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Pathways to Recovery: Recovery housing models for men who have sex with men (MSM)

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Abstract

Background & Aims: Gay, bisexual, and other men who have sex with men (MSM) face distinct recovery challenges. This mixed-methods study examines the service needs and help-seeking pathways of MSM (N=25) living in a group of recovery residences operated in Texas, one of which is a home specifically designated for gay and bisexual men.

Methods: Upon intake, adult MSM were recruited to complete an interview assessing the extent of their service needs as well as their recovery goals and expectations about their stay. Men were recruited regardless of whether they moved into the home designated for gay and bisexual men or into another one of the men's homes.

Results: MSM in the sample reported high rates of health conditions, depression, victimization, and sex risk behaviors. A greater number of them entering the gay and bisexual men's home reported being in recovery from amphetamine use, having a chronic medical problem, and being physically assaulted as an adult. The majority of MSM, regardless of home type, were seeking emotional and social support as well as accountability in their recovery home experience, but MSM in the gay and bisexual men's home talked about emotion and social support most frequently and within the context of emotional *safety*.

Conclusions: MSM entering recovery housing have complex service needs. Recovery housing may play an important role in supporting recovery among MSM. Residences specifically for them could be tailored to address their unique needs by fostering connections to other sexual minorities in recovery and facilitating social identity transformation.

Keywords

recovery; recovery residences; recovery housing; MSM

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Lesbian, gay, bisexual, and transgender (LGBT) individuals experience a variety of health disparities (Institute of Medicine, 2011). Within the LGBT community, gay, bisexual, and other men who have sex with men (referred to collectively as men who have sex with men or MSM) may be at particularly high risk for conditions ranging from substance use and depression (Cochran, Ackerman, Mays, & Ross, 2004; Joseph et al., 1990; Mills et al., 2004; Paul et al., 2002; Stall et al., 2001) to infectious, chronic, and life threatening diseases (Baker et al., 2009; Centers for Disease Control and Prevention (CDC), 2010; Silverberg et al., 2012; Witt et al., 2013). HIV continues to be a significant threat to MSM who account for 70% of new HIV infections in the United States (CDC, 2017). Substance use, depression, HIV, and violence (e.g., abuse, victimization, and partner violence) are often interconnected and mutually reinforcing among MSM and as such are characterized as “syndemic” in nature (Friedman et al., 2011; Friedman, Marshal, Stall, Cheong, & Wright, 2008; Herrick et al., 2013; Martinez et al., 2016; Mustanski, Andrews, Herrick, Stall, & Schnarrs, 2014; Stall et al., 2003), which describes the synergistic interaction of two or more conditions and the environment that promotes their interaction (Singer, 2009).

MSM experience the same risk factors for substance use as the general population, but they also experience risk factors that are unique to sexual minorities. Minority stress refers to “the excess stress to which individuals from stigmatized social categories are exposed as a result of their social, often a minority, position” (Meyer, 2003, p. 675). It has been used to describe the processes through which stigma, prejudice, and discrimination create hostile and stressful social environments that increase risk for negative outcomes. Stress from stigmatization can come both from distal and proximal sources. A proximal source, internalized homophobia reflects internalization of negative societal attitudes “leading to a devaluation of the self and resultant internal conflicts and poor self-regard” (Meyer & Dean, 1998, p. 161). In the description of the minority stress model, Meyer (2003, p.677) also describes personal and group factors that can work as “stress ameliorating” factors. Acceptance of one’s sexual minority status and incorporation of it into one’s identity, crystallized in the “coming out” process (Cass, 1979, 1984), is something that operates at the personal level, but solidarity and cohesiveness within the gay community can facilitate and reinforce this process and serve as a critical group-level resource as well (Kelly, Carpiano, Easterbrook, & Parsons, 2014; Meyer, 2003; Toomey, Ryan, Diaz, & Russell, 2018).

Unfortunately, however, substance use is common in places where MSM may go to meet and spend time with their peers, such as bars and clubs (Braine, Acker, van Sluytman, Friedman, & Des Jarlais, 2011; Green, 2003; Greenwood et al., 2001; Halkitis & Parsons, 2002; Palamar, Kiang, Storholm, & Halkitis, 2014), which elevates risk for substance use disorders and other negative outcomes. These contextual risks may extend further and include gay neighborhoods, enclaves, and social networks which are generally regarded as places in which MSM receive social support (Berger & Mallon, 1993; Hays, Chauncey, & Tobey, 1990). For example, studying a sample of 740 gay men in New York City, Carpiano and colleagues (2011) found higher odds of drug use among men who resided in gay neighborhoods, had networks consisting predominantly of gay men, and had increased socialization with gay men. These settings may not only elevate risk for substance use disorders but may also complicate substance use recovery for MSM, as number of drinkers in one’s social network is consistent predictor of continued substance use and relapse

(Delucchi & Kaskutas, 2010; Delucchi, Matzger, & Weisner, 2004; Mericle, Kaskutas, Polcin, & Karriker-Jaffe, 2018).

Indeed, as the field of addiction recovery is evolving, there is a growing recognition of how social networks may also facilitate it and do so through social identity transition processes (Best et al., 2016; Buckingham, Frings, & Albery, 2013; Frings & Albery, 2015). Building on Social Identity Theory and closely related, Self-Categorization Theory (Tajfel & Turner, 1979; Henry Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), as well as a wealth of empirical findings illustrating the benefits of 12-step and mutual aid groups to promote recovery (Kaskutas, 2009; Moos & Moos, 2006; Tonigan, Toscova, & Miller, 1996), social identity recovery models suggest that involvement in such groups can support recovery by facilitating a shift from an “addict” or “using” identity to that of an identity as a person in recovery through providing codes of normative behavior (the 12-step), facilitating reinterpretation of environmental cues, and offering support and reinforce of group norms.

Recovery housing generally refers to supportive living environments (e.g., Oxford Houses™, sober living, sober homes, recovery homes, halfway houses) used during, after, or sometimes in lieu of substance use treatment that promote recovery from alcohol, drug use, and associated problems (Jason, Mericle, Polcin, & White, 2013). By facilitating connections with peers in recovery and encouraging involvement with 12-step and mutual aid groups, recovery housing may play an important role in the social identity transition process. Findings from studies of residents in Oxford Houses (Groh, Jason, Ferrari, & Davis, 2009; Jason et al., 2007) and sober living houses in California (Polcin, Korcha, Bond, & Galloway, 2010; Polcin, Korcha, Bond, & Galloway, 2010) have consistently found positive outcomes and that a strong predictor of such outcomes is involvement in 12-step and mutual aid groups.

The social support and sense of community fostered within these settings (Ferrari, Jason, Olson, Davis, & Alvarez, 2002) may be especially important to MSM needing to develop connections with others in recovery. Recovery housing specifically for them may facilitate connections with other *MSM* in recovery, and in turn help shape one’s identity as a sexual minority in recovery. Unfortunately, however, we know little about the needs and experiences of MSM living in recovery residences, and even less about how they navigate dual membership in the larger LGBT and recovery communities. Prior work by this study team using focus group data from current residents (N=7) of a recovery home for gay and bisexual men and interviews with key stakeholders (N=6) has described the experiences of gay and bisexual men in LGBT-specific housing and identified programmatic and community-level factors essential to operating residences for this population (Mericle, Carrico, Hemberg, de Guzman, & Stall, Under review). However, as a qualitative study, this work did not systematically assess the service needs of these residents, and because it focused on just the home designated for gay and bisexual men, it did not collect information on MSM in other homes or on factors that may affect their decisions when selecting a recovery home—information critical to best meeting the needs of MSM in recovery housing.

To begin addressing this gap in the recovery housing literature, this mixed-methods study examined the service needs and help-seeking pathways of MSM (N=25) living in a group of recovery residences operated in Texas, one of which is a home specifically designated for gay and bisexual men. Using structured interview data, the first aim of this study was to describe the characteristics of MSM entering the homes and examine differences between those who moved into the home designated for gay/bi men and those who moved into the other men's homes. Using data from semi-structured questions at the end of the structured interview, the second aim of the study was to explore how residents learned about these homes and what they were hoping to accomplish during their stay.

Methods

Data for this study were collected between November 2015 and December 2016 as part of a multi-component study focused on addressing the recovery needs of MSM living in recovery housing. The study protocol and all procedures involving human subjects were approved and monitored by the Public Health Institute Institutional Review Board.

Sites and Participants

The group of recovery homes studied was located in Austin, Texas. At the time of the study there were 10 houses with a total capacity of 113 beds—3 homes were for women, 7 for men, with one of the men's home designated as a home for gay/bisexual men (hereafter referred to as the gay/bi men's home—see Mericle et al, Under review for additional background on this home). Intake into these homes was centralized. Prospective residents completed an application on which they are asked about house preference and also spoke with intake staff at the central office prior to moving into a home. These homes were similar in many respects to other types of recovery residences in that they were largely single-family homes located in residential neighborhoods in which residents were expected to remain abstinent from alcohol and drugs and participate in household chores and house meetings. However, unlike Oxford Houses and sober living homes in California, residents living in these homes were provided recovery support services delivered by professional recovery coaches and had access to additional substance use treatment services via linkage to an intensive outpatient treatment program opened specifically to meet the needs of the recovery home residents (Mericle, Polcin, Hemberg, & Miles, 2017). Newly admitted male residents were eligible to participate in the study if they were 18 or older and reported their sexual orientation as something other than heterosexual or having sexual relationships with men in the past five years.

Recruitment & Data Collection Procedures

Because sexual orientation was not routinely collected by the program, intake staff were trained by study staff to administer an eligibility screener to all incoming male residents during the study recruitment period. After administration, all screeners were then emailed to study staff (located in California) who recruited eligible residents by phone at the time and number provided by the residents on the screener. Midway through the study, largely to decrease burden on intake staff and reduce time between screening and recruitment, a web-

based kiosk system was set up so that the screener could be self-administered and accessed immediately by study staff.

On the recruitment call, study staff described the purpose and nature of the study, explained study procedures, obtained verbal informed consent, scheduled a time to complete the interview over the phone, and instructed residents how to access additional study information and response cards for Likert-type questions. Residents could complete the 60–90 phone interview in a place of their choosing, however arrangements were also made so that residents could complete it in privacy at the recovery home central offices. Participating residents received a \$25 gift card for completing the interview. To decrease no-shows and incentivize completing the interview within the first month of entry into the home, participating residents could receive an additional \$10 for completing it on the scheduled date.

During the recruitment period, 194 newly admitted males were screened, 43 met eligibility criteria, and 35 consented to participate. Only two residents declined participation, but six were considered passive refusals because they could not be reached for recruitment despite repeated phone calls to reach them. Of the 35 who consented to participate, three changed their mind prior to completing their interview, and another seven later became ineligible because they failed to complete it within the first month of moving into the house. In all, 25 participants completed interviews. Based on information collected from the eligibility screener, there were no statistically significant differences between MSM who were eligible and completed an interview and those who did not by house type, sexual orientation, or mix of male/female sex partners in the past 5 years.

Instruments and Measures

During the structured portion of the phone interview, which generally lasted 45–75 minutes, questions (and response categories when necessary) were read aloud and responses entered into a web-based, computer-assisted interview. Demographics (i.e., race/ethnicity, age, educational attainment, and employment status), information about substance use (i.e., use in the past 30 days prior to entry into the home, recovery focus, and number of prior substance use treatment episodes—excluding detoxes), and chronic medical problems were assessed with the Addiction Severity Index-Lite (Cacciola, Alterman, McLellan, Lin, & Lynch, 2007). However, to more fully assess the range of services needs of MSM, these questions were augmented with a variety of other instruments as well.

We used the Risk Assessment Battery (Metzger, Navaline, & Woody, 2001) to categorize sexual identity and collect information on HIV status and sex risk behavior. We created indicators to reflect multiple male sex partners (i.e., four or more in the past six months) and inconsistent condom use (i.e., using condoms only some or none of the time during sex in the past six months). We used the Patient Health Questionnaire-8 (PHQ-8; Kroenke et al., 2009) to assess current depression (i.e., meeting a cutpoint 10 on scores ranging from 0–24; Cronbach's alpha >0.80). Finally, we used questions from the Multicenter AIDS Cohort Study (MACS; Kaslow et al., 1987) to assess smoking status and diagnosis of hepatitis and the MACS Adverse Conditions and Life Events Survey supplement (Wolitski, Stall, &

Valdiserri, 2008) to assess negative events commonly experienced by MSM across the life course (e.g., verbal/physical/sexual assault).

The MACS supplement also contained questions assessing age at which participants began wondering about and disclosed their sexual identity and how many gay/bisexual male friends participants had (the five-category variable reflecting 0, 1, 2, 3–4, or 5 or more dichotomized into 5 or more vs less than 5) as well as a question asking them to rate their agreement with the statement “Being gay makes me feel part of a community” (dichotomized into strongly agree/agree vs not) and questions adapted from Herek and colleagues’ (1998) Internalized Homophobia (IHP) scale. Unlike the original IHP where higher scores reflect greater internalized homophobia, this version asked respondents to think back to when they first realized that they were sexually attracted to other men and rate level of agreement with the nine IHP items on a scale of 1 (strongly agree) to 5 (strongly disagree). Higher scores on these items (ranging from 9–45; Cronbach’s alpha >0.80) mean greater *disagreement* with statements like “I tried to stop being sexually attracted to men” and “I felt like being gay/bisexual was a personal short-coming,” thus reflecting greater acceptance or comfort with being attracted to other men and lower levels of internalized homophobia.

After the structured portion of the interview was completed, the remainder of time (15–25 minutes) was used for the quantitative portion of the interview. Participants were asked open-ended questions about how they came to be at the home they were living in (e.g., How did they learn about the provider? Were they considering other options? What about the provider seemed like the best option? What were they looking for when they moved into their recovery home?) and what they were hoping to accomplish during their stay, including how the home would help them accomplish these goals. This portion of the interview was audio-recorded. The interviewer used a question guide which also included suggested prompts, but following a grounded theory approach (Strauss & Corbin, 1994), the interviewer was also encouraged to incorporate information collected during the structured portion of the interview to further probe respondents’ help-seeking pathways and expectations for their stay.

Data Analyses

Descriptive statistics (frequencies of response options and measures of central tendency and dispersion) were used to summarize sample characteristics. Due to the small sample size, non-parametric tests (Fisher’s exact and Wilcoxon rank-sum tests) were used to examine differences between MSM living in the gay/bi men’s home and those living in other men’s homes. All quantitative analyses were conducted in Stata v14 (StataCorp., 2015). Audio recordings of the qualitative portion of the interview were professionally transcribed verbatim using guidelines to ensure standardization (O’Connell & Kowal, 1999). Transcripts were reviewed for accuracy and analyzed using both thematic (Braun & Clarke, 2006) and qualitative content analysis (Morgan, 1993) to identify patterns and systematically classify them with descriptive codes. All transcripts were independently coded by two team members (AAM & JH), with discrepancies discussed to refine the coding scheme and to ensure coding consensus (100% agreement). NVivo software (QSR International, 2015) was used to organize transcripts for coding, tally how many times a particular theme was mentioned by

different speakers, and facilitate retrieval of coded passages to illustrate common themes. Passages used to illustrate themes were denoted by a unique participant identification number to highlight the number of different speakers represented.

Results

Of the 25 incoming MSM residents enrolled during the study period, 17 moved into the gay/bi men's home and 8 moved into one of the other men's houses. As Table 1 displays, they were, on average, in their early thirties, and the majority were White/Caucasian (68%), had at least some college education (72%), and were currently unemployed (64%). The only statistically significant demographic difference found between MSM moving into the gay/bi men's home and MSM moving into the other men's homes was that those moving into the gay/bi men's home were older ($M=36.6$ vs. $M=26.4$, $p=0.020$). It is also notable that two MSM in other men's homes described themselves as "straight" and that nearly all (94%) of the men in the gay/bi men's home described themselves as "gay".

Table 2 presents findings regarding the services needs of MSM in the sample. With respect to substance use, very few respondents reported using alcohol or drugs in the 30 days prior to admission, and the majority (56%) reported that their recovery focused on amphetamine use (which includes methamphetamines). The majority (72%) were current smokers and reported multiple prior substance use treatment episodes (2 or more; 64%). The majority (72%) reported having four or more male sex partners in the past 6 months and used condoms inconsistently (68%). Forty-four percent reported having chronic medical problems—36% reported being HIV+ and 12% reported being told by a doctor in their lifetime that they had hepatitis. Forty percent of the participants had a score of 10 or higher on the PHQ-8 indicating current depression.

Participants reported first wondering whether they might be gay/bisexual in the pre-teen and teen years and disclosing to others that they were gay/bisexual in their teens and early twenties ($M=13.9$, $SD=7.4$ and $M=17.7$, $SD=5.7$, respectively). Nearly all (96%) reported experiencing some sort of verbal/physical assault or threats of violence in their early teens, and 68% reported that this because they were thought to be gay/bisexual. The majority reported a lifetime history of sexual victimization (76%) and well as being physically assaulted and verbally threatened or demeaned as an adult (64% and 68%, respectively). Scores on the adapted IHP ran from 13 to 45, reflecting a wide range of acceptance among participants with their attraction to other men. Less than half (48%) had five or more gay male friends, but a majority (76%) agreed with the statement that "being gay makes me feel part of a community."

Despite the small sample size, differences between MSM living in the gay/bi men's home and the other men's homes emerged. Significantly more MSM in the gay/bi men's home reported their recovery focusing on amphetamine use (76% vs. 13%, $p=0.007$), having chronic medical problems (59% vs. 13%, $p=0.042$), and being physically assaulted as an adult (82% vs. 25%, $p=0.010$). Although only approaching statistical significance, the percent of MSM who reported being verbally threatened or demeaned as an adult and using condoms inconsistently was more than twice as large among those in the gay/bi men's home

as it was among MSM in the other men's homes (both 82% vs. 38%, $p=0.061$). A greater percentage of MSM in the gay/bi men's home also agreed with the statement "being gay makes me feel part of a community" (88% vs. 50%, $p=.059$).

Table 3 summarizes how often different themes emerged across various respondents in the semi-structured portion of the interview. In terms of how participants learned about the homes, men reported multiple and diverse pathways. The most common pathway way was being referred to the home or program from a treatment provider. As one participant in the gay/bi men's home explained, "I actually learned about it in residential treatment. The house manager at the house I'm living in used to come out and chair meetings on Sundays, every other Sunday, and then I spoke with my counselor to get more information" (Resident 209). Residents also found their home through other peers in recovery and family members. Some found it from searching online for LGBT recovery housing. As one man living in the gay/bi men's home recalled, "I did a web search for gay sober living" (Resident 201).

To better understand their decision making around their selection, men were asked about other options that they considered prior to moving in. Some men looked and had few options due to limited resources, geographic restrictions, or other logistical constraints. As one man living in the gay/bi men's home commented, "The choice, honestly, was solely about it being in Austin and being able to utilize my insurance" (Resident 233). However, other men learned about their home and looked no further. As man in the gay/bi men's home described, "...once I started looking, this seemed like a good fit and so all my efforts went into the planning for here. And also, once I knew there was an option of a gay sober house where I could go, it just seemed like the best thing for me to do" (Resident 219). Others reported considering other places but making a conscious decision regarding their house of choice because the home or the program itself seemed a better option. Reflecting back on his choice among other homes in Southern California and Minnesota, one resident living in one of the other men's homes commented that, "LA is just too crazy and Minneapolis is too cold" (Resident 212).

So what were these men looking for in a recovery home? Men were generally looking for emotional and social support, accountability and structure, as well as factors pertaining to affordability, location (i.e., being in Austin and/or the house being conveniently located), and characteristics of the house itself (i.e., being "clean" or "nice"). In comparison to other themes, men in the gay/bi men's home most frequently talked about the importance of emotional and social support, and comments by these men often reflected seeking emotional safety as well. For example, when asked about why it was important for him to be in the gay/bi men's home, one participant replied that it was "Because I can be who I want to be and not be afraid of being judged by a straight person" (Resident 204). Other participants in the gay/bi men's house expressed similar sentiments. One saying that "I felt that I wouldn't be discriminated [against] as much for being bisexual" (Resident 207), and another explaining that "It's really nice to go into a place where you know you're going to be safe and be able to talk about whatever you want to talk about and be yourself" (Resident 250).

MSM living in the other men's homes also talked about emotional and social support, but this was mostly in the context of supporting abstinence, because they most frequently talked

about the importance of a home's level of accountability and structure. For example, one participant living in one of the other men's homes commented that he thought living in the home would "hold me accountable to people who are gonna like, not tell me what to do, but like people who have been through this that can show me the path they took and what they did, and that would help me a lot" (Resident 242). Speaking to the theme of the home's accountability and structure more directly, another participant in one of the other men's homes explained that what he valued most was "Definitely the high accountability that they have here. I think that helps me out a lot... curfew on weekdays and then weekends. We have curfew and then chores, drug tests, things like that" (Resident 245). MSM in the gay/bi men's home also talked about accountability and structure—indeed all the homes operated under the same guidelines and structure. However, men in the in the gay/bi men's home simply talked about this less frequently than they did about the importance of emotional and social support.

In terms of what they wanted to accomplish during their stay, MSM talked about wanting to maintain their sobriety, work their recovery program, become employed, develop connections to sober community, and eventually move into a place of their own. As a participant in the gay/bi men's home succinctly enumerated, he wanted "To be firmly rooted in my sobriety, one. Two, go and start looking for employment. And three, to continue my sober outpatient, my IOP" (Resident 244). Another participant in the gay/bi men's home explain that "I'm hoping to become a sober person and that is my biggest hope, to build a very good base for recovery" (Resident 243). MSM in other men's homes shared similar recovery-oriented goals. As one participant explained, "I hope to hopefully become a little bit more independent, find a job, get my feet back up on the right track" (Resident 214). Another participant in the other men's home said that he wanted to accomplish "Integration in the sober community, sober time in general, and development of healthy habits" (Resident 215).

In addition to these more general recovery-oriented goals, some MSM also talked about goals pertaining to their identity as a sexual minority. Participants in both types of homes discussed goals reflecting wanting to become more comfortable with themselves, and some men even talked about wanting to work on overcoming shame and self-loathing. As a particularly insightful participant in the gay/bi men's home explained:

When it comes to the LGBT community, addiction is very prevalent, anyhow, but there's the shame side that perpetuates that. But there's also a second level of shame associated with it--being born different and realizing that at a young age. Then a lot of us just go through shameful experiences associated with it. As we grow older, that gets engrained into our psyches, and it becomes less of a feeling and more of a state of being. That it's not necessarily feeling shame, which might end, we start to believe that we are shameful, that we are [the] shame.

He continued to say that "I really wanted to just be okay with myself as a person. So I thought this would help. I thought living around other gay men might give me an opportunity to just be okay with me" Resident (241). Another participant expressed a similar sentiment but chose one of the other's men's homes to facilitate this. As he explained, "I felt like I was limiting myself by moving into an LGBT house. Not that it's not a great

opportunity, but a lot of my personal problems have revolved around me thinking that I wouldn't fit in with heterosexual people because of my sexuality." He added that, "So putting me in [name of other men's home], where they're all very accepting of the fact that I'm gay, it's just teaching me more that I should be ok with myself" (Resident 232).

MSM living in the gay/bi men's home also expressed a desire to better integrate themselves into the LGBT community and to begin developing "healthy friendships" (Resident 217) with other men. With respect to both these objectives, one participant explained that, "So I've never been strongly involved with an LGBT community. I think honestly, eventually at some point, it would be really nice to be plugged into that community, but I have a lot of work around like objectifying and sexualizing people..." (Resident 233). Another participant hoped that he would be able to meet other men in a "healthier way" instead of "going to bars and stuff like that to meet people, or to the internet and stuff like that..." (Resident 227). Greater integration into the LGBT community was not discussed by the MSM in the other men's homes as something that they hoped to accomplish during their recovery home stay.

Discussion

MSM face distinct recovery challenges. Despite a growing body of literature demonstrating the effectiveness of recovery housing to improve resident outcomes, we know little about the experiences of MSM in these settings. Findings from this study highlight the complexity of their recovery needs. Although few studies of recovery housing residents have looked at a similar constellation of conditions and none have focused specifically on MSM, those that have looked at some of these have found lower rates of depression, HIV, and sex risk (Polcin, Buscemi, Nayak, Korcha, & Galloway, 2012; Polcin, Korcha, Mericle, Mahoney, & Hemberg, 2017). The confluence of these conditions lends additional support for the notion of syndemic production of HIV among MSM (Pantalone, Hessler, & Simoni, 2010; Parsons, Grov, & Golub, 2012; Stall et al., 2003) and suggests that recovery housing may be a critical venue in which to target treatment and prevention resources to MSM.

Because the group of homes studied included one specifically designated as a home for gay and bisexual men as well as other homes for men all run by the same organization with a centralized intake, we had a unique opportunity to examine differences between MSM who entered the gay/bi men's home and those who entered into the other men's homes in terms of their demographic and service need profiles at intake, helps-seeking pathways, and expectations and goals for their stay. Although MSM residents were more similar than not, and despite a small sample of MSM, we did find statistically significant differences between MSM by house type. MSM in the gay/bi men's home were older, and a greater proportion reported being in recovery from amphetamine use, having a chronic medical condition, and being physically assaulted as an adult.

Another notable difference was that nearly all of the MSM participants who moved into the gay/bi men's home identified themselves as being gay, while the percentage identifying as gay in the other men's homes was lower. To examine potential confounding of house effects by sexual identity, we ran post-hoc sensitivity analyses limiting the sample to MSM (N=21) who identified as gay. Although statistical power drops precipitously with only 5 MSM

residents in the other men's homes, the overall nature of our findings did not change. Statistically significant differences remained regarding age and primary focus of recovery. Further, even when level of statistical significance was attenuated, the general magnitude of the differences remained. For example, although no longer statistically significant, 62.5% (10 in 16) of the gay men entering the gay/bi men's home reported chronic medical problems while only 20.0% (1 in 5) of the gay men entering the other men's homes reported this; similarly, 87.5% (14 in 16) of gay men in the gay/bi men's home reported being physically assaulted as an adult in contrast to 40.0% (2 in 5) of gay men entering the other men's homes. These findings suggest that MSM entering LGBT-specific homes may be at different development stages and have different life experiences and certain service needs as well. However, it is certainly a finding that warrants additional research with larger and more heterogeneous samples of MSM, particularly those identifying as bisexual, entering recovery housing.

Further, although many participants, regardless of the home, discussed valuing emotional and social support as well as accountability and structure, MSM in the gay/bi men's home talked most frequently about wanting emotional and social support, and these comments reflected the expectation that living among other MSM would offer *emotional safety* as well. Finally, while some men in both types of homes talked about goals to become more accepting of themselves as sexual minorities, MSM in the gay/bi men's home also talked about this in terms of making stronger connections to the larger LGBT community and learning how to develop non-sexual relationships with other MSM in recovery—an important aspect of social support and personal development that same-sex, LGBT-specific homes may be particularly suited to facilitate.

It should be noted that one MSM participant in the other men's homes was there waiting for an opening in the gay/bi men's home. We ran post-hoc sensitivity analyses dropping this participant and re-classifying him as a resident in the gay/bi men's home, but doing so did not meaningfully alter findings with respect to service needs or help-seeking pathways. Our findings suggest that MSM entering the gay/bi men's home not only had some unique needs but were also looking for different things in a recovery home experience. And although we did not specifically query quantitatively or qualitatively where participants were coming from, 10 mentioned that came to the residence from *out-of-state* and the majority coming from out-of-state (n=7) moved into the gay/bi men's home. Certainly all homes could benefit from training and programming to ensure that MSM feel understood and safe within them, but homes specifically serving this population could be tailored to foster connections with the larger LGBT community and help MSM develop non-sexual and supportive relationships with other MSM in recovery.

While there is growing recognition of the importance of psychological sense of community as an integral aspect of recovery housing (Ferrari et al., 2002; Stevens, Jason, Ferrari, & Hunter, 2010) and of how involvement in recovery communities can facilitate identity transformational experiences critical to long-term to long recovery (Best et al., 2016), the field has yet to grapple with what these processes may entail for sexual minorities who must negotiate their identity as such and affiliation within the larger LGBT community as well. The notion of intersectionality has been used to illustrate the marginalization of women of

color who suffer from ill effects of both racism and patriarchy but whose experiences are not fully represented within the identity politics of the feminist or the antiracism movements (Crenshaw, 1991). Sexual minorities overcoming addiction have dual identities. Recovery housing for specifically for them occupies a space within the intersection of these identities--optimally a safe and supportive one where residents can learn and practice what it means to be a sexual minority in recovery.

Despite the innovative aspects of this study, a number of important limitations should be noted. First, this is a small study that recruited a largely racially/ethnically homogenous group of participants from one provider of recovery homes in Austin, Texas during a specific time period. Austin is known for being a notably progressive urban area and this recovery housing provider specifically listed one of its homes as being for gay and bisexual men, thereby drawing more MSM to this home, which may limit the generalizability of our findings. At the time this study was developed, it was the only provider with a home designated for sexual minorities that was a member of an organization affiliated with the National Alliance for Recovery Residences (NARR). Throughout the course of this study, the authors have identified other homes (affiliated and non-affiliated with NARR) across the US. Future studies are needed to determine whether findings from this study hold across different geographic locations, types of recovery residences, and sexual minority populations.

An additional threat to the generalizability of our findings is that we interviewed only slightly more than half of the eligible residents who entered the homes during the recruitment period, and we have limited information on how participating MSM differed from non-participating MSM. Based on feedback from those who did participate, we know that the timeframe in which we needed to complete the interview (within the first month of moving in) was a particularly chaotic time for residents who were trying to get settled into a routine within the program and, many times, find work, self-help meetings, and sponsors outside of it. We also only had access to residents by phone, and it is likely that if we could have interacted with residents in person, we may have had more success negotiating a time to complete the interview. Thus, it is possible that our findings represent the more motivated and highly functional MSM residents. If that is the case, however, it underscores an even more urgent need to study and intervene with this population given the history of substance use and co-occurring problems represented in this sample.

Finally, this study only provides a snapshot of the service need profiles and what MSM residents were hoping to accomplish during their stay. It cannot address whether they succeeded or how certain experiences in recovery housing may facilitate or hinder recovery outcomes. Future studies are needed to address the outcomes of MSM in recovery housing by collecting data from them over time. Ideally such studies would recruit MSM from homes specifically for them as well as from those for males more generally and follow them over a specified time regardless of whether they are still in the home at follow-up. This sort of study could address differential effects of general vs. sexual-minority specific homes as well as potential benefits and iatrogenic effects. It could also test specific hypotheses regarding identity formation and intersectionality among sexual minorities in recovery and how aspects of identity are shaped and fostered in the recovery housing experience.

Conclusions

MSM experience unique risk factors related to sexual minority stress and co-occurring syndemic conditions that complicate their recovery. Recovery housing may play an important role in facilitating recovery among MSM, and homes specifically for this population could be tailored to more specifically address their medical and psychosocial service needs. Culturally tailored recovery housing could also facilitate identity development and LGBT community engagement—two understudied but important components of recovery for this population.

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References

- Baker J, Plankey M, Josayma Y, Elion R, Chiliade P, Shahkolahi A, . . . Margolick JB (2009). The prevalence of rectal, urethral, and pharyngeal *Neisseria gonorrhoeae* and *Chlamydia trachomatis* among asymptomatic men who have sex with men in a prospective cohort in Washington, D.C. *AIDS Patient Care and STDS*, 23(8), 585–588. [PubMed: 19591608]
- Berger RM, & Mallon D (1993). Social support networks of gay men. *The Journal of Sociology & Social Welfare*, 20(1), 155–174.
- Best D, Beckwith M, Haslam C, Haslam SA, Jetten J, Mawson E, & Lubman DI (2016). Overcoming alcohol and other drug addiction as a process of social identity transition: the social identity model of recovery (SIMOR). *Addiction Research and Theory*, 24(2), 111–123.
- Braine N, Acker CJ, van Sluytman L, Friedman S, & Des Jarlais DC (2011). Drug use, community action, and public health: gay men and crystal meth in NYC. *Substance Use & Misuse*, 46(4), 368–380. [PubMed: 20394522]
- Braun V, & Clarke V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Buckingham SA, Frings D, & Albery IP (2013). Group membership and social identity in addiction recovery. *Psychology of Addictive Behaviors*, 27(4), 1131–1140.
- Cacciola JS, Alterman AI, McLellan AT, Lin Y-T, & Lynch KG (2007). Initial evidence for the reliability and validity of a “Lite” version of the Addiction Severity Index. *Drug and Alcohol Dependence*, 87(2–3), 297–302. [PubMed: 17045423]
- Carpiano RM, Kelly BC, Easterbrook A, & Parsons JT (2011). Community and drug use among gay men: The role of neighborhoods and networks. *Journal of Health and Social Behavior*, 52(1), 74–90. [PubMed: 21362613]
- Cass VC (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality*, 4(3), 219–235. [PubMed: 264126]
- Cass VC (1984). Homosexual identity formation: Testing a theoretical model. *Journal of Sex Research*, 20, 143–167.
- Centers for Disease Control and Prevention. (2017). HIV Among Gay and Bisexual Men.
- Centers for Disease Control and Prevention. (2010). Viral Hepatitis: Information for gay/bisexual men [Accessed: 2015-01-06 Archived by WebCite® at <http://www.webcitation.org/6VODtMCck>]. Atlanta, GA.

- Cochran SD, Ackerman D, Mays VM, & Ross MW (2004). Prevalence of non-medical drug use and dependence among homosexually active men and women in the US population. *Addiction*, 99(8), 989–998. [PubMed: 15265096]
- Crenshaw K (1991). Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299.
- Delucchi K, & Kaskutas LA (2010). Following problem drinkers over eleven years: understanding changes in alcohol consumption. *Journal of Studies on Alcohol and Drugs*, 71(6), 831–836. [PubMed: 20946739]
- Delucchi KL, Matzger H, & Weisner C (2004). Dependent and problem drinking over 5 years: a latent class growth analysis. *Drug and Alcohol Dependence*, 74(3), 235–244. [PubMed: 15194201]
- Ferrari JR, Jason LA, Olson BD, Davis MI, & Alvarez J (2002). Sense of community among Oxford House residents recovering from substance abuse: Making a house a home In Fischer A (Ed.), *Psychological Sense of Community*. New York, NY: Kluger/Plenum Inc.
- Friedman MS, Marshal MP, Guadamuz TE, Wei C, Wong CF, Saewyc E, & Stall R (2011). A meta-analysis of disparities in childhood sexual abuse, parental physical abuse, and peer victimization among sexual minority and sexual nonminority individuals. *American Journal of Public Health*, 101(8), 1481–1494. [PubMed: 21680921]
- Friedman MS, Marshal MP, Stall R, Cheong J, & Wright ER (2008). Gay-related development, early abuse and adult health outcomes among gay males. *AIDS and Behavior*, 12(6), 891–902. [PubMed: 17990094]
- Frings D, & Albery IP (2015). The social identity model of cessation maintenance: Formulation and initial evidence. *Addictive Behaviors*, 44, 35–42. [PubMed: 25468675]
- Green AI (2003). “chem friendly”: the institutional basis of “club drug” use in a sample of urban gay men. *Deviant Behavior*, 24, 427–447. doi: 10.1080/713840246
- Greenwood GL, White EW, Page-Shafer K, Bein E, Osmond DH, Paul J, & Stall RD (2001). Correlates of heavy substance use among young gay and bisexual men: The San Francisco Young Men’s Health Study. *Drug and Alcohol Dependence*, 61(2), 105–112. [PubMed: 11137274]
- Groh DR, Jason LA, Ferrari JR, & Davis MI (2009). Oxford House and Alcoholics Anonymous: the impact of two mutual-help models on abstinence. *Journal of Groups in Addiction and Recovery* 4(1–2), 23–31. [PubMed: 20689661]
- Halkitis PN, & Parsons JT (2002). Recreational drug use and HIV-risk sexual behavior among men frequenting gay social venues. *Journal of Gay & Lesbian Social Services*, 14(4), 19–38.
- Hays RB, Chauncey S, & Tobey LA (1990). The social support networks of gay men with AIDS. *Journal of Community Psychology*, 18(4), 374–385.
- Herek GM, Cogan JC, Gillis JR, & Glunt EK (1998). Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal of the Gay and Lesbian Medical Association*, 2, 17–25.
- Herrick AL, Lim SH, Planley MW, Chmiel JS, Guadamuz TE, Kao U, . . . Stall R (2013). Adversity and syndemic production among men participating in the multicenter AIDS cohort study: a life-course approach. *American Journal of Public Health*, 103(1), 79–85. [PubMed: 23153154]
- Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a foundation for better understanding*. Washington, DC: The National Academies Press.
- Jason LA, Mericle AA, Polcin DL, & White WL (2013). The role of recovery residences in promoting long-term addiction recovery. *American Journal of Community Psychology*, 52(3–4), 406–411. [PubMed: 24081318]
- Jason LA, Olson BD, Ferrari JR, Majer JM, Alvarez J, & Stout J (2007). An examination of main and interactive effects of substance abuse recovery housing on multiple indicators of adjustment. *Addiction*, 102(7), 1114–1121. [PubMed: 17567399]
- Joseph JG, Caumartin SM, Tal M, Kirscht JP, Kessler RC, Ostrow DG, & Wortman CB (1990). Psychological functioning in a cohort of gay men at risk for AIDS: a three-year descriptive study. *The Journal of Nervous and Mental Disease*, 178(10), 607–615. [PubMed: 2230745]
- Kaskutas LA (2009). Alcoholics Anonymous effectiveness: faith meets science. *Journal of Addictive Diseases*, 28(2), 145–157. doi: 10.1080/10550880902772464 [PubMed: 19340677]

- Kaslow RA, Ostrow DG, Detels R, Phair JP, Polk BF, & Rinaldo CR Jr. (1987). The Multicenter AIDS Cohort Study: rationale, organization, and selected characteristics of the participants. *American Journal of Epidemiology*, 126(2), 310–318. [PubMed: 3300281]
- Kelly BC, Carpiano RM, Easterbrook A, & Parsons JT (2014). Exploring the gay community question: Neighborhood and network influences on the experience of community among urban gay men. *The Sociological Quarterly*, 55(1), 23–48.
- Kroenke K, Strine TW, Spitzer RL, Williams JBW, Berry JT, & Mokdad AH (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders*, 114(1–3), 163–173. [PubMed: 18752852]
- Martinez O, Wu E, Levine EC, Muñoz-Laboy M, Spadafino J, Dodge B, ... Fernandez MI (2016). Syndemic factors associated with drinking patterns among Latino men and Latina transgender women who have sex with men in New York City. *Addiction Research & Theory*, 24(6), 466–476. [PubMed: 28077938]
- Mericle AA, Carrico AW, Hemberg J, de Guzman R, & Stall R (Under review). Several common bonds: Addressing the needs of gay and bisexual men in LGBT-specific recovery housing. *Journal of Homosexuality*.
- Mericle AA, Kaskutas LA, Polcin DL, & Karriker-Jaffe KJ (2018). Independent and interactive effects of neighborhood disadvantage and social network characteristics on problem drinking after treatment. *Journal of Social and Clinical Psychology*, 37(1), 1–21. [PubMed: 29657357]
- Mericle AA, Polcin DL, Hemberg J, & Miles J (2017). Recovery housing: evolving models to address resident needs. *Journal of Psychoactive Drugs*, 49(4), 352–361. [PubMed: 28657823]
- Metzger DS, Navaline HA, & Woody GE (2001). Assessment of substance abuse: HIV risk assessment battery (RAB) In Carson-Dewitt R (Ed.), *Encyclopedia of Drugs, Alcohol, and Addictive Behavior* (2nd ed., Vol. 2, pp. 148–150). New York: Macmillan.
- Meyer I, & Dean L (1998). Internalized homophobia, intimacy and sexual behaviour among gay and bisexual men In Herek GM (Ed.), *Stigma and Sexual Orientation* (pp. 160–186). Thousand Oaks, CA: Sage.
- Meyer IH (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. [PubMed: 12956539]
- Mills TC, Paul J, Stall R, Pollack L, Canchola J, Chang YJ, ... Catania JA (2004). Distress and depression in men who have sex with men: the Urban Men's Health Study. *The American Journal of Psychiatry*, 161(2), 278–285. [PubMed: 14754777]
- Moos RH, & Moos BS (2006). Participation in treatment and Alcoholics Anonymous: a 16-year follow-up of initially untreated individuals. *Journal of Clinical Psychology*, 62(6), 735–750. [PubMed: 16538654]
- Morgan DL (1993). Qualitative content analysis: a guide to paths not taken. *Qualitative Health Research*, 3(1), 112–121. [PubMed: 8457790]
- Mustanski B, Andrews R, Herrick A, Stall R, & Schnarrs PW (2014). A syndemic of psychosocial health disparities and associations with risk for attempting suicide among young sexual minority men. *American Journal of Public Health*, 104(2), 287–294. [PubMed: 24328641]
- O'Connell DC, & Kowal S (1999). Transcription and the issue of standardization. *Journal Of Psycholinguistic Research*, 28(2), 103–120.
- Palamar JJ, Kiang MV, Storholm ED, & Halkitis PN (2014). A Qualitative Descriptive Study of Perceived Sexual Effects of Club Drug Use in Gay and Bisexual Men. *Psychology And Sexuality*, 5(2), 143–160. [PubMed: 24883174]
- Pantalone DW, Hessler DM, & Simoni JM (2010). Mental health pathways from interpersonal violence to health-related outcomes in HIV-positive sexual minority men. *Journal of Consulting and Clinical Psychology*, 78(3), 387–397. [PubMed: 20515213]
- Parsons JT, Grov C, & Golub SA (2012). Sexual compulsivity, co-occurring psychosocial health problems, and HIV risk among gay and bisexual men: further evidence of a syndemic. *American Journal of Public Health*, 102(1), 156–162. [PubMed: 22095358]

- Paul JP, Catania J, Pollack L, Moskowitz J, Canchola J, Mills T, . . . Stall R (2002). Suicide attempts among gay and bisexual men: lifetime prevalence and antecedents. *American Journal of Public Health*, 92(8), 1338–1345. [PubMed: 12144994]
- Polcin DL, Buscemi R, Nayak M, Korcha R, & Galloway G (2012). Sex differences in psychiatric symptoms among methamphetamine-dependent residents in sober living houses. *Addictive Disorders and Their Treatment*, 11(2), 53–63. [PubMed: 23559891]
- Polcin DL, Korcha R, Bond J, & Galloway G (2010). Eighteen-month outcomes for clients receiving combined outpatient treatment and sober living houses. *Journal of Substance Abuse*, 15(5), 352–366.
- Polcin DL, Korcha R, Mericle AA, Mahoney E, & Hemberg J (2017). Problems and service needs among ex-offenders with HIV risk behaviors entering sober living recovery homes. *Criminal Justice Studies*, 30(4), 381–400. [PubMed: 29200972]
- Polcin DL, Korcha RA, Bond J, & Galloway G (2010). Sober living houses for alcohol and drug dependence: 18-month outcomes. *Journal of Substance Abuse Treatment*, 38(4), 356–365. [PubMed: 20299175]
- QSR International. (2015). NVivo qualitative data analysis software, Version 11.0 for Windows. Melbourne, Australia.
- Silverberg MJ, Lau B, Justice AC, Engels E, Gill MJ, Goedert JJ, . . . Dubrow R (2012). Risk of anal cancer in HIV-infected and HIV-uninfected individuals in North America. *Clinical Infectious Diseases*, 54(7), 1026–1034. [PubMed: 22291097]
- Singer M (2009). *Introduction to Syndemics: A critical systems approach to public and community health* (1st ed.). San Francisco, CA: Josey-Bass.
- Stall R, Mills TC, Williamson J, Hart T, Greenwood G, Paul J, . . . Catania JA (2003). Association of co-occurring psychosocial health problems and increased vulnerability to HIV/AIDS among urban men who have sex with men. *American Journal of Public Health*, 93(6), 939–942. [PubMed: 12773359]
- Stall R, Paul JP, Greenwood G, Pollack LM, Bein E, Crosby GM, . . . Catania JA (2001). Alcohol use, drug use and alcohol-related problems among men who have sex with men: the Urban Men's Health Study. *Addiction*, 96(11), 1589–1601. [PubMed: 11784456]
- StataCorp. (2015). *Stata Statistical Software: Release 14.0*. College Station, TX: Stata Corporation.
- Stevens EB, Jason LA, Ferrari JR, & Hunter B (2010). Self-efficacy and sense of community among adults recovering from substance abuse. *North American Journal of Psychology*, 12, 255–264. [PubMed: 23505336]
- Strauss A, & Corbin J (1994). Grounded theory methodology: An overview In Denzin NK & Lincoln YS (Eds.), *Handbook of Qualitative Research* (pp. 273–285). Thousand Oaks, California: SAGE Publications.
- Tajfel H, & Turner JC (1979). An integrative theory of intergroup conflict In Austin WG & Worchel S (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33–47). Monterey, CA: Brooks-Cole.
- Tajfel H, & Turner JC (1986). The social identity theory of intergroup behavior. *Psychology of Intergroup Relations*, 5, 7–24.
- Tonigan JS, Toscova R, & Miller WR (1996). Meta-analysis of the literature on Alcoholics Anonymous: sample and study characteristics moderate findings. *Journal of Studies on Alcohol*, 57(1), 65–72. [PubMed: 8747503]
- Toomey RB, Ryan C, Diaz RM, & Russell ST (2018). Coping with sexual orientation-related minority stress. *Journal of Homosexuality*, 65(4), 484–500. [PubMed: 28441107]
- Turner JC, Hogg MA, Oakes PJ, Reicher SD, & Wetherell MS (1987). *Rediscovering the social group: A self-categorization theory*. New York: Blackwell.
- Witt MD, Seaberg EC, Darilay A, Young S, Badri S, Rinaldo CR, . . . Thio CL (2013). Incident hepatitis C virus in men who have sex with men: a prospective cohort analysis, 1984–2011. *Clinical Infectious Diseases*, 57(1), 77–84. [PubMed: 23532480]
- Wolitski RJ, Stall R, & Valdiserri RO (Eds.). (2008). *Unequal Opportunity: Health disparities affecting gay and bisexual men in the United States*. New York: Oxford University Press.

Table 1.

Sample Characteristics

	Total Sample (N=25)		Gay/Bi Men's Home (N=17)		Other Men's Homes (N=8)	
			n	%	n	%
Race Ethnicity						
White/Caucasian	17	68.0	10	58.8	7	87.5
Black/African American	1	4.0	1	5.9	0	0.0
Hispanic	6	24.0	5	29.4	1	12.5
Other	1	4.0	1	5.9	0	0.0
Age (M, SD)	33.4	10.1	36.6	9.4	26.4	8.3 *
Sexual Identity						†
Straight/Heterosexual	2	8.0	0	0.0	2	25.0
Gay/Homosexual	21	84.0	16	94.1	5	62.5
Bisexual	2	8.0	1	5.9	1	12.5
Educational Attainment						
Less High School Diploma (<12 yrs)	1	4.0	0	0.0	1	12.5
High school diploma (12 yrs)	6	24.0	4	23.5	2	25.0
Some college or higher (>12 yrs)	18	72.0	13	76.5	5	62.5
Current Employment Status						
Working full-time/Part-time	9	36.0	6	35.3	3	37.5
Not working	16	64.0	11	64.7	5	62.5

NOTES: Due to the small sample sizes, differences were tested using Fisher's exact and Wilcoxon rank-sum tests.

* p<0.05;

† p<0.10.

Table 2.

Service Needs

	Total Sample (N=25)		Gay/Bi Men's Home (N=17)		Other Men's Homes (N=8)	
	n	%	n	%	n	%
Substance Use Past 30 Days Prior to Admission	3	12.0	2	11.8	1	12.5
Primary Focus of Recovery						**
Alcohol	5	20.0	3	17.7	2	25.0
Heroin/other opiates or analgesics/sedatives or hypnotics	4	16.0	1	5.9	3	37.5
Amphetamines	14	56.0	13	76.5	1	12.5
Marijuana	1	4.0	0	0.0	1	12.5
Poly substance use	1	4.0	0	0.0	1	12.5
Current Smoker	18	72.0	11	64.7	7	87.5
Chronic Medical Conditions	11	44.0	10	58.8	1	12.5 *
HIV Status	9	36.0	8	47.1	1	12.5
Verbal/Physical Assault or Threats of Violence (age 12-14)	24	96.0	16	94.1	8	100.0
Verbal/Physical Assault or Threats (age 12-14, orientation related)	17	68.0	12	70.6	5	62.5
History of Sexual Victimization	19	76.0	13	76.5	6	75.0
Physically Assaulted as an Adult	16	64.0	14	82.4	2	25.0 *
Verbally Threatened or Demeaned as an Adult	17	68.0	14	82.4	3	37.5 †
4+ Male Sex Partners (past 6 months)	18	72.0	12	70.6	6	75.0
Inconsistent Condom Use (past 6 months)	17	68.0	14	82.4	3	37.5 †
Has 5 or More Gay Male Friends	12	48.0	9	52.9	3	37.5
Being Gay Makes Me Feel Part of a Community	19	76.0	15	88.2	4	50.0 †
	M	SD	M	SD	M	SD
Number of Prior Treatment Episodes	3.9	3.3	3.8	3.7	4.1	2.5
PHQ-8 Score (0-24)	8.6	5.2	8.5	5.1	8.8	5.6
Age First Wondered about Being Gay/Bisexual	13.9	7.4	12.8	6.0	16.3	9.7
Age First Disclosed Identity (N=23)	17.7	5.7	18.0	6.5	16.8	2.5
Acceptance of Sexual Attraction to Men (9-45)	26.1	9.2	27.5	9.5	23.1	8.5

NOTES: Differences were tested using Fisher's exact and Wilcoxon rank-sum tests. Inconsistent condom use refers to using condoms some or none of the time (compared to all or most of the time). A total of 40% of the sample have a score of 10 or greater on the PHQ-8.

*
p<0.05,

**
p<0.01,

†
p<0.10

Table 3.

Help-seeking, Expectations, and Goals

	Total Sample (N=25)		Gay/Bi Men's Home (N=17)		Other Men's Homes (N=8)	
			n	%	n	%
Referral Source						
Treatment Program	14	56.0	10	58.8	4	50.0
Peers	9	36.0	6	35.3	3	37.5
Self-referred	5	20.0	3	17.6	2	25.0
Family Member	1	4.0	0	0.0	1	12.5
Alternatives						
Didn't Look for Alternatives	11	44.0	8	47.1	3	37.5
Viable Alternatives	8	32.0	6	35.3	2	25.0
Limited Alternatives	4	16.0	2	11.8	2	25.0
Not Discussed	2	8.0	1	5.9	1	12.5
Desired Characteristics						
Emotional/Social Support	22	88.0	16	94.1	6	75.0
Accountability/Structure	20	80.0	12	70.6	8	100.0
Location, Affordability, Amenities	18	72.0	13	76.5	5	62.5
Goals						
General Recovery	23	92.0	15	88.2	8	100.0
LGBT-identity Specific	9	36.0	7	41.2	2	25.0

Notes: Only the coding of subcategories within the theme of alternatives is mutually exclusive. Men could have discussed a variety of different referral sources, expectations, and goals.