



LGBTQ+ Cultural-Competence Training Effectiveness: Mental Health Organization and Therapist Survey Outcome Results from a Pilot Randomized Controlled Trial

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Abstract

Lesbian, gay, bisexual, transgender, queer/questioning, and other sexual and gender diverse (LGBTQ+) persons frequently lack access to mental health service organizations (MHOs) and therapists who are competent with LGBTQ+ clients. Existing continuing education programs to better equip therapists to work with LGBTQ+ clients are often not widely accessible or skills-focused, evaluated for effectiveness, and inclusive of MHO administrators who can address the organizational climate needed for therapist effectiveness. A virtual, face-to-face, multi-level (administrators and therapists) and multi-strategy (technical assistance, workshop, clinical consultations) LGBTQ+ cultural competence training – the Sexual and Gender Diversity Learning Community (SGDLC) – was tested in a pilot randomized controlled trial. Ten organizations were randomly assigned to the intervention (SGDLC plus free online videos) or control (free online videos only) group. Pre-/posttest Organization LGBTQ+ Climate Surveys (n=10 MHOs) and pre-/posttest Therapist LGBTQ+ Competence Self-Assessments (n=48 therapists) were administered. Results showed that at pretest, average ratings across organization LGBTQ+ climate survey items were low; twice as many items improved on average in the intervention (10/18 items) than control (5/18 items) group organizations. At pretest, therapist average scores (range 0–1)

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were highest for knowledge (0.88), followed by affirmative attitudes (0.81), practice self-efficacy (0.81), affirmative practices (0.75), and commitment to continued learning (0.69). Pre-/posttest change scores were higher for the intervention relative to the control group regarding therapist self-reported affirmative attitudes (cumulative ordinal ratio [OR]=3.29; 95% Confidence Interval [CI]=1.73, 6.26), practice self-efficacy (OR=5.28, 95% CI=2.00, 13.93), and affirmative practices (OR=3.12, 95% CI=1.18, 8.25). Average therapist and administrator satisfaction scores were high for the SGDLC. These findings suggest the SGDLC training can affect organizational- and therapist-level changes that may benefit LGBTQ+ clients.

Keywords

therapist; LGBTQ; sexual and gender minority; cultural competence; training; mental healthcare; mental health; randomized controlled trial

Notwithstanding cultural and legal strides regarding lesbian, gay, bisexual, transgender, queer/questioning and other sexual and gender minority (LGBTQ+) persons, stigma and lack of social support continue to undermine LGBTQ+ mental health. LGBTQ+ persons report markedly higher levels of psychopathology compared to their heterosexual and/or cisgender peers (Semlyen et al., 2016; Wanta et al., 2019; Wittgens et al., 2022), and these disparities persist despite LGBTQ+ persons accessing care from mental health professions at a greater rate than heterosexual and cisgender individuals (Cochran et al., 2003; Platt et al., 2018). That greater utilization of mental health care has failed to diminish mental health inequities has prompted growing discussions as to how to make treatment more available (Williams & Fish, 2020) and effective (Pachankis, 2018) for LGBTQ+ individuals.

LGBTQ+ individuals face unique challenges when seeking care from mental health professionals that impact their satisfaction with their care. Recent reviews reinforce the concern that LGBTQ+ individuals are not receiving culturally competent care from therapists and indicate therapists' ongoing need for LGBTQ+ specific training (Bishop et al., 2021; McNamara & Wilson, 2020). For example, LGBTQ+ persons frequently express that their therapists lack basic knowledge or understanding of sexual and/or gender identity (Eady et al., 2011; Foy et al., 2019), exhibit a lack of comfort in discussing issues related to sexuality, gender, or LGBTQ+ issues more broadly (McNamara & Wilson, 2020; Semp & Read, 2015), and dismiss, discriminate against, or outright pathologize their sexual and/or gender identities, behaviors, or relationships (McCann & Sharek, 2014). Due to experiences of discrimination and stigma, many LGBTQ+ youth and adults conceal their identities and are conditioned to look for implicit and explicit cues as to whether others will be rejecting of their sexual and/or gender identities (Hendricks and Testa, 2012; Meyer, 2003). When mental health organizations (MHOs) and therapists fail to communicate that they are LGBTQ+ affirming (welcoming, supportive, and most importantly, competent), they risk damaging their rapport and therapeutic alliance with clients. When LGBTQ+ persons perceive that therapists or MHOs are not affirming of their LGBTQ+ identity, they may avoid or prematurely terminate services (Freeman-Coppadage & Langroudi, 2022; Shelton & Delgado-Romero, 2013; Anderson et al., 2019; Israel et al., 2008). When therapists and

MHOs can actively communicate their competence and comfort with LGBTQ+ identities, they can help facilitate a strong, client-centered therapeutic alliance (Lefevor et al., 2022).

Unfortunately, continuing education trainings for increasing therapists' cultural competence have not been adequately evaluated to establish which training approaches as well as types of knowledge and skill are most effective for LGBTQ+ clients posing a significant challenge to providing these clients with evidence-based services (Matza et al., 2015; Pantalone, 2015; Chu et al., 2022). Furthermore, few studies have used experimental study designs to clarify intervention effectiveness, with most studies using single pre-post group testing or cross-sectional posttest-only designs (Bettergarcia et al., 2021).

Most empirically tested LGBTQ+ cultural competency trainings utilize didactic training methods (e.g., workshop lecture with or without live discussion either in-person or on-line). Preliminary evidence suggests that such trainings can help therapists gain more knowledge, comfort, and self-efficacy; and become more aware of and decrease their own biases/prejudices, including homo-, bi-, and trans-negativity (Pepping et al., 2018; Rutter et al., 2008; Bettergarcia, et al., 2021; Israel & Hackett, 2004; Pepping et al., 2018; Rutter et al., 2008; Lelutiu-Weinberger, et al., 2022). A recent randomized controlled trial (RCT) suggests that an extended eleven 1-hour synchronous webinar series can improve the LGBTQ+ competency knowledge and skills, albeit with already LGBTQ+ experienced therapists in LGBTQ+ community centers, and regarding LGBTQ-affirmative Cognitive Behavioral Therapy-- an evidence-based treatment to address internalizing mental health disorders among LGBTQ+ clients (Pachankis et al., 2022). Nevertheless, evidence generally indicates that most therapists need expert-facilitated real-time exploration and problem-solving to develop the practices needed to properly serve LGBTQ+ clients (Chu et al., 2022; Matza et al., 2015; Lelutiu-Weinberger, et al., 2022). Consultation opportunities for therapists following traditional training workshops improve impact of the workshops alone on adherence to best practices (Frank et al., 2020). The effectiveness of web-based and in-person workshops followed by consultation opportunities are comparable (Khanna and Kendall, 2015; Frank et al., 2020).

Regarding their topical content, LGBTQ+ competence trainings for therapists are ever evolving and typically address use of affirming language, reflection on personal bias and prejudice and how it may impact practice, and the influence of minority stress and sociocultural context on LGBTQ+ mental health (Rossi & Lopez, 2017; Borroughs et al., 2015). More attention has been given recently to how systems of oppression across multiple, intersecting marginalized identities can undermine mental health (Arora et al., 2022; Anders and Kivlighan, 2023). While sexual health conversations are considered integral to overall therapist competency with clients, past LGBTQ+ competency trainings typically do not address this topical area (Russell, 2012; Dermer and Bachenberg, 2015). This is unfortunate given that LGBTQ+ individuals experience higher rates of sexually transmitted infections, hypersexualized cultures, sexual objectification, concerns related to sexual health, and lack of access to adequate sexual health services; and therapists are often undertrained and uncomfortable discussing sexual health, particularly with sexual and gender minorities (Knight et al., 2014; Mollen and Abbott, 2022).

Existing evaluations of LGBTQ+ cultural competence programs also focus solely on therapist competencies and do not address the LGBTQ+ climate of MHOs. MHOs staff, policies, and procedures can facilitate or undermine therapists' effectiveness with LGBTQ+ clients. This is a critical limitation of LGBTQ+ training programs for therapists working within MHOs as many client interactions with MHO staff and procedures outside of the therapist-client relationship influence client satisfaction with their care. There is a need to develop and evaluate LGBTQ+ training and technical assistance (TTA) that facilitates changes in MHOs' policies, procedures, forms, staff, and educational materials so that MHOs are more welcoming and affirming (Yakob and Ncama, 2016; Goldhammer et al., 2021; Menkin et al. 2022), and to support and reinforce therapists' LGBTQ+-affirming practices (MacDonnell and Daley, 2015).

To redress the need for more empirically validated training opportunities that improve LGBTQ+ mental health services at the organizational and therapist levels, a multi-disciplinary team designed the Sexual and Gender Diversity Learning Community (SGDLC): a virtual, synchronous, face-to-face, multi-level (organization and therapist) and multi-strategy (workshops, technical assistance, clinical consultations) TTA program, and then evaluated the program in an RCT. Development of the SGDLC was grounded in 20 therapist LGBTQ+ competencies (Smith-Bynum et al., 2022) and empirically-validated theories including the Information, Motivation, and Behavior Skills (IMB), Social Cognitive Theory (SCT), and the Socio-ecological Model (SEM). Based on the IMB, the SGDLC aimed to improve therapist and MHO administrator LGBTQ+ practice with (a) Information to increase knowledge, (b) motivation through opportunities to examine their attitudes, beliefs, and values needed to comfortably and confidently care for LGBTQ+ clients; and (c) behavioral skills through experiential learning based on the SCT (Chang et al., 2014; Lacombe-Duncan et al., 2021). SCT was used to frame therapist skill-building around modeled best practices, role-play, clinical mentoring, problem solving, and feedback (Dillon & Worthington, 2003). The SEM reinforced the notion that MHO environmental influences (e.g., receptionists, intake and billing forms, and marketing and educational material) were integral to client access to care and therapist attempts to positively impact LGBTQ+ clients (Hudson and Bruce-Miller, 2022).

Prior papers describe the formative research for the SGDLC program components and its feasibility and acceptability (Fish et al. 2022, Fish et al. 2023). This paper reports on the RCT evaluation findings regarding the effectiveness of the SGDLC TTA program. The aims were to assess differences between the SGDLC intervention and control groups on improvements in (1) administrator-reported organizational LGBTQ+ climate and (2) therapist self-reported knowledge, affirming attitudes, practice self-efficacy, commitment to continued learning, and affirming skills/practices relevant to LGBTQ+ clients.

Methods

All procedures of the SGDLC RCT data collection were approved by the University of Maryland at College Park Institutional Review Board (IRB #1657558). The RCT was conducted between January 2021 and June 2022 in three overlapping 12-month cohorts

to support feasibility in scheduling and intervention implementation. The goal was to engage four mental health services organizations (MHO) per cohort, such that each cohort was recruited, randomized to study intervention or control condition, and administered baseline data collection (months 1–5), intervention (months 6–9), and post-test data collection (months 10–12). The following detailed study methods and overall study flow chart (Figure 1) are presented as one summary of all three cohorts.

Sampling Procedures

Organization and Therapist Recruitment, Eligibility, and Survey Completion—

A promotional flyer providing basic information about the study and eligibility criteria was emailed to therapists and MHO directors in Maryland identified through an online search, personal networking, responses to previously widely distributed newsletters, and a list of community mental and behavioral health regional authority directors throughout the state. To maximize reach, contacted parties were also invited to share the recruitment information within their own mental health therapist or organization networks in Maryland. Interested organizations (e.g., outpatient general mental health services; partnerships or non-profits) were instructed to have a lead administrator, such as a CEO/Director, complete an online organizational screening survey to collect eligibility information regarding characteristics about the organization and demographic information about their clientele. These initial screening surveys were reviewed by research team staff to assess whether the organization provisionally met study eligibility criteria.

Organization and therapist eligibility were based on the following criteria. Each MHO was required to (a) have two lead administrators willing to participate in the study organizational data collection and intervention, act as study liaisons with the research team, and serve as coordinators for the study within their organization; (b) have a minimum of 5 and maximum of 7 non-physician therapists (licensed or provisionally licensed) who had a caseload of at least 10 clients at least 16 years old and were willing to complete the therapist baseline survey; (c) represent a single administrative leadership structure with autonomy to determine its own policies and procedures, and have direct clinical oversight of a team of therapists; and (d) be a general MHO (e.g., not specifically focused on LGBTQ+ clients, women, youth, substance use rehabilitation, or faith-related concerns). Once an organization was deemed eligible based on the screening survey, a confirmation process for the eligibility was undertaken, starting with a virtual orientation meeting with the administrators in which the researchers reviewed specific eligibility criteria and expectations for the trial. This was followed by administrators jointly completing the online baseline *Organizational LGBTQ+ Climate Assessment Survey*.

Therapists were recruited by their organization administrators, who were provided with email language and attachments with information about the training and study components. The researchers did not communicate directly with therapists until their online consent forms were completed. To be eligible, therapists were required to be either provisionally or fully licensed general, and not subspecialty, mental health therapists (e.g., clinical social workers, mental health counselors, licensed professional counselors, licensed psychologists, and licensed marriage and family therapists); (b) work at the organization for a minimum

of 20 hours a week; (c) participate in at least one hour of clinical services a week as part of the enrolled site, and (d) have at least 10 clients 16 years old or older. To confirm their eligibility, therapists had to complete the consent form and online baseline *Therapist LGBTQ+ Competence Self-Assessment*. Therapist selection was based on who was first to complete the consent and confirm their eligibility with the online survey within their organization.

A total of 43 organizations completed a screening survey, of which 29 were ultimately deemed ineligible because they did not have enough eligible volunteer therapists and/or they did not have a general mental health service focus (Figure 1). Twelve MHOs were initially randomly assigned to study condition of which four dropped out of the study before intervention because they experienced a change that reduced their capacity to meet study expectations (e.g., moving locations, reaccreditation). Two of these organizations were replaced with the next consecutive two MHOs whose eligibility was confirmed. Hence, of the overall 14 organizations that were found eligible, ten organizations randomly assigned to the intervention and control condition completed the study.

After the intervention phase of the RCT, administrators at each MHO completed one online follow-up *Organizational LGBTQ+ Climate Assessment* and each therapist completed their own follow-up *Therapist LGBTQ+ Competence Self-Assessment*. These follow-up surveys mirrored the content of the baseline surveys. Organizations received up to \$1,000; \$250 for each therapist that completed the study, up to five therapists. Administrators who were also therapists received up to 15 mental health therapist continuing education units (CEUs) for participation in the study intervention (7-hour workshop and 8-hour technical assistance). Therapists received \$25 for completing the follow-up survey and up to 7 CEUs for participation in the study intervention.

Study Intervention

The SGDLC program and RCT evaluation measures were developed by a large and diverse research team including practicing therapists, behavioral and mental health researchers with and without clinical training, and public health students and faculty who were members of the LGBTQ+ community. Additionally, a Community Advisory Board (CAB) consisting of various LGBTQ+ stakeholder groups (researchers, therapists, policy makers, and LGBTQ+ community members) and who represented diverse races, ethnicities, sexual orientations, and gender identities reviewed and provided input throughout the development of the SGDLC competency goals and program. The first phase of SGDLC development was the development of basic therapist LGBTQ+ competencies that would serve to guide the intervention components. With input and several rounds of revisions with all the above project partners, a list of 20 competencies was developed as the basis for the study interventions and evaluation measures (see Smith-Bynum et al. 2022). Two licensed masters-level therapists on the research team had many years of experience providing TTA in sexual health, sexual orientation, and gender identity clinical competence for behavioral and mental health providers and had previously provided a therapist workshop and MHO administrator technical assistance aimed at improving therapist and MHO competency with LGBTQ+ clients as independent contractors for two state health departments. This TTA, which had

never been evaluated, was revised as the SGDLC program based on the 20 competencies and refined through several rounds of revision with input from all project team members and partners. Both therapist trainers were part of the LGBTQ+ community and they provided all TTA components of the SGDLC for the RCT.

While preparing for the SGDLC RCT, the COVID-19 pandemic led to a conversion of all training components; initially planned as in-person, to a virtual, synchronous, face-to-face format. The new virtual RCT was preceded by a preparatory implementation feedback study of the final SGDLC intervention components with three mental MHOs involving both administrators and therapists (Fish et al., 2022). The feasibility and acceptability of the SGDLC components during the FCT was previously reported (Fish et al., 2023). All SGDLC components were manualized for implementation.

Non-study Webinars Promoted to Both Study Groups.—Both the intervention and control group therapists and MHO administrators were offered a list of 15 webinars on LGBTQ+ clinical competence. The webinars were pre-recorded and publicly available for free, and most allowed for therapists to apply for continuing education units (CEUs; <https://lgbtquequity.org/>). Hence, both groups had the opportunity to participate in free, universally accessible, didactic, often asynchronous, online training opportunities that required self-initiative to complete and integrate into practice.

Virtual SGDLC Workshop.—The goals of the workshop were to improve mental healthcare provider's knowledge, comfort, self-efficacy, and skill for providing LGBTQ+ affirmative mental health care and facilitating sexual health conversations. Intervention group therapists and administrators received 7-hours of real-time, face-to-face didactic lectures interspersed with experiential learning activities by the two clinical trainers. The workshop included four modules: (1) interrogating stereotypes, examining comfort, and understanding the importance of language; (2) LGBTQ+ health disparities and obstacles to care; (3) facilitating sexual health conversations in mental health care; and (4) providing affirming practices and health conversations. The experiential activities involved bias and empathic sensitization, modeling of best practices, and role-play. The workshop for each study cohort was scheduled so that all MHO administrators and therapists from the cohort could participate together. For more details see Fish et al., 2023.

Virtual SGDLC Bi-Weekly Therapist Clinical Consultations.—The goals of the clinical consultations were to help providers apply what they learned in the SGDLC workshop to their actual clinical practice and delve further into the intersections of identity LGBTQ+ clients hold. Bi-weekly clinical consultations (CC) for intervention condition therapists consisted of six 1-hour group discussions and mentoring sessions with one expert clinical trainer. Session topics included: Collection of sexual orientation and gender identity data; mental health care with gender minority clients; substance use treatment with LGBTQ+ clients; facilitating sexual health conversations with LGB clients; and facilitating sexual health conversations with gender minority clients. Participants were expected to prepare for each session by reading an assigned article and bringing their clinical challenges regarding LGBTQ+ clients for discussion and problem-solving. Following group training supervision best practices (Smith et al., 2012; Chen et al., 2020; Deane et al., 2015),

therapists were instructed to maintain confidentiality, and confined to verbal descriptions of clinical challenges, regarding any specific cases they presented for colleague discussion. Like supervision, therapists shared clinical challenges; the clinical consultant provided mentorship and coaching while encouraging participation from other therapists and drawing from clinical experience and assigned articles as sources of best practice. See Fish et al., 2023, for additional details.

Virtual SGDLC Organization Administrator TTA.—Administrators at each intervention organization were provided with four monthly two-hour TTA sessions by an expert clinical trainer scheduled at a time of mutual agreement. The goal of TTA was to increase inclusiveness of all MHO administrative functions. Organizational policies and practices related to nine key areas of operation were assessed, prioritized regarding importance and changeability, and addressed through planning and problem-solving: built environment, human resources, workplace climate, professional development, intake and referral, services and programs, outreach, leadership, and mission and values. For more details, see Fish et al., 2023.

Measures

The research team and CAB developed the online evaluation instruments: the *Organizational LGBTQ+ Climate Assessment* and the *Therapist LGBTQ+ Competence Self-Assessment*. The researchers reviewed the literature for existing measures addressing aspects of LGBTQ+ affirming practices and policies at the organizational and therapist levels and determined that existing measures would have to be revised to meet the needs of the current study. The Principal Investigator (BOB) drafted the surveys; the larger team reviewed and commented on the drafts; the drafts were revised; the revised drafts were reviewed by the research team and commented on by the CAB and again revised; and lastly, team members and graduate student volunteers self-administered the surveys for review and comment prior to finalizing. The surveys were administered to participants through the Qualtrics online platform.

Organizational LGBTQ+ Climate Survey.—The LGBTQ+ Access Project Organizational Self-Assessment was revised to meet the needs of the current study (Demonstrate Access, 2015; Jordan et al., 2015). The organizational LGBTQ+ equity practices were measured using 18 items. Examples of items included: “Explicitly states that LGBTQ+ people and their families are eligible for services and programs,” “Health information and resources address LGBTQ+ health,” and “Facilitators make referrals to LGBTQ+ competent services”. These were coded based on how completely the organization addressed each item (not at all addressed=0, partially addressed=0.5, completely addressed=1).

Therapist LGBTQ+ Competence Self-Assessment Survey.—A new measure was created based on a synthesis and revision of past measures (Bidel, 2017; Bidel & Whitman, 2013; Gandy-Guedes, 2018) and the competencies developed for the study (Smith-Bynum et al. 2022). Multi-item subscales addressed *Knowledge, Attitudes, Self-efficacy, Commitment to Continued Learning, and Affirming Practices*, and total scale scores were averaged across items. Response options for all items were on a five-point scale scored 0.00, 0.25, 0.50,

0.75, and 1.00. *Knowledge* (8 items, $\alpha = 0.66$) included such items as: “Gender identity is defined by the client, not based on expression or roles.” and “Attempts to change a client’s sexual orientation have negative effects on their mental health.” with response options on a five-point scale from completely false=0 to completely true=1. *Attitudes* (13 items, $\alpha = 0.74$) included such items as: “Attempts to change an LGBTQ+ client’s sexual orientation are unethical.” and “I believe that if transgender people would just accept their sex assigned at birth as their gender identity, they would be a lot happier.” with response options on a five-point scale from strongly disagree=0 to strongly agree=1. *Self-Efficacy* (16 items, $\alpha = 0.82$) included items such as: “I am confident that I know which skills that I need to focus on with more training to provide competent LGBTQ+ mental healthcare.” and “I am confident that I can provide appropriate counseling to pansexual persons.” with response options on a five-point scale from strongly disagree=0 to strongly agree=1. *Commitment to Continued Learning* (4 items, $\alpha = 0.75$) included items such as: “I stay connected with LGBTQ+ resources for professional development related to LGBTQ+ competency.” and “I stay current with the language used by LGBTQ+ people.” with response options on a five-point scale from never=0 to all the time=1. Lastly, *Affirming Care* (9 items, $\alpha = 0.78$) included items such as: “I support clients who want gender confirmation surgery in obtaining the affirmative healthcare that they need.” and “I use the name that my client uses regardless of their legal name.” with response options on a five-point scale from never=0 to all the time=1.

Therapist and Administrator Program Satisfaction Surveys.—At the end of the workshop for therapists and administrators, the clinical consultation series for therapists, and the TTA for administrators, all participants completed an on-line satisfaction survey. Typical program satisfaction items used to evaluate therapist continuing education addressing instructor competence, success of the program in meeting educational objectives, and success of the program in meeting personal educational objectives were rated on a scale from strongly disagree=1 to strongly agree=5.

Analytic Strategy

The small sample size ($n=10$) of organizations made statistical analyses invalid at the organizational administrator level and the clinical significance of differences across groups was interpreted from the examination of the administrator survey’s absolute values of results. We present means for organizational level measures, as these measures were largely not skewed. Therapist-level measures were skewed however, so we report medians for these. For bivariate analyses at the therapist level, we assessed differences between the intervention group and control group using Rao-Scott Chi-Square tests (for binary factors) and Modified Cochran-Armitage tests of trend (for ordinal and continuous covariates) to account for nesting design effects. Bivariate analysis of difference-in-difference between study groups also utilized Cochran-Armitage tests of trend. We also tested associations between the study group and therapist sociodemographic covariates so that any covariates could be used as confounders in subsequent multivariable regression modeling of study group as a predictor of therapist outcome. For both ordinal and continuous therapist outcomes, we used a cumulative log model generating cumulative odds ratios, both unadjusted and adjusted for bivariate covariates. These are interpreted similarly to odds ratios, but reflect differences

based on ordered values, so these are described as “odds of higher values.” We use these given that the therapist level measures are skewed, so mean-based regression tests would not be appropriate here.

Missingness across all key variables was relatively low (less than 10% for all variables and less than 2% for most variables) and not associated with other study variables. Intrascade stochastic imputation was used to impute missing values within each multi-item subconstruct, given their acceptable internal consistency and low missingness. Leverages and Cook’s distances were used to assess outliers, and none were observed. There was no evidence of collinearity in any model based on the variance inflation factor (VIF) (All VIF<5). We conducted all analyses in SAS 9.4.

Results

Study Intervention Exposure

Attendance at the intervention group study workshop consisting of 7 hours was 100% for administrators (mean of 7 hours per administrator) and 77% for therapists (mean of 5.4 hours per therapist) (see Figure 1). Attendance for intervention group therapists across the six 1-hour clinical consultations was 68% (mean of 4.1 sessions per therapist). Intervention group administrator attendance at the four two-hour TA sessions was 93% (mean of 3.7 sessions per administrator). In both the intervention and control groups, therapists’ participation in the 15 designated publicly available, asynchronous, free online webinars was low at about 25% (mean number of webinars completed was 3.50 in the intervention and 3.96 in the control group).

Organization-Level Results

Of the 10 study organizations, 30% were for profit, 60% were charitable, and 40% were community-based. The median number of staff was 78, the median number of therapists was 30, the median range of organization annual income was approximately \$2,000,000 to \$5,000,000; 60% had public funding, and 20% were rural. No detectable differences were noted between the Intervention and comparison group organizations at baseline (Table 1).

On a scale from 0–1, the total mean change from pretest to posttest in organizational LGBTQ+ climate scores across all 18 items was higher in the intervention group ($M=0.14$) than in the control group ($M=0.01$) but these differences were not significant based on test of trend, which may not be valid given the small group sample size of five organizations (Table 2). Nevertheless, absolute posttest minus pretest change scores within each condition showed more improvements in the intervention group than the control group on 10 of 18 comparisons, whereas improvements in the control group were observed on 5 of 18 comparisons. There were no differences in change scores between conditions on 3 comparisons. The largest intervention and control group differences in change scores favoring the intervention group were: Explicitly states that LGBTQ people and their families are eligible for services and programs ($M=0.35$); the organization maintains a client Bill of Rights that speaks specifically to LGBTQ access ($M=0.40$); programs and services are currently serving diverse LGBTQ individuals and communities ($M=0.40$); health

information and resources address LGB health ($M=0.50$); and health information and resources address transgender health ($M=0.45$).

On a scale from strongly disagree=1 to Strongly agree=5 scale, the average administrator rating for whether the workshop improved their knowledge was 4.90 (Table 5).

Therapist-Level Results

To summarize therapist characteristics at baseline: Over 37% of therapists were between 31–40 years old, over 90% were non-Hispanic/non-Latino, almost 73% were white, over 87% were assigned female at birth, over 87% identified as cisgender women, and over 77% were heterosexual (Table 3). One therapist reported that they are currently working on their mental health care license and all others reported having their license. About a third of therapists held a license in social work, a quarter held a professional counseling license, a tenth held another type of license, and a third did not specify license type. All but one therapist reported having LGBTQ+ clients. No therapists identified as transgender or gender diverse. Intervention condition therapists ($n=23$) compared to control condition therapists ($n=25$) differed on percent assigned female at birth (intervention 95.7% vs. control 80.0%; $p<0.05$), and on percent cisgender women (intervention 95.7% vs. control 80.0%; $p<0.05$).

The *Knowledge* domain of the therapist LGBTQ+ competence self-assessment indicated high average scores at baseline ($M=.88$) limiting the amount of detectable improvement possible from these scores (i.e., a ceiling effect; Table 4).

There were significant unadjusted increases across all therapists self-assessed LGBTQ+ cultural competence domains, except *Knowledge*, with median differences of posttest minus pretest scores between the intervention and the control group escalating in the following order: *Attitudes* (Median=.077), *Self-efficacy* (Median=.141), *Commitment to Continued Learning* (Median difference=.188), and *Affirming practices* (Median=.250). (Table 4). This was mostly consistent with adjusted mixed effects ordinal regression findings, with significant increases in *Attitudes* (Ordinal Ratio [R.R.]=3.29, 95% confidence interval [C.I.]=1.73, 6.26), *Self-efficacy* (R.R.=5.28, 95% C.I.=2.00, 13.9), and *Affirming practices* (R.R.= 3.12, 95% C.I.= 1.18, 8.25) between the intervention group compared to the comparison group. As an example of interpretation, the intervention group had 3.29 times the odds of higher attitude scores compared to the comparison group. The adjusted findings considered intraclass correlation of therapists within organization which appropriately reduced the statistical power of therapist study group comparisons making it harder to detect significant differences. This accounts for the loss of significance regarding *Commitment to Continued Learning* going from the unadjusted to the adjusted results.

On a scale from strongly disagree=1 to strongly agree=5 scale, the average therapist rating for whether the workshop improved their knowledge was 4.67, comfort and confidence was 4.73, and skill and ability was 4.73. Therapists rated that clinical consultation was effective preparation for LGBTQ+ client care at 4.87 (Table 5).

Discussion

The goal of this study was to test the effectiveness of a virtual, synchronous, multi-level (organization and therapist), multi-strategy (workshops, technical assistance, clinical consultations) cultural competency training program (the SGDLC) on improving MHO's and therapist's cultural competence with LGBTQ+ clients. Findings of the RCT at the organizational level indicated that the SGDLC in the intervention group improved twice as many components of an affirming environment for LGBTQ+ clients than was observed in the control MHOs, although more improvement was needed after the SGDLC was completed. At the therapist level, findings indicated that the SGDLC increased therapist self-reported LGBTQ+ affirming attitudes, practice self-efficacy, and affirming practices.

LGBTQ+ Competence at the Organizational Level

The first aim of this study was to assess RCT differences between the intervention and control group in administrator-reported organizational LGBTQ+ climate. Even with the small sample size of organizations, the results suggest that the SGDLC had a positive impact on specific LGBTQ+ affirming practices, particularly those that required the least amount of effort to change for the organization. The largest organizational changes reported by administrators involved making sure they were explicit that they provided LGBTQ+ inclusive services and that they had health education materials and resources available that were specifically tailored for LGBTQ+ clients. The results suggest that the 8 hours of SGDLC initiated, but far from completed, organizations' focused attention on necessary processes and practices to create an inclusive climate for LGBTQ+ clients and employees.

The SGDLC focus on LGBTQ+ cultural competency at the organizational level is unique, as cultural competency programs typically focus only on educating individual providers. Organizational change is critical for LGBTQ+ inclusive care as many client interactions occur outside of the therapist-client relationship. Inclusive organization administration policies and staff practices (e.g., scheduling, billing, intake interviews) must be welcoming and supportive so as not to impart harm or undermine the client's therapeutic alliance, disclosure, and persistence in care with their therapist (Heck et al., 2013; Israel et al., 2008).

Recognizing that LGBTQ+ clients' mental health is dually influenced by experiences and stress related to other marginalized identities (e.g., race/ethnicity, disability), we emphasized an intersectional lens in the SGDLC workshop, clinical consultation series, and organizational technical assistance. Organizational and therapist commitment to LGBTQ+ inclusivity and intersectional perspectives that consider LGBTQ+ experiences in the context of other marginalized identities, may be particularly important for Black, Indigenous, and other People of Color (BIPOC) who also identify as LGBTQ+ (Moore et al., 2021). Recent mixed-methods work examining the experiences of BIPOC LGBTQ+ individuals suggests that LGBTQ+-affirming mental health services help communicate broader commitments to systemic injustices (e.g. racism) (Moore et al., 2021; Arora et al., 2022)

The SGDLC for organization administrators also focused on non-consumer-facing organizational changes such as employee non-discrimination policies, provision of LGBTQ+ inclusive health insurance, and attention to LGBTQ+ employees' significant relationships

when the organization sponsors employee social gatherings. Such inclusive practices and policies for employees can create a sustainable culture of inclusion that facilitates inclusiveness in all organizational activities, including clinicians' approach to clients. The SGDLC multi-level approach encourages these organizational-level client-facing and employee-facing changes across various policies and practices to create a learning community that supports ongoing efforts toward institutionalizing a culture of LGBTQ+ inclusivity. The study findings suggest that the SGDLC is successful at initiating this process.

LGBTQ+ Competence at the Therapist Level

The second aim of the study was to assess differences between the intervention and control group in therapists' self-reported LGBTQ+ affirming knowledge, attitudes, self-efficacy, commitment to continued learning, and practices. In total, this study indicates that the SGDLC intervention was highly impactful in improving therapists' self-reported LGBTQ+ affirming attitudes, self-efficacy, and practices at immediate post-test. Future studies are needed to assess longer-term maintenance of these changes.

The SGDLC training consisted of a virtual workshop with real-time, face-to-face, didactic lectures interspersed with multiple experiential activities involving bias and empathic sensitization, modeling, and role-play; and clinical consultation involving clinical case study and problem-solving with colleagues and an expert mentor. Recent reviews of LGBTQ+ cultural competence training programs found that few use active learning techniques such as role-playing, modeling, immediate feedback, and direct clinical experiences (Chu et al., 2022). Active learning techniques are likely important for changing deeply held biases and for developing new skills. Given that LGBTQ+ clients frequently note that therapist biases and microaggressions pose significant barriers to effective treatment (Bishop et al., 2021; Israel et al., 2008; McNamara & Wilson, 2020; Shelton & Delgado-Romero, 2013), therapists are likely to benefit from programs like the SGDLC which involve experiential learning activities that allow for direct exposure, active self-reflection, and practice (Killian et al., 2019; Bettergarcia, et al., 2021; Chu et al., 2022). Thus, while didactic training opportunities such as asynchronous webinars may offer easy access to information for busy therapists, engagement in programs with multiple types of active learning opportunities and mentoring is more likely to facilitate clinical competence and sustained change.

Unique to the SGDLC versus typical LGBTQ+ competency lists of training topics is discussion about sexual health. Conversation about sexual health was included as a topic in the SGDLC workshop and clinical consultation series. Sexual health was emphasized throughout the SGDLC specifically because it is a universal right that is uniquely challenged among LGBTQ+ persons and receives inadequate attention in most clinical and educational venues (Dermer & Bachenberg, 2015; McBride, 2022; Mollen & Abbott, 2022). Therapist's comfort with sexual health conversations may directly impact clients' therapeutic outcomes (McBride, 2022). Sexual health among LGBTQ+ clients may influence many other aspects of their well-being such as relationship, substance use, education, and career outcomes (Nelson, 2022; Chaney & Urhahn-Schmitt, 2022; Speciale & Oster, 2022).

Importantly, sexual and gender minority clients may use strategies to see if they can trust a therapist or mental health organization to “pass the test” regarding knowledge, sensitivity, and competence of LGBTQ+ issues (Goldblum et al., 2017). When therapists and mental health organizations can engender trust that they (a) are supportive of LGBTQ+ identities and (b) possess the knowledge and skills to appropriately help LGBTQ+ clients through their unique experiences, then they can help facilitate a strong, client-centered therapeutic relationship (Lefevor et al., 2022; Alessi et al., 2019; Ardito & Rabellino, 2011). This study suggests that the SGDLIC increases MHO administrators’ and therapists’ self-assessed competence and warrants further examination to determine if it helps them increase LGBTQ+ clients’ trust, persistence in care, and mental health care outcomes.

Limitations and Future Directions

This study has several limitations. First, it is best viewed as a pilot study given the small sample size of therapists and organizations. Small sample sizes may create limitations regarding randomly balanced groups, valid statistical analyses, and adequate power to detect differences. A small sample size required reliance on clinical significance versus calculation of statistical significance of difference between study groups at the organizational level. Second, although organizations were randomized into intervention and control groups, therapists were not randomly assigned. Although the assignment of organizations and therapists to study group was not subject to investigator bias, therapists were nested within their organizations’ study group assignment reducing the effectiveness of random assignment at the therapist level. Given this potential limitation, it is reassuring that the characteristics of therapists were similar between study conditions. Third, there may have been bias in which therapists were included in the study because (a) only therapists interested in improving their LGBTQ+ competence may have volunteered and (b) organizational leadership may have been selective in who they recruited to participate in the study. If only therapists interested in LGBTQ+ competence participated, this may be one explanation for why therapist baseline knowledge regarding LGBTQ+ mental health was so high. Fourth, LGBTQ+ competence measures at the organizational and therapist levels may have had limitations. The constantly evolving language used regarding LGBTQ+ mental and the lack of established measures of LGBTQ+ competence led investigators to modify existing measures and create their own with potential for bias. Furthermore, these measures relied on administrator and therapist self-report with its potential for bias such as social desirability. Finally, the study only included immediate posttest measures precluding assessment of whether improvements in clinical competence grew, diminished, or were maintained over an extended follow-up.

Although there were limitations as described above, strengths of this study should also be considered. The approach was multi-level (organizations and therapists) and multi-strategy (workshop, technical assistance, clinical consultation); outcomes at both the organization and therapist levels were assessed using measures over a wide array of domains; data collection and study intervention participation rates were high; and the study design comparing pretest to posttest measurement between an intervention and control group was strong. Future studies are needed to further address the limitations described above and to

build on the strengths of this study to further understand how to improve organizational inclusivity and clinical competence for LGBTQ+ populations.

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References:

- Alessi EJ, Dillon FR, & Van Der Horn R. (2019). The therapeutic relationship mediates the association between affirmative practice and psychological well-being among lesbian, gay, bisexual, and queer clients. *Psychotherapy*, 56(2), 229–240. 10.1037/pst0000210 [PubMed: 30714759]
- Anders C, & Kivlighan III DM (2023). Identity salience: An intersectional approach to understanding multicultural processes and outcomes in psychotherapy. *Journal of counseling psychology*. 10.34296/04S11085
- Anderson KN, Bautista CL, & Hope DA (2019). Therapeutic alliance, cultural competence and minority status in premature termination of psychotherapy. *American Journal of Orthopsychiatry*, 89(1), 104–114. 10.1037/ort0000342 [PubMed: 30010364]
- Ardito RB, & Rabellino D. (2011). Therapeutic alliance and outcome of psychotherapy: historical excursus, measurements, and prospects for research. *Frontiers in psychology*, 2, 270. 10.3389/fpsyg.2011.00270 [PubMed: 22028698]
- Arora S, Gonzalez KA, Abreu RL, & Gloster C. (2022). “Therapy can be restorative, but can also be really harmful”: Therapy experiences of QTBIPOC clients. *Psychotherapy*. 10.1037/pst0000443
- Bettergarcia J, Matsuno E, & Conover KJ (2021). Training mental health providers in queer-affirming care: A systematic review. *Psychology of Sexual Orientation and Gender Diversity*, 8(3), 365–377. 10.1037/sgd0000514
- Bidell MP (2017). The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS): Establishing a New Interdisciplinary Self-Assessment for Health Providers. *Journal of Homosexuality*, 64(10), 1432–1460. 10.1080/00918369.2017.1321389 [PubMed: 28459378]
- Bidell MP, & Whitman JS (2013). A Review of Lesbian, Gay, and Bisexual Affirmative Counseling Assessments. *Counseling Outcome Research and Evaluation*, 4(2), 112–126. 10.1177/2150137813496423
- Bishop J, Crisp DA, & Scholz B. (2021). A systematic review to determine how service provider practices impact effective service provision to lesbian, gay and bisexual consumers in a mental health setting. *Clinical Psychology & Psychotherapy*, 29(3), 874–894. 10.1002/cpp.2699 [PubMed: 34873771]
- Boroughs MS, Bedoya CA, O’Cleirigh C, & Safren SA (2015). Toward defining, measuring, and evaluating LGBT cultural competence for psychologists. *Clinical Psychology: Science and Practice*, 22(2), 151. 10.34296/04S11085 [PubMed: 26279609]

- Chang SJ, Choi S, Kim S-A, & Song M. (2014). Intervention Strategies Based on Information-Motivation-Behavioral Skills Model for Health Behavior Change: A Systematic Review. *Asian Nursing Research*, 8(3), 172–181. 10.1016/j.anr.2014.08.002
- Chaney MP, & Urhahn-Schmitt N. (2022). LGBTQ+ Substance Use and Sexual Health and Wellbeing: A Special Commentary. *Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education*, 4(2), 66–69. 10.34296/04S11085
- Chen SY, Wathen C, & Speciale M. (2020). Online Clinical Training in the Virtual Remote Environment: Challenges, Opportunities, and Solutions. *Professional Counselor*, 10(1), 78–91. 10.15241/syc.10.1.78
- Chu W, Wippold G, & Becker KD (2022). A systematic review of cultural competence trainings for mental health providers. *Professional Psychology: Research and Practice*. 10.1037/pro0000469
- Cochran SD, Sullivan JG, & Mays VM (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*, 71(1), 53–61. 10.1037/0022-006X.71.1.53 [PubMed: 12602425]
- Deane FP, Gonsalvez C, Blackman R, Saffioti D, & Andresen R. (2015). Issues in the development of e-supervision in professional psychology: A review. *Australian Psychologist*, 50(3), 241–247. 10.1111/ap.12107
- Demonstrate Access (2015). Organizational assessment. Retrieved from <https://www.demonstrateaccess.org/wp-content/uploads/2015/06/Organizational-Self-Assessment.pdf>
- Dermer S, & Bachenberg M. (2015). The importance of training marital, couple, and family therapists in sexual health. *Australian and New Zealand Journal of Family Therapy*, 36(4), 492–503. 10.34296/04S11085
- Dillon F, & Worthington RL (2003). The Lesbian, Gay and Bisexual Affirmative Counseling Self-Efficacy Inventory (LGB-CSEI): Development, validation, and training implications. *Journal of Counseling Psychology*, 50(2), 235–251. 10.1037/0022-0167.50.2.235
- Eady A, Dobinson C, & Ross LE (2011). Bisexual People's Experiences with Mental Health Services: A Qualitative Investigation. *Community Mental Health Journal*, 47(4), 378–389. 10.1007/s10597-010-9329-x [PubMed: 20602170]
- Fish JN, King-Marshall EC, Turpin RE, Aparicio EM, & Boekeloo BO (2023). Assessing the Implementation of an LGBTQ+ Mental Health Services Training Program to Determine Feasibility and Acceptability During the COVID-19 Pandemic. *Prevention Science*, 1–15. 10.1007/s11121-023-01505-5
- Fish JN, King-Marshall EC, Williams ND, Aparicio EM, Tralka HM, & Boekeloo BO (2022). What motivates community mental and behavioral health organizations to participate in LGBTQ+ cultural competency trainings? *American Journal of Orthopsychiatry*. Advance online publication. 10.1037/ort0000641
- Foy AAJ, Morris D, Fernandes V, & Rimes KA (2019). LGBTQ+ adults' experiences of Improving Access to Psychological Therapies and primary care counselling services: Informing clinical practice and service delivery. *The Cognitive Behaviour Therapist*, 12, e42. 10.1017/S1754470X19000291
- Frank HE, Becker-Haimes EM, & Kendall PC (2020). Therapist training in evidence-based interventions for mental health: A systematic review of training approaches and outcomes. *Clinical Psychology*, 27(3), e12330. 10.34296/04S11085
- Freeman-Coppadge D, & Farhadi Langroudi K. (2022). Beyond LGBTQ-affirmative therapy: Fostering growth and healing through intersectionality. In Nadal KL, & Scharon-del Río M. (Eds.) *Queer psychology: Intersectional perspectives* (pp. 159–180). Springer. 10.1007/978-3-030-74146-4_9
- Gandy-Guedes ME (2018). The queer youth cultural competency (QYCC) scale: Measuring competency in direct-care behavioral health workers. *Journal of Gay & Lesbian Social Services*, 30(4), 356–373. 10.1080/10538720.2018.1516171
- Goldblum P, Pflum S, Skinta M, & Balsam K. (2017). Psychotherapy with lesbian, gay, and bisexual clients: Theory and practice. *Comprehensive textbook of psychotherapy: Theory and practice*, 330–345. LCCN 2016018962 (ebook)

- Goldhammer H, Smart AC, Kissock LA, & Keuroghlian AS (2021). Organizational Strategies and Inclusive Language to Build Culturally Responsive Health Care Environments for Lesbian, Gay, Bisexual, Transgender, and Queer People. *Journal of health care for the poor and underserved*, 32(1), 18–29. 10.1353/hpu.2021.0004 [PubMed: 33678677]
- Heck NC, Flentje A, & Cochran BN (2013). Intake interviewing with lesbian, gay, bisexual, and transgender clients: Starting from a place of affirmation. *Journal of Contemporary Psychotherapy: On the Cutting Edge of Modern Developments in Psychotherapy*, 43(1), 23–32. 10.1007/s10879-012-9220-x
- Hendricks ML, & Testa RJ (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460–467. 10.1037/a0029597
- Hudson KD, & Bruce-Miller V. (2022). Nonclinical best practices for creating LGBTQ-inclusive care environments: A scoping review of gray literature. *Journal of Gay & Lesbian Social Services*, 1–23. 10.1080/10538720.2022.2057380
- Israel T, Gorcheva R, Burnes TR, & Walther WA (2008). Helpful and unhelpful therapy experiences of LGBT clients. *Psychotherapy Research*, 18(3), 294–305. 10.1080/10503300701506920 [PubMed: 18815981]
- Israel T, & Hackett G. (2004). Counselor Education on Lesbian, Gay, and Bisexual Issues: Comparing Information and Attitude Exploration. *Counselor Education and Supervision*, 43(3), 179–191. 10.1002/j.1556-6978.2004.tb01841.x
- Jordan S, Tucker K, Burk C, & Cousin M. (2015). Demonstrate LGBTQ Access: Impact report king county 2012–2014. Retrieved from <https://www.demonstrateaccess.org/wp-content/uploads/2015/06/LGBTQ-Access-Impact-Report.pdf>
- Khanna MS, & Kendall PC (2015). Bringing technology to training: Web-based therapist training to promote the development of competent cognitive-behavioral therapists. *Cognitive and Behavioral Practice*, 22(3), 291–301. 10.34296/04S11085
- Killian T, Farago R, & Peters HC (2019). Promoting queer competency through an experiential framework. *The Journal of Counselor Preparation and Supervision*, 12(4), 10. Retrieved from <https://digitalcommons.sacredheart.edu/jcps/vol12/iss4/10>
- Knight RE, Shoveller JA, Carson AM, & Contreras-Whitney JG (2014). Examining clinicians' experiences providing sexual health services for LGBTQ youth: considering social and structural determinants of health in clinical practice. *Health Education Research*, 29(4), 662–670. 10.34296/04S11085 [PubMed: 24412811]
- Lacombe-Duncan A, Logie CH, Persad Y, Leblanc G, Nation K, Kia H, ... & Loutfy M. (2021). Implementation and evaluation of the 'Transgender Education for Affirmative and Competent HIV and Healthcare (TEACHH)' provider education pilot. *BMC Medical Education*, 21, 1–14. 10.1186/s12909-021-02991-3 [PubMed: 33388043]
- Lefevor GT, Goldblum P, Dowling KT, Goodman JA, Hoeflein B, & Skidmore SJ (2022). First do no harm: Principles of care for clients with sexual identity confusion and/or conflict. *Psychotherapy*. 10.1037/pst0000426
- Leletiu-Weinberger C, Clark KA, & Pachankis JE (2022). Mental health provider training to improve LGBTQ competence and reduce implicit and explicit bias: A randomized controlled trial of online and in-person delivery. *Psychology of Sexual Orientation and Gender Diversity*. Advance online publication. 10.1037/sgd0000560
- MacDonnell JA, & Daley A. (2015). Examining the Development of Positive Space in Health and Social Service Organizations: A Canadian Exploratory Study. *Journal of Gay & Lesbian Social Services*, 27(3), 263–301. 10.1080/10538720.2015.1040186
- Matza AR, Sloan CA, Kauth MR, & DeBakey ME (2015). Quality LGBT health education: A review of key reports and webinars. *Clinical Psychology: Science and Practice*, 22(2), 127–144. 10.1111/cpsp.12096
- McBride MS (2022). Human Sexuality Education for Counseling Students, An Ethical Imperative: A Special Commentary. *Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education*, 4(2), 60–62. 10.34296/04S11081

- McCann E, & Sharek D. (2014). Survey of lesbian, gay, bisexual, and transgender people's experiences of mental health services in Ireland: LGBT and Mental Health Services. *International Journal of Mental Health Nursing*, 23(2), 118–127. 10.1111/inm.12018 [PubMed: 23473079]
- McNamara G, & Wilson C. (2020). Lesbian, gay and bisexual individuals experience of mental health services—A systematic review. *The Journal of Mental Health Training, Education and Practice*, 15(2), 59–70. 10.1108/JMHTEP-09-2019-0047
- Menkin D, Tice D, & Flores D. (2022). Implementing inclusive strategies to deliver high-quality LGBTQ+ care in health care systems. *Journal of nursing management*, 30(5), O46–O51. 10.1111/jonm.13142 [PubMed: 32869409]
- 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. 10.1037/0033-2909.129.5.674 [PubMed: 12956539]
- Mollen D, & Abbott DM (2022). Sexuality as a competency: Advancing training to serve the public. *Training and Education in Professional Psychology*, 16(3), 280. 10.34296/04S11085
- Moore K, Camacho D, & Spencer-Suarez KN (2021). A mixed-methods study of social identities in mental health care among LGBTQ young adults of color. *American Journal of Orthopsychiatry*, 91(6), 724. 10.1037/ort0000570 [PubMed: 34166057]
- Nelson JA (2022). Counseling Sexology in Marriage, Couple, & Family Counseling: A Special Commentary. *Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education*, 4(2), 63–65. 10.34296/04S11075
- Pachankis JE (2018). The scientific pursuit of sexual and gender minority mental health treatments: Toward evidence-based affirmative practice. *American Psychologist*, 73(9), 1207–1219. 10.1037/amp0000357 [PubMed: 30525805]
- Pachankis JE, Souliard ZA, Seager van Dyk I, Layland EK, Clark KA, Levine DS, & Jackson SD (2022). Training in LGBTQ-affirmative cognitive behavioral therapy: A randomized controlled trial across LGBTQ community centers. *Journal of Consulting and Clinical Psychology*, 90(7), 582–599. 10.1037/ccp0000745 [PubMed: 35901370]
- Pacquiao D. (2007). The Relationship Between Cultural Competence Education and Increasing Diversity in Nursing Schools and Practice Settings. *Journal of Transcultural Nursing*, 18(1_suppl), 28S–37S. 10.1177/1043659606295679 [PubMed: 17204813]
- Pantalone DW (2015). Improving the evidence base for LGBT cultural competence training for professional psychologists: Commentary on “quality LGBT health education: A review of key reports and webinars”. *Clinical Psychology: Science and Practice*, 22(2), 145–150. 10.1111/cpsp.12101
- Pepping CA, Lyons A, & Morris EMJ (2018). Affirmative LGBT psychotherapy: Outcomes of a therapist training protocol. *Psychotherapy*, 55(1), 52–62. 10.1037/pst0000149 [PubMed: 29565622]
- Platt LF, Wolf JK, & Scheitle CP (2018). Patterns of Mental Health Care Utilization Among Sexual Orientation Minority Groups. *Journal of Homosexuality*, 65(2), 135–153. 10.1080/00918369.2017.1311552 [PubMed: 28346079]
- Rossi AL, & Lopez EJ (2017). Contextualizing competence: language and LGBT-based competency in health care. *Journal of Homosexuality*, 64(10), 1330–1349. 10.1080/00918369.2017.1321361 [PubMed: 28467155]
- Russell EB (2012). Sexual health attitudes, knowledge, and clinical behaviors: Implications for counseling. *The Family Journal*, 20(1), 94–101. 10.1177/1066480711430196
- Rutter PA, Estrada D, Ferguson LK, & Diggs GA (2008). Sexual Orientation and Counselor Competency: The Impact of Training on Enhancing Awareness, Knowledge and Skills. *Journal of LGBT Issues in Counseling*, 2(2), 109–125. 10.1080/15538600802125472
- Savitsky D, Stevens M, & Yacoub M. (2022). Supporting Mental, Emotional, and Sexual Wellness for LGBTQ+ College Students: A Special Commentary. *Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education*, 4(2), 80–84. 10.34296/04S11077
- Semlyen J, King M, Varney J, & Hagger-Johnson G. (2016). Sexual orientation and symptoms of common mental disorder or low wellbeing: Combined meta-analysis of 12 UK population health surveys. *BMC Psychiatry*, 16(1), 67. 10.1186/s12888-016-0767-z [PubMed: 27009565]

- Semp D, & Read J. (2015). Queer conversations: Improving access to, and quality of, mental health services for same-sex-attracted clients. *Psychology & Sexuality*, 6(3), 217–228. 10.1080/19419899.2014.890122
- Shelton K, & Delgado-Romero EA (2013). Sexual orientation microaggressions: The experience of lesbian, gay, bisexual, and queer clients in psychotherapy. *Psychology of Sexual Orientation and Gender Diversity*, 1(S), 59–70. 10.1037/2329-0382.1.S.59
- Smith RD, Riva MT, & Erickson Cornish JA (2012). The ethical practice of group supervision: A national survey. *Training and Education in Professional Psychology*, 6(4), 238. 10.1037/a0030806
- Smith-Bynum MA, Aparicio EA, Shin RQ, Lare S, Vigorito M, Fish JN, Williams ND, & Boekeloo BO. (2022). UMD-PRC progress report: Competencies for mental health clinicians working with LGBTQ+ people in mental health care. <https://drum.lib.umd.edu/handle/1903/29113>
- Speciale M, & Oster D. (2022). Integrating Sexuality Issues in Career Counseling: A Special Commentary. *Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education*, 4(2), 70–72. 10.34296/04S11085
- Wanta JW, Niforatos JD, Durbak E, Viguera A, & Altinay M. (2019). Mental Health Diagnoses Among Transgender Patients in the Clinical Setting: An All-Payer Electronic Health Record Study. *Transgender Health*, 4(1), 313–315. 10.1089/trgh.2019.0029 [PubMed: 31701012]
- Williams ND, & Fish JN (2020). The availability of LGBT-specific mental health and substance abuse treatment in the United States. *Health Services Research*, 55(6), 932–943. 10.1111/1475-6773.13559 [PubMed: 32970327]
- Wittgens C, Fischer MM, Buspavanich P, Theobald S, Schweizer K, & Trautmann S. (2022). Mental health in people with minority sexual orientations: A meta-analysis of population-based studies. *Acta Psychiatrica Scandinavica*, 145(4), 357–372. 10.1111/acps.13405 [PubMed: 35090051]
- Yakob B, & Ncama BP (2016). A socio-ecological perspective of access to and acceptability of HIV/AIDS treatment and care services: a qualitative case study research. *BMC public health*, 16, 155. 10.1186/s12889-016-2830-6 [PubMed: 26880423]

Key Practitioner Message

- LGBTQ+ mental health services clients need welcoming and supportive: 1) organizational practices regarding marketing, scheduling, reception, forms, billing, and education materials and 2) therapists regarding their knowledge, attitudes, and practices.
- Therapists have relatively high basic knowledge about the needs of LGBTQ+ clients but often lack affirming attitudes, practice efficacy, commitment to continued learning, and affirming practices regarding LGBTQ+ clients.
- A virtual, synchronous, face-to-face, multi-level (administrators and therapists) and multi-strategy (workshop, technical assistance, clinical consultation) training program can improve therapist self-reported LGBTQ+ affirming attitudes, practice self-efficacy, and affirming practices, and potentially mental health services organizational climate for LGBTQ+ clients.

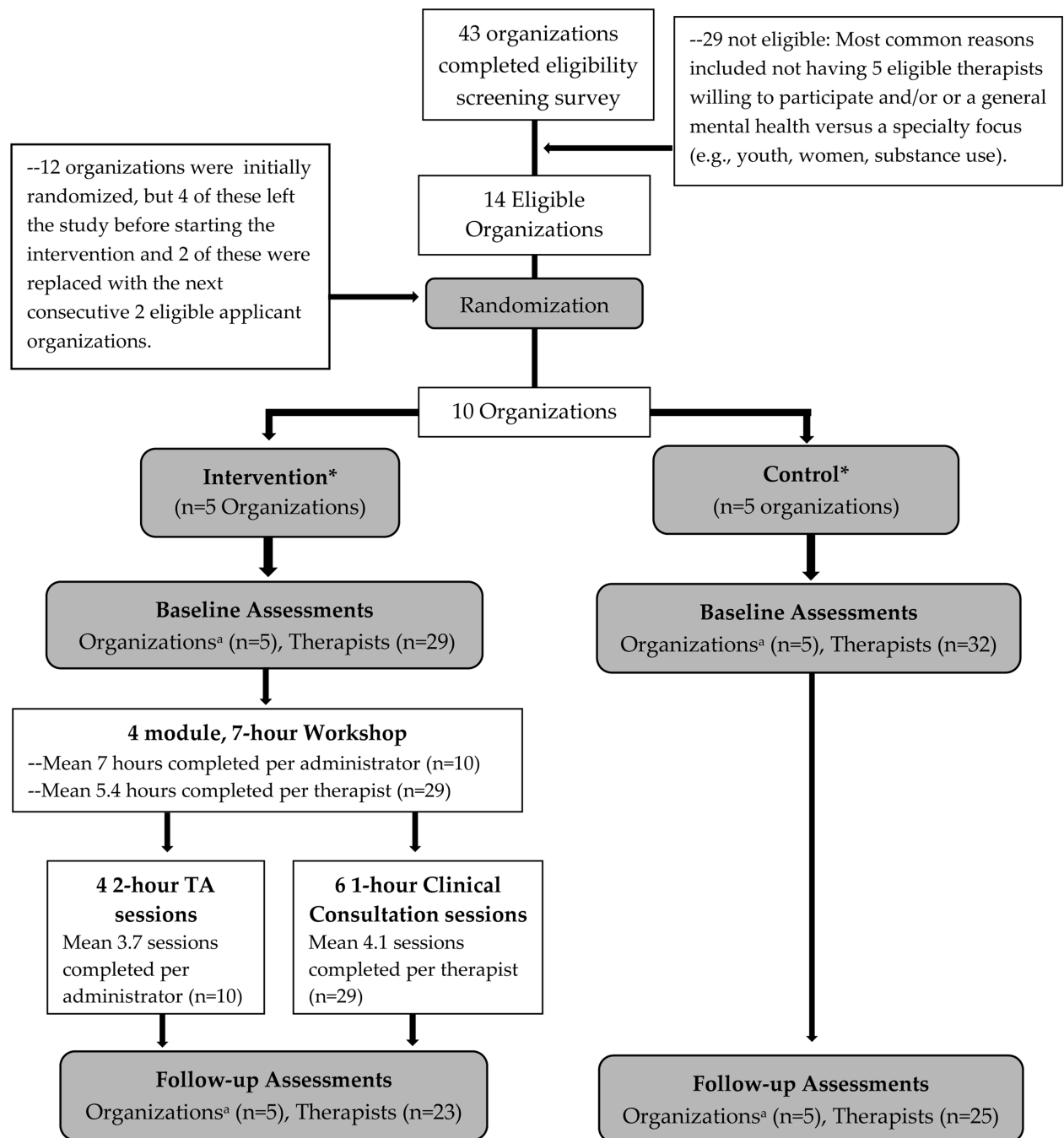


Figure 1. Flow-chart of study participation by mental health services organizations, organizational administrators, and therapists.

(*Both intervention and comparison group received a list of publicly available webinar trainings on LGBTQ+ mental and behavioral health services. ^aOne organizational assessment was completed for each organization jointly by two administrators. ^bClients at follow-up assessment were a different cohort of clients than those assessed at baseline.)

Table 1.

Sociodemographic and background characteristics of organizations at baseline.

Organization Characteristics	Intervention (n=5)	Control (n=5)	Total (n=10)
Median number of employees	78	54	78
Median number of therapists	20	30	30
Median number of sites	4	3	3.5
% charitable	60%	60%	60%
% for profit	20%	40%	30%
% community based	40%	40%	40%
Median annual income	Over \$5,000,000	\$2,000,000 to \$5,000,000	\$2,000,000 to \$5,000,000
% receiving public funding	60%	60%	60%
Median % clients with public insurance	95.0%	93.0%	93.0%
Median % rural	20.0%	20.0%	20.0%

Table 2.

Organizational-level LGBTQ+ climate pretest to posttest change score differences between the intervention and control group.

Organizational LGBTQ+ Climate Composite Scale and Individual Items	Pretest Means		Posttest – Pretest Change Scores ^b		I - C
	Intervention n=5	Control n=5	Intervention (I) n=5	Control (C) n=5	
<i>Organizational LGBTQ+ Climate Scale^a (Mean of all 18 items)</i>	<i>0.37</i>	<i>0.54</i>	<i>0.14</i>	<i>0.01</i>	<i>0.13</i>
Explicitly states that LGBTQ people and their families are eligible for services and programs	0.10	0.25	0.30	-0.05	0.35
Clear non-discrimination statement that includes sexual orientation and gender identity	0.40	0.50	0.20	0.10	0.10
Collects in-take data that allows clients to specify their sexual orientation, gender identity, preferred name, and pronouns	0.70	0.80	0.20	0.00	0.20
Programs that serve by gender affirm the client's gender identity, sexuality, and familial relationships	0.30	0.70	0.10	0.20	-0.10
Services involving pre-marital therapy, parenthood, adoption, retirement, etc. address LGBTQ specific concerns and are LGBTQ inclusive	0.30	0.55	0.30	0.15	0.15
Information on LGBTQ-specific referrals is readily available to staff and client	0.40	0.50	-0.10	0.10	-0.20
The organization maintains a client Bill of Rights that speaks specifically to LGBTQ access	0.30	0.50	0.40	0.00	0.40
Programs and services are currently serving diverse LGBTQ individuals and communities	0.50	0.70	0.30	-0.10	0.40
The organization collects data to better understand the satisfaction of LGBTQ individuals in services and programs	0.20	0.40	0.10	0.00	0.10
The organization offers LGBTQ-specific services/programs	0.00	0.20	0.10	0.10	0.00
Health information and resources address LGB health	0.20	0.40	0.30	-0.20	0.50
Health information and resources address transgender health	0.10	0.25	0.40	-0.05	0.45
Health information and resources address STIs/HIV	0.20	0.40	0.40	0.20	0.20
The organization routinely utilizes participant feedback to improve services and programs, including from LGBTQ clients	0.50	0.60	0.20	0.20	0.00
Violence prevention programs address violence experienced by LGBTQ people	0.40	0.40	-0.10	0.10	-0.20
Facilitators make referrals to LGBTQ+ competent services	0.60	0.75	-0.20	-0.15	-0.05
Facilitators are equipped to respond to anti-LGBTQ bias among participants	0.80	0.90	0.00	0.00	0.00
Curricula are analyzed for outcomes (positive/adverse) with LGBTQ participants	0.70	0.95	-0.40	-0.35	-0.05

Notes:

Individual item measures coded as 0=Does not address, 0.5=Partially addresses, 1=Completely addresses.

I-C = Difference between Intervention and Control group change scores.

All differences in change scores that are larger in the intervention than control group are bolded.

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Organizational LGBTQ+ Climate Scale is the mean of all 18 individual item measures.
Cochran-Armitage Test of trend between the intervention and control group means showed no significant differences.

Differences in baseline sociodemographic characteristics of therapists by intervention and control group.

Table 3.

	Intervention (n=23) %	Control (n=25) %
Age (years) ¹		
21 to 30	21.7	24.0
31 to 40	39.1	36.0
41 to 50	21.7	20.0
Over 50	17.4	20.0
Ethnicity ²		
Hispanic/Latino	13.0	4.0
Non-Hispanic/non-Latino	87.0	96.0
Race ²		
Asian/Pacific Islander	4.4	8.0
Black	21.7	20.0
White	73.9	72.0
Sex Assigned at Birth ²		
Female	95.7	80.0 *
Male	4.4	20.0
Gender ²		
Cisgender Man	4.4	20.0 *
Cisgender Woman	95.7	80.0
Non-Binary	0.0	0.0
Transgender Man	0.0	0.0
Transgender Woman	0.0	0.0
Sexual Identity ²		
Asexual	0.0	4.0
Bisexual	13.0	12.0
Gay/Lesbian	13.0	4.0

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	Intervention (n=23) %	Control (n=25) %
Heterosexual	73.9	80.0
Approximate proportion of clients who are LGBTQ+ ¹		
None	0.0	4.0
Some	95.6	96.0
About Half	4.3	0.0
Number of clients ¹		
1–9	13.0	8.0
10–19	17.4	20.0
20–29	47.8	28.0
30–39	13.0	44.0
40 or more	8.7	0.0

* Statistically significant (p<.05) difference between intervention and comparison groups.

¹Tested using Cochran Armitage test of trend.

²Tested using Chi-square test.

Table 4. Score differences in therapist-level LGBTQ+ competence outcomes for intervention (n=23) and control (n=25) groups.

	Control Medians			Intervention Medians			Intervention Post-Base – Control Post-Pre ^a	Cumulative Ordinal Ratio ^b (95% CI)
	Pre	Post	Post-Pre	Pre	Post	Post-Pre		
LGBTQ+ Competence Outcomes								
Knowledge (8 items)	.875	.906	.031	.906	.969	.063	.032	1.81 (0.69, 4.77)
Affirmative Attitudes (13 items)	.807	.865	.058	.788	.923	.135	.077 [*]	3.29 (1.73, 6.26) [*]
Self-Efficacy (16 items)	.813	.828	.015	.766	.922	.156	.141 [*]	5.28 (2.00, 13.93) [*]
Commitment to Continued Learning (4 items)	.688	.688	.000	.562	.750	.188	.188 [*]	3.22 (0.79, 13.22)
Affirmative Practices (9 items)	.750	.750	.000	.611	.861	.250	.250 [*]	3.12 (1.18, 8.25) [*]

Note:

Pre=Pretest, Post=Posttest, Post-Pre = Posttest minus Pretest.

For summative scales 0 represents the lowest possible score and 1 represents the highest possible score.

^aRank-based Cochran Armitage test of trend in Post-Pre difference between control and intervention groups.

^bAll ratios compare intervention to the referent control group. All analyses use mixed effects to account for within-organization sampling.

^{*} P-value <.05.

Mean satisfaction scores[/] (and standard deviations) for technical assistance, workshops, and clinical consultations among intervention group therapists and administrators.

Table 5.

	Therapists (n=23)	Administrators (n=10)
Technical Assistance Items		
I was satisfied with the instructor knowledge and expertise.		4.90 (0.1)
I was satisfied with the teaching material used during the program.		4.90 (0.1)
The program improved my knowledge about LGBTQ+ health disparities and affirmative mental health services		4.90 (0.1)
Workshop Items		
I was satisfied with the instructor knowledge and expertise.	4.87 (0.1)	5.00 (0.0)
I was satisfied with the teaching material used during the program.	4.60 (0.8)	4.90 (0.3)
The program improved my knowledge about LGBTQ+ health disparities and affirmative mental health services	4.67 (0.4)	4.90 (0.3)
The program improved my comfort and confidence with providing LGBTQ+ affirmative mental health care	4.73 (0.3)	4.90 (0.3)
The program improved my skill and ability to provide LGBTQ+ affirmative mental health care.	4.73 (0.2)	4.82 (0.4)
I was satisfied with the choice and amount of interaction and activities.	4.42 (0.5)	4.82 (0.4)
Clinical Consultation Items		
I benefited from other clinicians discussing practice experiences during this session	4.81 (0.1)	–
This session was effective in preparing me to address mental health of LGBTQ clients.	4.87 (0.1)	–
I was satisfied with the quality of this clinical consultation session.	4.94 (0.1)	–

[/] Scores reflect a Likert Score ranging from “strongly disagree” (1) to “strongly agree” (5).