclusion

This study assessed youth participation in LGBTQ-specific community-based programs and the association with youth mental and behavioral health. The findings presented here suggest that youth assigned male at birth, transgender youth, youth of color, and youth who receive free-or-reduced lunch are more likely to engage with LGBTQ youth-focused community-based organizations. Importantly, these programs have appreciable effects on youths' self-esteem and substance use over time, particularly for those youth who reported participation across waves. Given the potential of these programs to reach youth across the country, LGBTQ community-based organizations could be an untapped resource for fostering the healthy development of sexual and gender minority youth. Inasmuch as sexual and gender minority health inequities may be traced to adolescence experiences (Rosario et al. 2014), bolstering support for LGBTQ youth-focused community-based organizations could have long-lasting effects for LGBTQ population health for contemporary cohorts of sexual and gender minority young people.

Funding

This research uses data from the *Risk and Protective Factors for Suicide among Sexual Minority Youth* study, designed by A.H.G. and S.T.R., and supported by Award Number R01MH091212 from the National Institute of Mental Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Mental Health or the National Institutes of Health. J.N.F. acknowledged support from the National Institute on Alcohol Abuse and Alcoholism (F32AA023138), and S.T.R. from the Priscilla Pond Flawn Endowment at the University of Texas at Austin. This research was also supported, in part, by grants P2CHD042849, awarded to the Population Research Center at The University of Texas at Austin, and P2CHD041041, awarded to the Maryland Population Research Center, by the Eunice Kennedy Shriver National Institute of Child Health and Human Development. J.N.F. would also like to acknowledge support from the University of Maryland Prevention Research Center cooperative agreement #U48DP006382 from the Centers for Disease Control and Prevention (CDC). Any interpretations and opinions expressed herein are solely those of the authors and may not reflect those of the CDC.

Biographies

Jessica N. Fish is an Assistant Professor in the Department of Family Science at the University of Maryland School of Public Health and a Core Research Scientist in the University of Maryland Prevention Research Center. Her research aims to identify modifiable factors that contribute to sexual orientation and gender identity-related health disparities in order to inform developmentally-sensitive policies, programs, and prevention strategies that promote the health of sexual and gender minority people across the life course.

Raymond L. Moody is a doctoral student in Health Psychology and Clinical Science at the CUNY Graduate Center and a graduate student researcher at Hunter College's PRIDE

Health Research Consortium. His research is focused on the mechanisms that link syndemic factors of HIV risk.

Arnold H. Grossman is Professor of Applied Psychology in the Steinhardt School of Culture, Education, and Human Development at New York University. His research interests include sexual and gender identity development of LGBT adolescents, adults, and older adults, the psychosocial and health experiences of LGBT people, including HIV/AIDS prevention education and health behaviors of people living with HIV/AIDS.

Stephen T. Russell is Priscilla Pond Flawn Regents Professor in Child Development and the Department Chair, Human Development and Family Sciences at The University of Texas at Austin. His research is focused on adolescent development, with an emphasis on adolescent sexuality, LGBT youth, and parent-adolescent relationships.

References

- Allen KD, Hammack PL, & Himes HL (2012). Analysis of GLBTQ youth community-based programs in the United States. *Journal of Homosexuality*, 59, 1289–1306. [PubMed: 23101498]
- Baams L, Grossman AH, & Russell ST (2015). Minority stress and mechanism of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental Psychology*, 51, 688–696. [PubMed: 25751098]
- Baiocco R, D'Alessio M, & Laghi F (2010). Binge drinking among gay, and lesbian youths: The role of internalized sexual stigma, self-disclosure, and individuals' sense of connectedness to the gay community. *Addictive Behaviors*, 35, 896–899. [PubMed: 20584573]
- Bowleg L (2008). When Black+lesbian+woman Black lesbian woman: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles: A Journal of Research*, 59(5–6), 312–325. 10.1007/s11199-008-9400-z
- Centerlink & Movement Advancement Project [MAP] (2016). 2016 LGBT community center survey report: Assessing the capacity and programs of lesbian, gay, bisexual, and transgender community centers. Fort Lauderdale, FL. <https://www.lgbtcenters.org/Assets/Documents/CC-Surveys/2016-lgbt-community-center-survey-report.pdf>
- Collins PH (1989). The social construction of Black feminist thought. *Signs: Journal of Women in Culture and Society*, 14, 745–773. 10.1086/494543
- Crenshaw K (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. *University of Chicago Legal Forum*. (vol. 1989, Article 8) Available at: <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>
- D'Augelli AR, Hershberger SL, & Pilkington NW (2001). Suicidality patterns and sexual orientation-related factors among lesbian, gay, and bisexual youths. *Suicide and Life-Threatening Behavior*, 31, 250–264. [PubMed: 11577911]
- Day JK, Fish JN, Perez-Brumer A, Hatzenbuehler ML, & Russell ST (2017). Gender identity-related substance use disparities among youth: results from a population-based sample. *Journal of Adolescent Health*, 61, 729–735.
- Eccles J, & Gootman JA (2002). Community programs to promote youth development Committee on Community-Level Programs for Youth. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences Education, National Research Council and Institute of Medicine Washington, DC: National Academies of Science.
- Elia JP (2014). Bisexuality and schooling: erasure and implications for health. *Journal of Bisexuality*, 14, 36–52.
- Erdem G, DuBois DL, Larose S, De Wit D, & Lipman EL (2016). Mentoring relationships, positive development, youth emotional and behavioral problems: investigation of a mediational model. *Journal of Community Psychology*, 44, 464–483.

- Fish JN, & Baams L (2018). Trends in alcohol-related disparities between heterosexual and sexual minority youth from 2007 to 2015: findings from the Youth Risk Behavior Survey. *LGBT Health*, 5, 359–637. [PubMed: 30010480]
- Floyd FJ, & Bakeman R (2006). Coming-out across the life course: implications of age and historical context. *Archives of Sexual Behavior*, 35, 287–296. [PubMed: 16804747]
- Frisco ML, Muller C, & Dodson K (2004). Participation in voluntary youth-serving associations and early adult voting behavior. *Social Science Quarterly*, 85, 660–676.
- Frost DM, Fine M, Torre ME, & Cabana A (2019). Minority stress, activism, and health in the context of economic precarity: results from a national participatory action survey of lesbian, gay, bisexual, transgender, queer, and gender non-conforming youth. *American Journal of Community Psychology*, 63, 511–526. [PubMed: 30989666]
- Goldbach JT, Tanner-Smith EE, Bagwell M, & Dunlap S (2014). Minority stress and substance use in sexual minority adolescents: a meta-analysis. *Prevention Science*, 15, 350–363. [PubMed: 23605479]
- Green KE, & Feinstein BA (2012). Substance use in lesbian, gay, and bisexual populations: an update on empirical research and implications for treatment. *Psychology of Addictive Behaviors*, 26, 265–278. [PubMed: 22061339]
- Hatzenbuehler ML (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin*, 135(5), 707–730. 10.1037/a0016441 [PubMed: 19702379]
- Herdt G, & Boxer A (1996). *Children of Horizons*. Boston, MA: Beacon Press.
- Hughes TL, Wilsnack SC, & Kantor LW (2016). The influence of gender and sexual orientation on alcohol use and alcohol-related problems: toward a global perspective. *Alcohol Research: Current Reviews*, 38, 121–132. [PubMed: 27159819]
- Iachini AL, Bell BA, Lohman M, Beets MW, & Reynolds JF (2016). Maximizing the contribution of after-school programs to positive youth development: exploring leadership and implementation within Girls on the Run. *Children & Schools*, 39, 43–52.
- Katz-Wise S, & Hyde J. (2012). Victimization experiences of lesbian, gay, and bisexual individuals: a meta-analysis. *Journal of Sex Research*, 49, 142–67. [PubMed: 22380586]
- Lee SA, Borden LM, Serido J, & Perkins DF (2009). Ethnic minority youth in youth programs: feelings of safety, relationships with adult staff, and perceptions of learning social skills. *Youth & Society*, 41(2), 234–255.
- Lerner JV, Phelps E, Forman Y, & Bowers EP (2009). Positive youth development. In Lerner RM & Steinberg L (Eds), *Hand-book of adolescent psychology: individual bases of adolescent development*. 3rd ed. (pp. 524–558). Hoboken, NJ: John Wiley.
- Marshal MP, Friedman MS, Stall R, King KM, Miles J, Gold MA, & Morse JQ (2008). Sexual orientation and adolescent substance use: a meta-analysis and methodological review. *Addiction*, 103, 546–556. [PubMed: 18339100]
- Martos AJ, Wilson PA, & Meyer IH (2017). Lesbian, gay, bisexual, and transgender (LGBT) health services in the United States: origins, evolution, and contemporary landscape. *PLoS ONE*, 12, 1–18.
- Marx RA, & Kettrey HH (2016). Gay-straight alliances are associated with lower levels of school-based victimization of LGBTQ+youth: a systematic review and meta-analysis. *Journal of Youth and Adolescence*, 45, 1269–1282. [PubMed: 27221632]
- McGuire JK, Dworkin J, Borden LM, Perkins D, & Russell ST (2016). Youth motivations for program participation. *Journal of Youth Development*, 11(3), 7–25.
- Meyer IH (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. [PubMed: 12956539]
- Muehlenkamp JJ, Gutierrez PM, Osman A, & Barrios FX (2005). Validation of the Positive and Negative Suicide Ideation (PANSI) Inventory in a diverse sample of young adults. *Journal of Clinical Psychology*, 61, 431–445. [PubMed: 15503303]
- Newport F (2018). In U.S., estimate of LGBT population rises to 4.5%. Gallup Retrieved from <https://news.gallup.com/poll/234863/estimate-lgbtpopulation-rises.aspx>

- Paceley MS (2016). Gender and sexual minority youth in nonmetropolitan communities: individual- and community-level needs for support. *Families in Society: The Journal of Contemporary Social Services*, 97, 77–85.
- Paceley MS, Fish JN, Conrad A, & Schuetz N (2019). Diverse community contexts and community resources for sexual and gender minority youth: a mixed-methods study. *Journal of Community & Applied and Social Psychology*. 10.1002/casp.2417
- Phillips II Beach G, Turner LB, Feinstein B, Marro BA, Philbin R, M M, ... Birkett M. (2019). Sexual identity and behavior among U.S. high school students, 2005–2015. *Archives of Sexual Behavior*. 10.1007/s10508-019-1404-y
- Peter T, Edkins T, Watson R, Adjei J, Homma Y, & Saewyc E (2017). Trends in suicidality among sexual minority and heterosexual students in a Canadian population-based cohort study. *Psychology of Sexual Orientation and Gender Diversity*, 4, 115–123. 10.1037/sgd0000211 [PubMed: 29326961]
- Plöderl M, & Tremblay P (2015). Mental health of sexual minorities. A systematic review. *International Review of Psychiatry*, 27, 367–385. [PubMed: 26552495]
- Poteat VP (2017). Gay-straight alliances: promoting student resilience and safer school climates. *American Educator*, 40, 10–14.
- Ramanadhan S, & Viswanath K (2013). Priority setting for evidence-based health outreach in community-based organizations: a mixed-methods study in three Massachusetts communities. *Translational Behavioral Medicine*, 3, 180–188. [PubMed: 23795220]
- Roberts TS, Horne SG, & Hoyt WT (2015). Between a gay and a straight place: bisexual individuals' experiences with monosexism. *Journal of Bisexuality*, 15, 554–569.
- Rosario M, Corliss HL, Everett BG, Russell ST, Buchting FO, & Birkett MA (2014). Mediation by peer violence victimization of sexual orientation disparities in cancer-related tobacco, alcohol, and sexual risk behaviors: pooled youth risk behavior survey. *American Journal of Public Health*, 104, 1113–1123. [PubMed: 24825215]
- Rosario M, Schrimshaw EW, & Hunter J (2004). Predictors of substance use over time among gay, lesbian, and bisexual youths: an examination of three hypotheses. *Addictive Behaviors*, 29, 1623–1631. [PubMed: 15451129]
- Rosenberg M (1989). *Society and the adolescent self-image* (rev. ed.) Middletown, CT: Wesleyan University Press. Retrieved from EBSCOhost.
- Russell ST, & Fish JN (2016). Mental health in LGBT youth. *Annual Review of Clinical Psychology*, 12, 465–487.
- Russell ST, & Fish JN (2019). Sexual minority youth, social change, and health: a developmental collision. *Research in Human Development*, 16, 5–20. [PubMed: 31602178]
- Russell ST, & Horn SS (2017). *Sexual orientation, gender identity, and schooling: the nexus of research, practice, and policy*. New York, NY: Oxford University Press.
- Russell ST, Sinclair KO, Poteat VP, & Koenig BW (2012). Adolescent health and harassment based on discriminatory bias. *American Journal of Public Health*, 102, 493–495. [PubMed: 22390513]
- Ryan C, Huebner D, Diaz RM, & Sanchez J (2009). Family rejection as a predictor of negative health outcomes in White and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, 123, 346–352. [PubMed: 19117902]
- Santos CE, & Toomey RB (2018). Integrating an intersectionality lens in theory and research in developmental science. In Santos CE & Toomey RB (Eds), *Envisioning the Integration of an Intersectional Lens in Developmental Science*. *New Directions for Child and Adolescent Development* (vol. 161, pp. 7–15). <https://onlinelibrary.wiley.com/doi/full/10.1002/cad.20245>
- Seefeldt VD, & Ewing ME (1997). Youth sports in America: an overview. *President's council on physical fitness and sports research digest*. 11(2), 3–14, Washington, DC.
- Shilo G, Antebi N, & Mor Z (2015). Individual and community resilience factors among lesbian, gay, bisexual, queer and questioning youth and adults in Israel. *American Journal of Community Psychology*, 55, 215–227. [PubMed: 25510593]
- StataCorp. (2017). *Stata statistical software: release 15*. College Station, TX: StataCorp LLC.
- The Institute of Medicine (2011). *The health of lesbian, gay, bisexual, and transgender people: building a foundation for better understanding*. Washington, DC: The National Academies Press.

- The National GLBTQ Youth Foundation (2010). Community-based social support programs GLBTQ youth: state and regional analysis. Portland, Oregon: The National GLBTQ Youth Foundation. <https://www.globalgiving.org/pfil/7046/projdoc>
- Theokas C, & Bloch M (2006). Out-of-school time is critical for children: who participates in programs. Washington, DC: Child Trends.
- Toomey RB, & Russell ST (2016). The role of sexual orientation in school-based victimization: a meta-analysis. *Youth & Society*, 48, 176–201. [PubMed: 26997680]
- Toomey RB, Huynh VW, Jones SK, Lee S, & Revels- Macalinao M (2017). Sexual minority youth of color: a content analysis and critical review of the literature. *Journal of Gay & Lesbian Mental Health*, 21(1), 3–31. 10.1080/19359705.2016.1217499 [PubMed: 28367257]
- Williams ND, Levine D, & Fish JN (2019). 2019 Needs Assessment: LGBTQ+ Youth Centers and Programs. Fort Lauderdale, FL: CenterLink.
- Winters KC (1992). Development of an adolescent alcohol and other drug abuse screening scale: Personal Experiences Screening Questionnaire. *Addictive Behaviors*, 17, 479–490. [PubMed: 1332434]

Table 1

Wave 1 and Wave 2 sample characteristics

	Wave 1 (N = 1045)		Wave 2 (N = 545)		χ^2, p or t, p	χ^2, p or t, p
	Total sample %/M (SD)	Non-participant (n = 401) %/M (SD)	Participant (n = 644) %/M (SD)	Total sample %/M (SD)		
CBO Participation(yes)	38.37			43.76		2.88, 0.237
Sexual identity						
Gay/lesbian	48.25	56.72	43.28	53.77	53.87	46.13
Bisexual	40.95	69.60	30.40	35.52	51.45	38.55
Other	10.80	62.86	37.14	10.71	61.11	38.89
Sex assigned at birth						16.86, <0.001
Male	46.07	50.94	49.06	46.97	46.88	53.13
Female	53.93	70.69	29.31	53.03	64.36	35.64
Gender identity						2.96, 0.085
Cisgender	88.04	53.48	36.52	88.44	57.47	42.53
Transgender	11.96	48.00	52.00	11.56	46.03	53.97
Race						54.64, <0.001
White	21.34	78.48	21.52	21.10	86.09	13.91
Black	24.50	50.78	49.22	25.14	44.53	55.47
API/AN	8.80	63.04	36.96	9.17	50.47	50.00
Multiracial	22.97	56.67	43.33	22.02	47.50	52.50
Not reported	22.39	61.97	38.03	22.57	52.03	47.97
Ethnicity						4.16, 0.041
Hispanic/Latino	38.37	57.61	42.39	37.06	50.50	49.50
Non-Hispanic/Latino	61.63	64.13	35.87	62.94	59.48	40.52
Free-or-reduced lunch						27.37, <0.001
No	40.74	70.48	29.52	44.55	68.46	31.54
Yes	59.26	55.97	44.03	55.45	46.00	54.00
Data collection region						24.49, <0.001
Northeast	46.99	48.88	51.12	57.45	50.32	49.68
Southwest	18.09	53.97	46.03	23.09	54.33	45.67

	Wave 1 (N = 1045)		Wave 2 (N = 545)		χ^2, p or t, p	Participant (n = 306) %/M (SD)	χ^2, p or t, p
	Total sample %/M (SD)	Non-participant (n = 401) %/M (SD)	Participant (n = 644) %/M (SD)	Total sample %/M (SD)			
West Coast	34.93	82.74	17.26	19.45	77.57	22.43	
Age	18.81	18.70	18.99				
Self esteem	3.05	3.01	3.13	3.11	3.04	3.18	2.75, 0.006
Suicidal ideation	1.57	1.59	1.52	1.44	1.43	1.46	0.51, 0.612
Depressive symptoms	16.61	17.28	15.53	15.52	16.69	14.02	2.69, 0.007
Substance abuse	1.74	1.80	1.66	1.66	1.71	1.61	1.93, 0.054
Alcohol use	3.76	3.98	3.41	3.82	4.11	3.46	3.61, <0.001
Marijuana use	3.50	3.63	3.27	3.28	3.40	3.14	1.27, 0.205

Bold denotes statistically significant effect at $p < 0.05$

CBOCommunity-based organization

Table 2

Adjusted odds ratios for association between demographic characteristics and community-based organization participation at Wave 1 in the full sample and stratified by geographic region

	Full Sample			Northeast			Southwest			Westcoast		
	aOR	95% CI	p	aOR	95% CI	p	aOR	95% CI	p	aOR	95% CI	p
Age	1.01	(0.93, 1.09)	0.876	1.07	(0.95, 1.20)	0.287	0.87	(0.73, 1.04)	0.123	1.08	(0.91, 1.27)	0.389
Race ^(ref: White)												
Black	2.83	(1.78, 4.51)	<0.001	6.49	(2.90, 14.53)	<0.001	2.59	(0.76, 8.81)	0.128	1.62	(0.64, 4.07)	0.308
API/NA	2.47	(1.37, 4.45)	0.003	5.40	(1.83, 15.92)	0.002	3.70	(1.01, 13.50)	0.047	1.11	(0.41, 2.96)	0.839
Multiracial	2.67	(1.67, 4.26)	<0.001	6.73	(2.89, 15.67)	<0.001	3.45	(1.33, 8.91)	0.011	1.20	(0.51, 2.83)	0.682
No report	1.60	(0.94, 2.73)	0.082	3.48	(1.37, 8.81)	0.008	0.96	(0.36, 2.53)	0.932	1.37	(0.45, 4.19)	0.576
Ethnicity ^(ref: Latino)												
Non-Latino	0.82	(0.57, 1.19)	0.301	0.64	(0.37, 1.09)	0.098	1.17	(0.52, 2.62)	0.705	1.06	(0.45, 2.49)	0.896
Biological sex ^(ref: Male)												
Female	0.48	(0.36, 0.64)	<0.001	0.42	(0.28, 0.64)	<0.001	0.49	(0.24, 1.04)	0.063	0.50	(0.28, 0.89)	0.019
Gender Identity ^(ref: Cisgender)												
Transgender	2.38	(1.53, 3.69)	<0.001	1.32	(0.68, 2.54)	0.414	8.88	(2.40, 32.94)	0.001	2.49	(1.20, 5.14)	0.014
Sexual identity ^(ref: Gay/lesbian)												
Bisexual	0.80	(0.58, 1.11)	0.178	0.74	(0.47, 1.15)	0.178	0.97	(0.44, 2.13)	0.934	0.73	(0.38, 1.40)	0.341
Other	1.20	(0.72, 2.00)	0.488	1.93	(0.83, 4.48)	0.125	0.64	(0.20, 2.02)	0.446	0.86	(0.32, 2.27)	0.754
Free-or-reduced lunch	1.60	(1.18, 2.17)	0.002	2.44	(1.55, 3.82)	<0.001	1.61	(0.81, 3.19)	0.173	0.75	(0.42, 1.35)	0.344
Collection site ^(ref: Northeast)												
Southwest	4.15	(2.92, 5.90)	<0.001									
West Coast	4.76	(3.11, 7.29)	<0.001									

API/Asian or Pacific Islander, NA native American

Table 3

Regression coefficients for associations between Wave 1 community-based organization participation and Wave 1 outcomes

	Wave 1 cross sectional (N = 1045)						Wave 1 to Wave 2 longitudinal (N = 545)					
	Substance abuse		Alcohol use		Marijuana use		Self-esteem		Alcohol use		Marijuana use	
	B (SE)	p	B (SE)	p	B (SE)	p	B (SE)	p	B (SE)	p	B (SE)	p
Intercept	0.90 (0.24)	<0.001	-1.11 (0.73)	0.128	2.40 (0.85)	0.005	1.44 (0.24)	<0.001	0.23 (0.85)	0.784	3.72 (0.98)	<0.001
W1 participation(Yes)	-0.12 (0.04)	0.008	-0.45 (0.14)	0.001	-0.31 (0.16)	0.049						
community-based organization participation (Ref: No W1												
No W2)												
Yes W1							0.09 (0.04)	0.039	-0.52 (0.17)	0.003	-0.42 (0.20)	0.037
Yes W2												
Yes W1							0.05 (0.07)	0.492	-0.50 (0.28)	0.078	-0.37 (0.32)	0.254
No W2												
No W1							0.10 (0.08)	0.191	-0.38 (0.30)	0.195	-0.05 (0.34)	0.887
Yes W2												
Baseline outcome score ^a							0.61 (0.04)	<0.001	0.54 (0.04)	<0.001	0.65 (0.04)	<0.001
Age	0.05 (0.01)	<0.001	0.30 (0.04)	<0.001	0.08 (0.04)	0.058	-0.02 (0.01)	0.164	0.12 (0.04)	0.008	-0.12 (0.05)	0.012
Race(ref: White)												
Black	-0.23 (0.06)	<0.001	-0.94 (0.19)	<0.001	-0.53 (0.23)	0.021	0.16 (0.06)	0.009	-0.44 (0.23)	0.053	0.19 (0.26)	0.467
API/NA	-0.22 (0.08)	0.007	-0.82 (0.25)	<0.001	-0.91 (0.29)	0.002	0.07 (0.08)	0.383	-0.40 (0.29)	0.168	-0.34 (0.33)	0.303
Multiracial	-0.05 (0.06)	0.436	-0.03 (0.20)	0.870	0.07 (0.23)	0.770	0.04 (0.06)	0.507	-0.37 (0.24)	0.115	-0.10 (0.27)	0.709
Not reported	-0.21 (0.08)	0.007	-0.56 (0.23)	0.016	-0.62 (0.27)	0.023	0.10 (0.07)	0.144	-0.27 (0.27)	0.327	-0.29 (0.31)	0.352
Ethnicity(ref: Latino)												
Non-Latino	-0.15 (0.06)	0.008	-0.25 (0.17)	0.140	-0.39 (0.20)	0.047	0.02 (0.05)	0.709	0.14 (0.19)	0.460	0.01 (0.22)	0.966
Biological sex(ref: Male)												
Female	0.02 (0.04)	0.722	0.10 (0.13)	0.452	0.14 (0.16)	0.360	-0.02 (0.04)	0.615	-0.16 (0.15)	0.290	-0.18 (0.18)	0.315
Gender identity(ref: Cisgender)												

	Wave 1 cross sectional (N = 1045)			Wave 1 to Wave 2 longitudinal (N = 545)							
	Substance abuse B (SE)	Alcohol use B (SE)	P	Marijuana use B (SE)	P	Self-esteem B (SE)	P	Alcohol use B (SE)	P	Marijuana use B (SE)	P
Transgender	-0.02 (0.06)	0.777	0.506	-0.11 (0.23)	0.648	-0.13 (0.06)	0.036	-0.22 (0.23)	0.349	0.38 (0.27)	0.153
Sexual identity (Ref: Gay/Lesbian)											
Bisexual	0.15 (0.05)	0.001	0.014	0.29 (0.17)	0.084	0.01 (0.04)	0.732	0.02 (0.17)	0.926	0.04 (0.19)	0.845
Other	0.09 (0.07)	0.220	0.547	0.09 (0.27)	0.723	-0.07 (0.06)	0.308	0.08 (0.26)	0.765	-0.34 (0.30)	0.269
Free-or-reduced lunch ^(Yes)	0.03 (0.04)	0.435	0.011	0.18 (0.16)	0.251	-0.03 (0.04)	0.435	-0.18 (0.16)	0.243	0.12 (0.18)	0.507

API/Asian or Pacific Islander, NA native American

^aDenotes Wave 1 score of model specific Wave 2 outcome