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Journal

Journal of Clinical Child & Adolescent Psychology, ahead-of-print(ahead-of-print)

ISSN

1537-4416

Authors

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Publication Date

2024-09-23

DOI

10.1080/15374416.2024.2395254

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Journal of Clinical Child & Adolescent Psychology



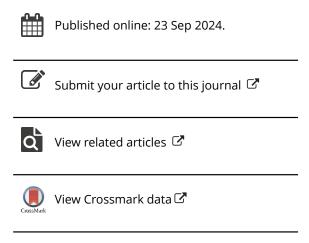
ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/hcap20

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To cite this article: Natalia Ramos, Elizabeth Ollen, David J. Miklowitz & Jeanne Miranda (23 Sep 2024): Development and Pilot of a Portable Community-Based Intervention for LGBTQ + Youth with Depression Symptoms, Journal of Clinical Child & Adolescent Psychology, DOI: 10.1080/15374416.2024.2395254

To link to this article: https://doi.org/10.1080/15374416.2024.2395254







Development and Pilot of a Portable Community-Based Intervention for LGBTQ+ Youth with Depression Symptoms

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ABSTRACT

Objective: Lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ+) youth experience known inequities in mental health outcomes, including depression and suicidality. The Promoting Wellbeing & Resilience (PWR) class is an interactive, developmentally tailored group that provides strength-based, practical skills to LGBTQ+ teenagers with depression. It is designed to be implemented by paraprofessionals to increase community-based access to care.

Method: Investigators developed and piloted an eight-session cognitive-behavioral class for LGBTQ+ youth (N=21) ages 12 to 17 (M=14.8 years, 81% Caucasian, 57% gender diverse, 100% non-heterosexual) with depression symptoms. The youth received training in mood regulation, communication skills, stress management, and goal setting in a small group format (5–8 youth per group). Outcomes were youth-reported depression (primary), anxiety, and trauma symptoms at pre-treatment and post-treatment. Paired sample (dependent) one-tailed t-tests were used to examine treatment effects. Focus groups were also conducted with participants to assess satisfaction and collect qualitative feedback regarding class content and format.

Result: The resilience class was associated with reductions in depression symptoms post-treatment (t(17) = 3.3, p = .002, d = 0.5) but not anxiety (t(17) = 1.8, p = .049, d = 0.3) or trauma symptoms (t(17) = 1.2, p = .118, d = 0.1). Completion rates for all group sessions were high (95%), and the majority (57%) of participants returned for an optional review session.

Conclusion: Preliminary results suggest a manualized 8-week skills-based cognitive-behavioral group intervention designed to be delivered by paraprofessionals may be effective at reducing depression symptoms in actively depressed LGBTQ+ youth.

Introduction

Lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ+) youth continue to experience disproportionate rates of mental health symptoms as compared to their heterosexual cisgender peers, particularly in regards to suicidal thoughts, suicide attempts, and depression (Becerra-Culqui et al., 2018; Centers for Disease Control and Prevention [CDC], 2023; Perez-Brumer et al., 2017). National data on high school students show that LGBQ high school students are twice as likely as heterosexual peers to experience poor mental health (52% vs 22%) and persistent sadness or hopelessness (69% vs 35%), and rates have continued to increase over the last decade (CDC, 2023). Forty-five percent of LGBQ youth in the national 2021 Youth Risk Behavior Survey reported seriously considering attempting suicide within the last year, and 22% reported an actual attempt in the past year (CDC, 2023). Transgender and gender diverse youth in

community samples also show elevated rates of anxiety as compared to cisgender peers (Atteberry-Ash et al., 2021; Wallien et al., 2007). Young LGBTQ+ Americans experience greater impacts of discrimination on their psychological wellbeing than previous generations (Mahowald et al., 2020).

These mental health disparities can be contextualized through the lens of discriminatory social stress (Meyer, 1995). LGBTQ+ youth experience traumatic stress due to discrimination, harassment, marginalization, and victimization across social systems, including within family, school, and health care settings (Scheer et al., 2021). Common social stressors facing LGBTQ+ youth include family rejection and neglect (Ryan et al., 2010), harsher discipline and bullying in schools (Kosciw et al., 2016), more frequent child welfare contact and out-of-home placements (Irvine & Canfield, 2016) and anti-LGBTQ+ legislation (Ramos et al., 2023). Pervasive social stress and decreased access to protective factors that mitigate traumatic stress – such as family support,

stable housing, and social support networks - fuel maladaptive coping and risk behaviors, including substance use and self-harm.

Despite the emergent literature on the mental health inequities facing LGBTQ+ youth, evidence for practical community-delivered strengths-based intervention that promote adaptive coping and improve mental wellbeing among LGBTQ+ youth populations remains limited and in need of further research (Hobaica et al., 2018). A review by Hobaica et al. (2018) identified eight diverse interventions (in-person, online/virtual, and computerized) that demonstrated early feasibility and/or and efficacy in supporting LGB youth's mental health concerns. One such intervention, Rainbow SPARX, provided self-directed computerized cognitive behavioral therapy (CBT) and was designed to augment traditional therapy (Lucassen et al., 2015). The more recent Project Youth Affirm, piloted in Canada across existing community health centers, aimed to adapt traditional CBT interventions to LGBTQ+ youth facing identity-related stressors linked to sexual risk-taking behaviors (Craig et al., 2019). Additional contemporary interventions focus primarily on increasing accessibility via schoolbased programming (e.g., Proud and Empowered, Goldbach et al., 2021; ASSET; Craig, 2013).

A focus on reducing barriers to care is a crucial component to delivering care to marginalized populations. Community-based resilience classes have previously shown promise in reducing depression symptoms among racially minoritized adults in underresourced communities, including among low-income LGBTQ+ racial/ethnic minority adults in Los Angeles, California, and New Orleans, Louisiana (Vargas et al., 2019). These CBT-based adult resilience groups, developed through a community-partnered participatory research model (Jones & Wells, 2007), were successfully delivered in non-clinical community settings by paraprofessionals to racial and ethnic minority adults (Chung et al., 2010). An underlying principle of these earlier adaptations of the adult resilience groups is that depressed adults in under-resourced areas seek support from various service sectors, not mental health practitioners (Jones & Wells, 2007). Though the content of the current study is informed by CBT, the intervention was (1) not framed as therapy, but rather as a "class" in community discussions; and (2) intentionally designed for delivery by nonprofessional or paraprofessional facilitators in community settings (Chung et al., 2010). Community-based interventions promote greater accessibility and reduction of barriers to care for underserved, marginalized groups (Jones & Wells, 2007).

In the United States, the supply of youth mental health providers serving LGBTQ+ youth remains woefully

insufficient. According to data from the Substance Abuse and Mental Health Services Administration (SAMHSA) National Mental Health Services Survey (N-MHSS)-one of the few datasets to examine LGBTQ+ mental health services - only 28% of youth mental health facilities offer any LGBTQ+ specific mental health services (2021). More than half of LGBTQ+ youth aged 13-24 (54%) desired mental health care in the last year but were unable to receive it (Choi et al., 2023). Racially minoritized LGBTQ+ youth, including Black, Latinx/e, and Asian American youth, were even less likely to receive desired mental health care than White LGBTQ+ youth. Geographic differences are also apparent, with LGBTQ+ youth residing in the South experiencing the highest unmet mental health needs (Choi et al., 2023).

Portability and scalability are strategic priorities to better serve LGBTQ+ individuals who lack access to mental health services and/or have been marginalized from care settings. This open pilot study aimed to develop and test a skills-based, strengths-focused intervention designed for paraprofessionals to deliver to LGBTQ+ youth with depressive symptoms called the Promoting Wellbeing & Resilience (PWR) Group. The intervention was designed to moderate the impacts of depression in a practical, accessible, and enjoyable format. The PWR Group curriculum teaches CBT-based tools for engaging in pleasant and supportive activities, improving communication, and managing stressors that lower mood.

Specifically, the study sought to: (1) develop a manual for community-based depressed LGBTQ+ youth informed by prior community-partnered research framework and feedback from LGBTQ+ youth (PWR Group); and (2) examine the impact of the PWR Group on depression (primary outcome), anxiety, and trauma symptom severity in the target population. We hypothesized that depression scores would decrease from pre-treatment to post-treatment. Since depressed LGBTQ+ youth disproportionately experience cooccurring anxiety symptoms (Reisner et al., 2015) and exposure to traumatic events (Kosciw et al., 2016), we posited that participants may also demonstrate reductions in anxiety and trauma symptoms. Investigators additionally conducted qualitative group exit interviews to assess participants' satisfaction with the intervention and collect constructive feedback about session modules.

Method

Manual Adaptation

The PWR manualized intervention derived from the Community Partners in Care Group CBT for Depression community program (Miranda et al., 2006), which was developed and adapted over more than a decade for depressed under-resourced adults using a community-partnered participatory research model (Jones & Wells, 2007). As per these protocols, investigators integrated community member and stakeholder input throughout all phases of depression treatment quality improvement for under-serviced communities (Chung et al., 2010). The *Community Partners in Care* manualized group was selected in consultation with researchers on community-based depression group education based at the University of California Los Angeles (UCLA) Center for Health Services and Society.

The group manual was first re-written using adolescent-focused language by this team of child psychiatry/psychology clinician-researchers. Sessions were edited to teach each skill in an interactive format by integrating didactics, individual activities, and group and individual skills practice. Each session included a supplemental home activity to support real-world skills practice between sessions. Content relevant to LGBTQ+ identity-related stressors was prioritized (e.g., managing frequently encountered identity-linked stressors such as sharing one's identity in school and social settings, confronting incorrect pronoun

use by others, and hearing discriminatory and/or threatening statements from peers and adults).

A group of five LGBTQ+ teenagers was recruited from UCLA primary care clinics and a Southern California free conference for LGBTO+ vouth to receive the revised group intervention and provide feedback via a focus group. The youth were screened as per the pilot criteria described below and completed a brief survey on demographic data and community LGBTQ+ and mental health services utilization via a computerized survey. The youth and a legal guardian consented to participation. Youth received a total of \$155 for their participation, which included \$60 to cover transportation for each of their seven visits to the study site. Through a series of facilitated open-ended questions, participants provided feedback about the most useful and least useful modules, overall perception of the group, barriers to completing home practice, and recommended revisions helpful to future peers (See Figure 1). The PWR manual was revised again to incorporate this qualitative feedback.

The PWR curriculum comprises eight 60-min sessions, with seven unique skill-based modules and one

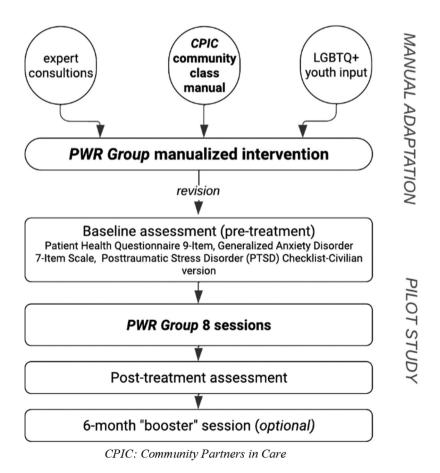


Figure 1. Study flow diagram.

| Module | Title | Module Content | |
|--------|---|--|--|
| 1 | What Affects Your Mood & Resilience | Establish structure, rules, goals for group Learn about connections between thoughts and moods Learn how to notice helpful and unhelpful/harmful thoughts | |
| 2 | Pleasant Activities Can Help Improve Your Mood and Make you Resilient | Learn about connections between activities, mood, and resilience Learn about the roles of pleasant activities and self-care activities Identify new activities you can do (self-care, fun, learning, meaningfu | |
| 3 | What Gets in the Way of Engaging in Pleasant Activities | Examine how harmful thoughts affect activities Learn to identify and examine your thoughts Learn how to replace a harmful thought with a helpful thought | |
| 4 | How to Increase Resilience through Support from Others | Learn about connections between social interactions and mood Identify supportive people in your life Learn how to grow and strengthen your support network Locate local and online resources for LGBTQ youth | |
| 5 | How to Improve Communication & Assertiveness | Learn how communication affects relationships Learn how to listen actively Learn how to make requests assertively Express your feelings and thoughts assertively | |
| 6 | Recognizing Stressors & Building Stress Management Skills | Learn how to recognize stress Learn how stress works in the body Learn about self-compassion and why it's important | |
| 7 | My Personal Resiliency Plan: Goal Setting | Learn how setting reachable goals gives meaning to your life and shapes the future Identify short-term and long-term goals Learn how to create small steps for your goals | |
| 8 | Resilience Review & Wrap Up | Resilience curriculum review via Jeopardy! Review skills and resources from group. | |

Figure 2. Module content of the PWR group for depressed LGBTQ+ Adolescents.

review and celebration session (see Figure 2 for details of module content). An eighth session was added based on feedback from focus group participants, who recommended additional time for group discussion and skill practice. Focus group participants varied in regards to their wish for prompting by the facilitator to specifically discuss their LGBTQ+ identities (e.g., versus more open-ended prompts wherein they would self-identify specific stressors to discuss). Thus, exercises were designed to address both LGBTQ+ specific and additional developmentally relevant stressors (e.g., those pertaining to school work, peers, and home relationships).

Pilot Study Design and Procedure

The treatment was conducted in an office building on the UCLA campus in Los Angeles, California. Of note, the initial study site was a large LGBTQ+ community center; however, the center withdrew due to financial concerns and potential liability related to serving suicidal youth. Participants were recruited from public middle and high schools throughout Los Angeles Unified School District, the second largest public district in the country; nearby smaller school districts; pediatric and adolescent medicine clinics at local academic medical centers; and LGBTQ+ youth-serving county-wide agencies affiliated with a centralized youth coalition. Email and hard-copy study advertisements were provided to coordinators and leaders at these community sites.

Investigators also directly recruited youth participants through a booth at the largest regional free LGBTQ+ youth conference.

Youth and caregivers who responded to the advertisements were screened by phone. The caregiver was first presented a brief study overview and given the opportunity to consent or decline screening of their youth. Inclusion criteria, reported by the youth, were conversational English, self-identification as LGBTQ+, age 12-17 years old, and a score of 3 or higher on the 2-Item Patient Health Questionnaire (PHQ-2), which asks youth to rate the frequency of depressed mood and anhedonia over the past 2 weeks on a scale from "0" (not at all) to "3" (nearly every day). A threshold value of 3 was selected due to its common use for detecting individuals who warrant additional screening for Major Depressive Disorder in primary care populations (Kroenke et al., 2003). As in the Community Partners in Care community class program, exclusion criteria included a known diagnosis of intellectual disability, bipolar disorder, or schizophrenia, in this case reported by the caregiver, as these youth did not represent general community youth samples appropriate for groupbased non-clinical interventions. Youth were not excluded on the basis of depression, anxiety, or trauma symptoms unless active suicidal planning or intent was reported at the time of entry.

Youth were enrolled if caregiver consent and youth assent were provided. Youth participants completed a baseline computerized demographic survey with detailed sexual orientation and gender identity information at the time of enrollment. Caregivers separately completed a phone assessment on family demographic characteristics and perceived access to community resources for their youth. Youth participants completed primary (depression) and exploratory (anxiety and trauma) psychological measures privately on paper at two time points: immediately prior to the beginning of the first group session (pre-intervention) and immediately following the final group session (postintervention). Youth were also invited to attend a 30min focus group following the final group session facilitated by a trained moderator and an assistant moderator (the note-taker), neither of whom delivered the intervention. Focus groups were designed and conducted utilizing standardized protocols detailed elsewhere (Krueger, 1998b; Krueger & Casey, 2000). Caregiver and youth participants received financial compensation for each of the completed assessments (\$20 each), and the class was offered free-of-charge on weekday evenings. An unlicensed masters-level psychology intern led all sessions.

All class sessions were conducted in-person in a nonclinical conference room on the UCLA campus prior to the COVID-related facility shutdown. The participants were split into three class cohorts based on time of enrollment. Each class duration was between 60 and 75 minutes. Participants were subsequently offered an optional "booster" session 6-months after group completion, for which no financial incentive was offered. The extra, optional session reviewed the resilience curriculum in 60 min with other participants from the class cohort.

Pilot Participants

Participants were English-speaking adolescents 12-17 years old who identified as LGBTQ+ (including questioning or exploring gender identity and/or sexual orientation) who screened positive for depression symptoms, were willing and able to engage in an 8-week skills group intervention, and had a caregiver willing to provide consent. Youth enrolled in the study presented with a PHQ-2 score of 3 or greater at screening.

A total of 47 youth and proxies (caregiver or counselor) inquired about the study via phone and/or e-mail. A total of 37 youth completed screening, of which 33 were eligible. Of the 12 youth who were eligible but did not enroll, the most common reason cited was distance from the study site and/or lack of transportation (5), followed by inability to obtain parent consent (3), and non-availability on weeknight evenings (2). The remaining two screened, eligible participants did not respond to three additional contact attempts by study staff.

Informed Consent & Suicide Severity Screening Protocol

Prospective participants were screened via phone after a legal guardian (caregiver or parent) verified the prospective participant's age and provided verbal consent for the screening process. Consent, assent, and locator forms were sent to the caregiver if the youth qualified for the study. Youth were enrolled in the study only if written consent and assent were received. Participants completed a pre-treatment PHQ-9 in-person at the study site. An attending psychiatrist or psychologist on the study team conducted a safety and risk assessment individually with youth who endorsed Item-9 (suicidality) using a modified Columbia-Suicide Severity Rating Scale (C-SSRS) (Posner et al., 2011). No participants reported active suicidal thoughts, planning, or intent during the risk assessments. No youth attempted suicide during the study period. Referrals for mental health care were offered to caregivers of youth who reported any suicidality during the post-treatment assessment. An attending clinician remained on call for the duration of the study to address any reports of suicidality during or between class sessions.

Measures

Treatment Response Outcome Measures

Patient Health Questionnaire 9-Item (PHQ-9; Kroenke & Spitzer, 2002)

The PHQ-9 is a self-administered instrument that captures the nine Diagnostic and Statistical Manual 4th edition (DSM-IV; American Psychiatric Association, 2000) criteria for Major Depressive Disorder. The PHQ-9 has been validated as both a screening tool for depression and as a measure of depression symptom severity. Scores correspond to symptom severity, where 0-4 indicates no depressive symptoms, 5-9 "mild" depressive symptoms, 10-14 "moderate" depression symptoms, 15-19 "moderately severe" depression symptoms, and scores of 20-27 indicate "severe" depression symptoms. Criterion validity for PHQ-9 cutoff points for diagnosing Major Depression is described elsewhere (Kroenke et al., 2001). Participants completed the PHQ-9 at pre-treatment and post-treatment.

Generalized Anxiety Disorder 7-Item Scale (GAD-7; Spitzer et al., 2006)

The GAD-7 is a self-administered instrument for capturing core DSM-IV criteria for Generalized Anxiety Disorder that has been validated as both a screening tool and a measure of symptom severity. Like the PHQ-9, items on the GAD-7 range in severity from

"0" (not at all) to "3" (nearly every day) and assess symptoms within the preceding two weeks. A score of 10 or greater designates clinically significant symptoms corresponding to functional impairment. Criterion and construct validity are described in detail elsewhere (Spitzer et al., 2006). Participants completed the GAD-7 at pre-treatment and post-treatment.

Posttraumatic Stress Disorder (PTSD) Checklist-Civilian Version (PCL-C; Lang & Stein, 2005; Lang et al., 2012; Weathers et al., 1993)

The PCL-C is a 17-item self-administered instrument that captures the core symptoms of PTSD within the DSM-IV. The PCL asks participants to rate how many individual symptoms of PTSD bothered them in the last month using a 5-point scale, which ranges from "1" (not at all) to "5" (extremely). Scores range from 17 to 85, with scores over 30 indicating at least moderate severity of PTSD symptoms. When used to monitor treatment response, a change in score of five or more is considered reliable. Participants completed PCL-C at pre-treatment and post-treatment.

Youth Qualitative Feedback

Youth participants who attended a focus group were asked a predetermined set of open-ended questions addressing perceived utility and subjective feedback about class content and format (see Table 1). The focus groups were audio-recorded, professionally transcribed, and de-identified for qualitative analysis (Krueger, 1998a). Two study team members independently read transcripts as well as moderators' notes. Responses were analyzed and sequenced in a questionby-question format, with key themes and illustrative quotes identified and bulleted (Krueger, 1998a; Krueger & Casey, 2000).

Statistical Analyses

All treatment response data were analyzed using the intent-to-treat principle. Analyses were conducted using SPSS Statistics version 28.0 (IBM Corp, 2021).

Paired samples (dependent) t-tests were applied to depression (PHQ-9) and anxiety (GAD-7), and trauma (PCL-C) at two time points, pre-treatment and posttreatment. An alpha level of 0.05 was chosen for all tests, and all tests were one-tailed. Effect sizes for the paired samples t-tests were calculated using Cohen's d formula (Cohen, 1988). A pooled standard deviation (equivalent to the averaged standard deviation) was used in calculating the effect sizes (Dunlap et al., 1996; Goulet-Pelletier & Cousineau, 2018).

Due to the nature of the statistical analyses comparing pre- and post-treatment scores for study participants (paired samples), treatment response analyses were limited by data missing at either of the timepoints. Available-case (pairwise deletion) analysis (Cook, 2020; Enders, 2010) was performed to minimize data loss for univariate analysis in a small sample (McKnight et al., 2007; Pigott, 2001). In other words, participants were included in all analyses for which they reported values at both timepoints. The degrees of freedom are included in the reported results.

Results

Participant Characteristics

The sample size comprised 21 teenagers between 12 and 17 years old (M = 14.8 years, SD = 1.82), of whom 17 participants (81%) were white. All participants identified with non-heterosexual sexual orientations (8 participants identified as gay or lesbian [38%], 7 identified as bisexual or pansexual [33%], and 6 reported actively questioning their sexual orientation [29%]). More than half of the participants identified as transgender or gender diverse (n = 12, 57%). Of these 12 participants, 5 participants were transmasculine (24%), 4 participants were non-binary or genderfluid (19%), 2 participants were agender (10%), and 1 participant reported being "not sure" of their gender identity (5%). The remaining 9 participants (43%) identified as cisgender (6 male [29%] and 3 as female [14%]) (See Table 2 for details on sociodemographic characteristics).

Table 1. Focus group questions.

- (1) What was the most helpful lesson, section, or skill that you learned here?
- (2) What was the least helpful, or what should we have skipped?
- (3) What was your favorite part of the class?
 - a. (if relevant): What made you complete the class?
- (4) Do you think we focused on skills around LGBTQ+ issues enough? Too much? a. (if relevant): Did you access any of the LGBTQ+ resources we gave you, or do you plan to? How come?
- (5) What other things would have been helpful?
- (6) What got in the way of doing the Home Activities?
- (7) Would you recommend this group to a friend? Why or why not?
- (8) How would you feel about your parents coming to a separate group to get education and learn skills?

Table 2. Sociodemographic characteristics of youth participants.

| Youth characteristic | n | % |
|-----------------------|----|----|
| Race & ethnicity | | |
| White | 17 | 81 |
| Non-Latinx/e | 14 | 67 |
| Latinx/e | 3 | 14 |
| Black | 1 | 5 |
| Asian | 1 | 5 |
| Multi-racial | 2 | 10 |
| Sexual orientation | | |
| Lesbian/gay | 8 | 38 |
| Bisexual/pansexual | 7 | 33 |
| Questioning | 6 | 29 |
| Gender identity | | |
| Transgender boy | 5 | 24 |
| Cisgender boy | 6 | 29 |
| Non-binary or fluid | 4 | 19 |
| Cisgender girl | 3 | 14 |
| Transgender girl | 0 | 0 |
| Agender | 2 | 10 |
| Not sure | 1 | 5 |
| Sex assigned at birth | | |
| Female | 16 | 76 |
| Male | 5 | 24 |

N = 21. Participants were on average 14.8 years old (SD = 1.82).

Depression Symptoms

Among LGBTQ+ youth in the study sample, there was a significant change in depression scores from pretreatment (M=12.85, SD=6.5) to post-treatment (M=9.68, SD=7.0); t(17)=3.3, p=.002) with a moderately large effect size (d=.47). Seventy percent of participants scored within the moderate-to-severe symptom severity range pre-treatment, as compared to 43% at post-treatment (see Figure 3). In regard to recent suicidality, 10 participants endorsed Item-9 of the PHQ-9 ("Over the last two weeks, how often have you been bothered by the following problems? Thoughts you would be better off dead, or of hurting yourself") pre-treatment, as compared to 5 participants post-treatment (48% pre-treatment vs. 25% post-treatment) (Kroenke & Spitzer, 2002). All five youth who reported recent

suicidality post-treatment had also endorsed suicidality pre-treatment.

Anxiety and Trauma Symptoms

A paired samples t-test did not show a statistically significant difference in generalized anxiety scores between pre-treatment (M=12.63, SD=5.73) and posttreatment (M=11.15, SD=4.52); t(17)=1.8, p=.049 (95% CI for mean difference [-.39, 4.16]). The effect size was low, with a Cohen's d of .29. We did not see a significant difference in post-traumatic stress severity scores between pre-treatment (M=35.37, SD=20.00) and post-treatment (M=34.00, SD=18.33); t(17)=1.2, p=.118, and the effect size was very low (d=.07).

Attendance and Group Completion Rates

Of the 21 LGBTQ+ youth enrolled, 20 participants completed pre-treatment and post-treatment assessments and the group intervention (95%). These participants attended all 8 sessions of the PWR Group. One participant dropped out mid-way through the intervention, reportedly due to transportation difficulties. A total of 12 participants attended an optional extra skills review session offered six months after group completion.

Qualitative Feedback from Focus Groups

All 20 of the youth completing treatment attended a focus group following their last class module. All youth participated actively in responding to question prompts and expressed enthusiasm in sharing their opinions. Key findings are briefly summarized herein. First, youth overwhelmingly highlighted social connectedness and camaraderie with class peers. This theme emerged throughout

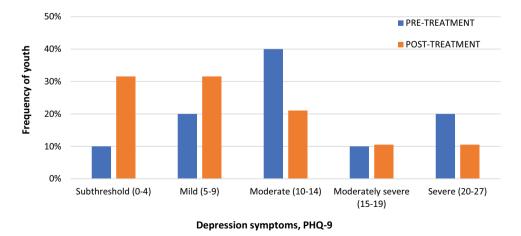


Figure 3. Frequency of youth with PHQ-9 total score (range 0-27) pre- and post-treatment.

all focus groups multiple times, regardless of the interview prompt. The second-most valued lesson was identifying emotions and rating mood, which youth practiced weekly at the beginning and end of each class. Interestingly, youth were split on whether they wanted more or less focus on LGBTQ+ specific challenges (versus everyday life stressors not related to identity). Youth almost universally expressed difficulty completing home practice, citing forgetfulness, fatigue, lack of motivation, and feeling overwhelmed as the most common reasons. Multiple youth suggested exploring ways to check-in between class sessions, noting difficulty applying the skills on their own. All youth voiced willingness to recommend the group to a friend, with individuals highlighting "the social environment" and "problem solving skills" as their reasons for doing so. Lastly, the majority of youth were open to having their parent (or caregiver) join a separate, complementary resilience class. Several gender diverse youth felt that a complementary parent group would improve parents' understanding of their gender identities, while others voiced reservations. One gender diverse youth noted that parents "are set in their opinions."

Discussion

The purpose of this study was to develop a manualized CBT-based class tailored to depressed LGBTQ+ youth from community settings utilizing youth feedback and expert consultation and test its preliminary efficacy in reducing depressive symptoms among pilot participants. The pilot curriculum was adapted from a prior community-based depression education class using qualitative feedback from LGBTQ+ youth with a history of depression. Youth informed class content and format via focus groups after viewing the group content in a live format. As a result of youth feedback, skill exercises incorporated both identity-related stressors as well as other conventional stressors associated with family, school, and peer settings.

The current study adds to this field of study as an intervention that is designed to be accessible by participants who may not have access to traditional mental health services or settings. Increasing access to care among marginalized and underserved populations like LGBTQ+ youth is a crucial step toward addressing mental health disparities. The PWR Group intervention, which offers evidenced skill modules targeting social stress, may be particularly suitable for schools and especially non-health care community settings amidst the spike in psychological distress among American youth (CDC, 2023) and widespread shortages of youth mental health services (Office of the Surgeon General, 2021). Preparing community and/or school facilitators to offer structured skills-building groups to more vulnerable youth may improve access to evidence-based strategies in a socially acceptable, low-cost format. A resilience skills class may prove more acceptable and less stigmatizing to marginalized LGBTQ+ communities than traditional mental health care, given that LGBTQ+ adults report potential discrimination by providers as a frequent reason for not accessing care (Mahowald et al., 2020).

Prior studies on Gay-Straight Alliance (GSA) student groups, which offer interpersonal support and educational, advocacy, and/or recreational activities to LGBTQ+ students and their allies, provide additional support for a skills group intervention model. Participation in a GSA group is associated with better psychological wellbeing and more social connectedness among LGBTQ+ students (Herdt et al., 2007). The presence of a GSA on a school campus is associated with better overall student wellbeing (Ioverno et al., 2016) and lower rates of risk behaviors among students - including substance use and high numbers of sexual partners (Poteat et al., 2013). The PWR Group has the potential to both augment supportive school-based GSA programming and serve as a structured intervention for LGBTQ+ youth in other community settings with paraprofessionals who offer support services (e.g., local LGBTQ centers, drop-in community youth centers, etc.). These settings often do not integrate trained mental health professionals (e.g., Pachankis et al., 2021) and lack evidence-based social support programs for LGBTQ+ youth (Fish et al., 2019).

Since the original pilot study described herein, the PWR Group has been adapted into an online format to better reach less resourced youth who are geographically disconnected from LGBTQ+ affirming spaces and schools (and remain fully operational during facility closures). A larger efficacy study of the online group enrolling youth throughout California is in progress.

In this study, the PWR Group showed efficacy in reducing self-reported depressive symptoms among LGBTQ+ adolescent participants post-intervention. The improvement in depressive symptoms may suggest that youth participants applied skills and/or psychoeducation to real-life situations outside the sessions.

Strengths & Limitations

Qualitative feedback from participants, outstanding attendance, and high completion rates (95%) suggested that the intervention taught evidenced skills in a format acceptable to LGBTQ+ adolescents. In this initial pilot cohort, the PWR Group intervention appeared well-tolerated, with high rates of completion among youth with diverse LGBTQ+ identities and



complex co-occurring psychiatric symptoms. Participants exhibited particular diversity in sexual orientation, with no participants identifying as heterosexual. The study sample's relatively high proportion of gender non-binary youth also reflects an emerging trend among national data on gender expression, with youth increasingly reporting nonbinary gender identities and expression (Wilson et al., 2017).

Despite efforts to recruit across Los Angeles County, participants in the study were predominately white (81%). This observed disproportion may be partially explained by the location of the study at an academic institution in a relatively affluent section of the county and limitations in recruitment resources. Transmasculine adolescents and nonheterosexual cisgender male adolescents were also overrepresented in the study as compared to transfeminine adolescents and non-heterosexual cisgender female adolescents. This observation may be consistent with broader trends showing that transgender women - particularly transgender women of color fare far worse in health status and access to care than transgender male and white peers (see, e.g., Everett & Mollborn, 2014; Lambda Legal, 2010). Furthermore, due to the nature of the consenting protocol for minors (e.g., a legal guardian provided consent) and framing of the study (e.g., an intervention for LGBTQ+ youth), selection bias likely occurred, with youth participants demonstrating a degree of openness and disclosure regarding their identities and potentially benefiting from some familial support. Still, youth participants often provided examples of family behaviors they perceived as rejecting or hurtful during the group sessions, suggesting the pervasiveness of LGBTQ+ related stress among study participants. Lastly, in this pilot study, we were not able to distinguish the effects of skill acquisition compared to the effects of social support.

Given the combination of strengths and limitations, further larger-scale community-based testing with randomized controls is indicated to assess efficacy in comparison to other community care options and among more sociodemographically diverse LGBTQ+ youth. LGBTQ+ youth collectively continue to face many barriers to evidence-based care despite experiencing alarming—and growing—rates of depression and suicidality as a result of chronic, pervasive discrimination and other forms of social stress. A group-based resiliencefocused intervention that delivers tailored skills and education in an easily accessible community setting offers a promising, scalable intervention for community-based LGBTQ+ youth.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

This study was funded by the American Academy of Child and Adolescent Psychiatry [Junior Investigator Award (2018-

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