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A qualitative study of reasons to use substances and substance use treatment experiences among transgender and gender diverse adults in Rhode Island

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Declaration of competing interest

None.

CRediT authorship contribution statement

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1. Introduction

An estimated 1.6 million United States (US) adults are transgender and gender diverse (TGD) (i.e., individuals whose gender identity differs from their gender/sex assigned at birth) (Fausto-Sterling, 2019; Herman et al., 2022, p. 26). TGD individuals face structurally and institutionally pervasive cissexism (i.e., a system of oppression that empowers people whose gender aligns with their gender/sex assigned at birth while disadvantaging those whose gender identity differs from their gender/sex assigned at birth) (Wesp et al., 2019). Cissexism can render TGD people more susceptible to social harms including a lack of legal protections when accessing housing,(Kattari et al., 2016) workplace discrimination, (Davis & Yeung, 2022) and barriers to accessing gender-affirming healthcare (White Hughto et al., 2015). Research demonstrates that cissexism has elevated physical and mental health morbidity among TGD people relative to cisgender people,(White Hughto et al., 2015) including the increased use of substances to manage perpetual distress (Connolly & Gilchrist, 2020; Reisner et al., 2015; Scheim et al., 2022). For example, an analysis of 2017 insurance claims data found that TGD adults were four times more likely than cisgender adults to have at least 2 co-occurring substance use disorders; additionally, alcohol, cannabis, cocaine, and opioid use disorder diagnoses were significantly more prevalent among TGD adults compared to cisgender adults (White Hughto et al., 2021).

While substance use is a common facet of the human experience, (Szalavitz, 2021) substance use at a frequency or for purposes or other than which they are indicated for may be associated with deleterious harms to health and social wellbeing (i.e., a substance use disorder). Extant literature has largely adopted a risk paradigm to understand motivation for and experiences with substance use among TGD people to account for the elevated prevalence of substance use among this population. Indeed, multiple studies have found that substance use is significantly associated with having experienced TGD-related stigma, discrimination, violence, and unmet gender-affirming healthcare needs (Hsiang et al., 2022; Operario et al., 2023; Wolfe et al., 2021). At the same time, a growing body of work has also explored the generative value substance use can have for TGD people including enhancement of sexual pleasures (Freestone et al., 2022; Pienaar et al., 2020a, pp. 139–163) and fostering experiences of gender exploration and self-affirmation (Race et al., 2022). To date, most substance use research that moves beyond risk focused paradigms has focused on chemsex among men who have sex with men, and very little research has centered TGD people (Møller & Hakim, 2023). Research with TGD people that explores the nuanced motivations for and experiences with substance use is needed.

The elevated prevalence of substance use, varied use experiences, and associated adverse and generative outcomes of substance use experienced by TGD people underscores the need to understand substance use and substance use treatment experiences among this underrepresented population. Substance use treatment, including behavioral health modalities and pharmacotherapy (e.g., methadone), are effective, yet ongoing treatment gaps and barriers to care among people with a substance use disorder persist (Cernasev et al., 2021; Krawczyk et al., 2022). These barriers include program cost, (Priester et al., 2016) restrictions on accessing medications for opioid use disorder, (Cioe et al., 2020) few treatment options for certain substances like stimulants, (Ling et al., 2014) and enacted

stigma that leads to self-directed withdraw from care (Earnshaw, 2020). These barriers can be exacerbated for TGD people who already encounter barriers when accessing healthcare services, (White Hughto et al., 2015) and only 18 % of US treatment services offer LGBTQ-specific programs, with fewer that are TGD-specific (Williams & Fish, 2020). Moreover, TGD people of color have experienced racism and enacted TGD and substance use stigma in substance use treatment settings (Dawes et al., 2022). Given the barriers in accessing substance use treatment for TGD populations,(Lombardi, 2007; Lyons et al., 2015) there is a need to understand how TGD people who use drugs (PWUD) navigate treatment settings. Thus, to address these gaps, the present study qualitatively explored motivations for substance use and the substance use treatment experiences of TGD people.

2. Materials and methods

2.1. Study setting and procedures

From July to August 2022, in-depth interviews and a demographic survey were conducted with 12 TGD PWUD in Rhode Island. In 2022, the Human Rights Campaign conducted a state-by-state review of laws and policies affecting lesbian, gay, bisexual, transgender, and queer people and categorized Rhode Island as “working toward innovative equality” relative to other states. (Rhode Island State Score Card) Although antitransgender rhetoric affects TGD people regardless of where adversity is concentrated,(White Hughto et al., 2022) recruiting participants living in a state with policies and resources that may buffer these harms is notable, particularly as it is related to inquiry into motivations for substance use and access to treatment.

Convenience sampling was used to recruit participants from syringe services programs, community health centers, and TGD community listservs reaching potentially eligible individuals. Participants were also referred by substance use treatment providers enrolled in a complementary study (Hughto et al., 2024). Participants could also refer people to the study. Eligible participants were: ≥18 years old; self-identified as TGD; reported using illicit substances or accessed substance use treatment in the past 30 days; lived in Rhode Island; able to complete the interview in English; and able and willing to provide informed consent. The [masked for review] Institutional Review Board approved this study.

Interested individuals contacted the study team by phone and were screened for eligibility. Eligible individuals were scheduled for a phone or Zoom interview depending on participant preference and technology access. Participants provided verbal informed consent prior to data collection. Participants completed an interviewer-administered demographic survey consisting of 20 items developed by the research team immediately prior to their interview to assess participant characteristics and substance use and treatment history. Survey administration lasted approximately 5 min. Interviews were facilitated using a topic guide that covered substance use patterns and motivators of substance use, healthcare experiences, and substance use treatment experiences. Interviews were audio-recorded and averaged 42 min in length; demographic survey administration was not audio-recorded. All participants were compensated $40 for their time. Interviewers identified as transgender, non-binary, and cisgender, and previously conducted qualitative TGD health and substance use research. The study team acknowledges that our individual and collective experiences, including

our experiences of gender, ideological biases, and the sociocultural context in which this research was conducted influenced how this research was conducted and reported (Pillow, 2003). To check potential biases, the team had frequent discussions about the application of codes and the interpretation of findings. These discussions allowed the team to reach consensus on discrepancies in code application and interpretation and afforded time to be mindful that data were collected during a period of national and global politicization of TGD people and the growing problem of the toxic drug supply,(White Hughto et al., 2022; Centers for Disease Control and Prevention) which impacted the experiences and perspectives of both our participants and members of our study team.

2.2. Measures

2.2.1. Self-reported sociodemographic characteristics—Age was assessed in years. Race and ethnicity (combined to Asian non-Hispanic; Black non-Hispanic; multiracial non-Hispanic; white non-Hispanic), and sexual orientation (straight; bisexual; gay; lesbian; queer; another sexual identity) were assessed. Gender identity options included transgender (man; transgender man; woman; transgender woman), agender, gender fluid, non-binary or gender-queer, or something else. Participants reported current living situation (e.g., house or apartment; friend or family's place; shelter; recovery or residential treatment center; unsheltered outside), employment status, and past 30-day income sources (e.g., social assistance/disability; drug selling; sex work; panhandling).

2.2.2. Substance use characteristics—Lifetime and past 30-day substance use, including cannabis, alcohol, stimulants (e.g., cocaine; crack cocaine; crystal methamphetamine), opioids (e.g., heroin; fentanyl), and medications used not as prescribed (e.g., benzodiazepines; gabapentin; other opioids) were assessed. We also assessed participants' preferred substance, frequency of use (daily; 3–4 times per week; one or fewer times per week), and past 30-day route of administration (injection; inhalation; sniffing; ingesting). Lifetime history of accessing a substance use treatment program was also assessed (yes/no); those reporting yes specified whether they had accessed programs in the 6 months prior to the interview (in-patient treatment; residential treatment; recovery or transitional housing; counseling or support groups; methadone or buprenorphine). Self-rated health (excellent; very good; good; fair; poor) and lifetime history of diagnosed medical conditions (e.g., HIV; hepatitis C) were also assessed.

2.3. Data analysis

Quantitative analyses were conducted in SPSS. The data were explored to see if there were missing responses for one or more variable. All variables included in the analysis had complete responses. Audio recordings were professionally transcribed and reviewed for accuracy by a study team member. Randomly generated pseudonyms were assigned to transcripts for anonymity. Transcripts were coded and analyzed following an integrated approach to thematic analysis in NVivo (Bradley et al., 2007). First, transcripts were read by a three-member analytic team to understand the breadth of collected data. Then preliminary deductive codes that aligned with guide topics (e.g., drug use patterns; barriers to accessing substance use treatment) were drafted to create a preliminary code framework. These codes were iteratively refined by the analytic team as we independently reviewed the transcripts.

This process involved discussing similarities and discrepancies in application of the initial code framework and collaborative editing of the preliminary code framework. Revisions included the addition of inductive codes (e.g., conceptualizations of substance use) to capture emergent themes not otherwise appropriately captured by the preliminary deductive codes, the reorganization of codes so that conceptually related codes were grouped, and the combining of codes to reduce redundancy. The analytic team met weekly for a month to reach consensus on proposed revisions to the code framework and to assess theoretical saturation. Specifically, we were attentive to whether a diversity in substance use treatment experiences had been explored and whether there were outstanding conceptual gaps (Bradley et al., 2007). None were identified. Subsequently, each transcript was re-reviewed and independently coded by the analytic team utilizing the finalized code framework; transcripts were not double coded. The analytic team met regularly to discuss final code application until coding of all transcripts was complete.

The final stage of analysis involved the first author identifying thematic relationships between the codes. Analysis was informed by a modified socio-ecological framework of TGD stigma and health to understand individual, interpersonal, and structural level sources of stigma and discrimination that negatively affect the lived experiences of TGD people(White Hughto et al., 2015). In the present research, we utilized the framework to understand how themes manifest at the individual, interpersonal, and structural level to color TGD peoples' experiences using substances and accessing substance use treatment services (Bradley et al., 2007; White Hughto et al., 2015). Use of a socio-ecological framework enriches analysis by providing a tool to understand how interlocking levels of stigma operate simultaneously to affect an individual's relationship with substance use and treatment. This affords a language to articulate the nuances and context of inter-related factors that shape experiences, thereby advancing the literature beyond a myopic focus on individual-level drivers of substance use. Lastly, understanding how themes manifest across multilevel influences is useful to identifying multilevel recommendations to redress origins of suboptimal substance use treatment experiences for TGD people. The identified themes were discussed with the analytic team for validation and refinement of wording. Finalized themes were subsequently shared with the full team to inform interpretation of results. Quantitative data is presented alongside the qualitative data to contextualize the qualitative themes.

3. Results

3.1. Sociodemographic characteristics

The average age of participants was 36 years (range: 21–63 years) (Table 1). Most participants were Black non-Hispanic (n = 5) or white non-Hispanic (n = 5), with the remainder being multiracial or Asian. All participants identified as TGD, and gender identities included five non-binary or genderqueer people, four transgender women, one woman, one transgender man, and one man.

3.2. Motivations for substance use vary

Substances used, frequency of use, and route of administration varied among participants (Table 2). Overall, the sample reported a lifetime history of using cocaine (n = 12), cannabis (n = 10), alcohol (n = 10), opioid pain medications (n = 8), methamphetamine (n = 6), benzodiazepines (n = 6), crack (n = 5), and heroin or fentanyl (n = 5). Participants described using substances for a variety of reasons (e.g., enhancing social and sexual experiences, exploring gender identity, and self-treating mental distress), which they characterized as having both generative and adverse outcomes.

3.2.1. Enhancement of social and sexual experiences—Substance use can enhance the enjoyment and duration of sex, and for some participants, substances were a needed tool for sex work. Just 2 participants reported full time employment, and the majority reported inconsistent money-making strategies including selling drugs (n = 3) and sex work (n = 7). This is reflective of how cissexism originating at the structural level results in economic disenfranchisement, thereby increasing the likelihood that people engage in transient methods of making money. Among those engaged in sex work, substance use was characterized as a tool to enhance sex and pleasure when working and was described as an important way to affirm their gender:

> *I was expressing my identity as being female. I had gotten my implants and stuff and so I just wanted to be with a man. It* [sex] *was so much easier using the drug* [methamphetamine] *so it enhanced the frequency of that because that's the only way I can be with a man is using the drug.* ['Rae,' a 50-year-old multiracial non-Hispanic transgender woman]

3.2.2. Facilitation and hindrance of gender affirmation—Participants also discussed the effects of substance use on mental health at the intersection of understanding and accepting gender identity. In these instances, substance use was characterized by participants as both a generative tool to support the process of exploring their gender identity and a potential hindrance toward navigating transitioning. For some participants, like 'Sig', who used multiple substances, substance use was a salve for their mental distress and helped them realize and accept that they are non-binary:

> *I definitely would've killed myself in the past if I didn't have some way to escape and they* [substances] *were there. Was it ideal? Absolutely not, but it got me through that time of my life. I've also had some really amazing experiences with substances. Like tripping acid was how I finally accepted that I was non-binary. At some level, I very much knew, but I came to peace with it.* ['Sig,' a 22-year-old white non-Hispanic non-binary/genderqueer person]

While some participants underscored the utility of substances for managing the mental stress they experienced when exploring their gender identity, others described how their substance use worsened their overall mental health and hindered their process of exploring gender. For 'Val', their desire to commit themselves to exploring their gender identity contributed to a need to reduce their substance use: "*I really wanna quit. I don't wanna be impulsive. I don't want get depressed. I'm tryin' to work on all these gender issues, tryin' to come to terms with who I am. I just have to accept things the way they are.*" ['Val,' a 60-year-old

white non-Hispanic non-binary/genderqueer person]. Experiences of substance use at the intersection of gender identity varied and were shaped by the structural factors including cissexism that produced mental distress; some participants were grateful for being able to self-treat mental distress with substances, whereas others reflected on how substance use has been a hindrance toward gender affirmation.

3.2.3. Substance use to self-treat mental health concerns—Many participants drew attention to the utility of substances to self-treat their mental health concerns. Indeed, eleven participants self-reported a mental health diagnosis and underscored the ongoing barriers they experienced when trying to access mental healthcare services. For example, 'Abbe' recounted the challenge of locating a mental healthcare provider: "*Mental health is the worst. Number one – it sucks … You got any numbers I can call up to get a mental health doctor?*" ['Abbe,' a 63-year-old Black non-Hispanic non-binary/genderqueer person] The dearth of accessible mental health providers resulted in participants using substances to self-manage what they characterized as untreated mental distress. 'Sig,' a 22-year-old white non-Hispanic non-binary/genderqueer person who primarily used mushrooms, cocaine, and benzodiazepines, explained: "*Downers in a lot of ways have been a crutch to deal with* [psychological] *pain that I was not able to get treated through traditional routes.*" While participants acknowledged that self-treatment serves the useful purpose of "*escap*ing" untreated mental health concerns, others felt that their substance use did not address their mental health issues that precipitated their substance use. One participant who used multiple substances explained: "*It appears like it's gonna be a temporary relief, but it really isn't. It doesn't do nothin'. It just numbs you for a short time. Then when you come out of it, you're right back where you begun*" ['Val,' a 60-year-old white non-Hispanic non-binary/genderqueer person]. For some, self-treatment of their mental health was framed as inadequately addressing–or worsening–the root cause of their mental distress. As a result, several participants described how such adverse outcomes served as motivating factors for considering a reduction in their use and heightened the need for mental health services.

Participants also drew attention to providers' reluctance to prescribe needed medications to people with a history of substance use, resulting in people having to self-manage their medical needs. To that end, one participant, 'Tisha,' who used cocaine and ecstasy daily, described barriers they faced in accessing a prescription for attention-deficit/hyperactivity disorder (ADHD) because of their substance use history, so they reported self-medicating with stimulants:

> *Getting prescribed ADHD medications is right now very impossible. However, because of my past and current drug use and stuff, it's just—my doctor right now is just like, 'Yeah, it's a hard 'no' until you can get this* [their substance use] *better under control. Yeah,* [I] *pretty much* [find myself using stimulants to try to manage my ADHD]*. It's like a catch-22.* ['Tisha,' a 33-year-old Asian non-Hispanic non-binary/genderqueer person].

'Tisha's' recollection is indicative of how interpersonal-level stigma from providers toward substance use can erode the patient-provider relationship, which in this instance, reinforced the use of substances to self-treat a medical concern. Taken collectively, that many

participants reported self-treating unaddressed mental health concerns through self-managed substance use is a by-product of how cissexism and substance use stigma jointly operate by creating a deficit in accessible, stigma-free, and affirming health services.

3.3. Interest in and utilization of substance use treatment services varied

3.3.1. Evolution of interest in reducing substance use—While all participants used substances at the time of the interview, many participants felt that substance use treatment was for people with a greater dependence on substances compared to how they characterized their own use. When recounting their substance use patterns, some participants described how their beliefs regarding who should receive substance use treatment evolved as their use patterns changed. One participant who primarily used ecstasy shared: "*I didn't think* [treatment] *was for people like me because at first I wasn't so much into drugs. It was just once in a while. I think over time it is for people like me*" ['Sheela,' a 23-year-old Black non-Hispanic transgender woman]. Other participants described thinking that substance use treatment was for "*bad people*" and contrasted their own use patterns with those who used more frequently (i.e., daily use). When reflecting on how their attitude toward substance use treatment evolved, 'Rae', who smoked methamphetamine, explained:

> *I thought it was for people that were completely everyday doing it* [using substances]. *I mean got up and instead of brushing teeth, they would put the pipe in their mouth. I thought it was like that - living on the street and day to day was not waking up and having a cup of coffee, but 'where am I gonna get my next hit?' That's the kind I thought drug treatment was for. I was stupid.* ['Rae,' a 50-year-old multiracial non-Hispanic transgender woman]

Here, 'Rae's' perception of substance use treatment was framed by substance use-related stigma at the intersection of socioeconomic position. This 'othering' practice was common among some participant narratives, especially if participants reported recreational use of substances. In this way, drug-related stigma functioned as a means for participants to distance themselves from treatment.

Other participants were motivated to reduce their use to be more present in family relationships and pursue career goals, whereas others were primarily concerned about the impact of substance use on their overall health. To that end, seven participants rated their health as 'fair' or 'poor', and those with poorer self-rated health expressed a more pronounced interest in reducing substance use during interviews. For example, a participant living with HIV reported that substance use made it difficult to adhere to HIV medications and reflected that they felt their "*numbers* [i.e., viral load] *could be better*" if they were not using drugs. Additionally, half of participants experienced an overdose within the past year, which was characterized as a catalyst for wanting to reduce use. One participant described: "*It was because of the overdoses. It was also because of how addictive the drug was and how much loss of control. I knew I was headed to the morgue*" ['Rae', a 50-year-old multiracial non-Hispanic transgender woman]

Participants who had accessed in-patient treatment characterized treatment as an opportunity to have a "*time out*" or "*reset*" rather than a dedicated time to focus on recovery. In

this way, past positive experiences with in-patient treatment motivated future interest in and attempts to access in-patient treatment. This is reflective of structural-level failures to adequately meet the needs of the marginalized, because this theme was especially salient for participants who experienced socioeconomic marginalization and were unhoused::

> *I didn't want to be homeless, so I had to do somethin'. I had to come up with somethin', so I went to detox, try to get my life together. Once I got my life half together, it just went back to its square one again, back to not having and trying to build up to have, then back to detox. It's like a vicious cycle.* ['Porter,' a 61-year-old Black non-Hispanic (transgender) man]

3.3.2. Linkage to substance use treatment services primarily occurred through peers—

Most participants (n = 9) had accessed a substance use treatment program in their lifetime (Table 3). Participants learned about treatment options through the knowledge and experiences of their peers or were linked with support groups through recovery housing programs rather than through provider-initiated referrals. 'Tisha,' a 33-year-old Asian non-Hispanic non-binary/genderqueer person who used cocaine and ecstasy daily, explained: *"I didn't really know much about treatment options, like before moving into the sober house and stuff. Once I moved in, I was with people and able to connect with NA* [Narcotics Anonymous] *and AA* [Alcoholics Anonymous] *meetings."* Few participants were referred to treatment programs through psychiatric hospitalizations. That most participants learned of treatment options through their existing substance-using networks rather than through provider-initiated referrals or discussions maybe be symptomatic of a structural deficit in established referral processes through which providers can link TGD people to affirming substance use treatment services.

3.4. Multilevel barriers to general healthcare services affect substance use treatment access and experiences

Participants faced challenges locating mental health and general healthcare services because of structural (e.g., limited insurance coverage), institutional (e.g., clinic hours conflicting with work schedule), and logistical (e.g., limited transportation) barriers. Participants also cited provider turnover in general healthcare settings as an issue that erodes valued relationships with staff and providers. One participant explained how growing accustomed to a new provider and health system is challenging for TGD people given the added work that is needed to educate providers about one's gender identity:

> *Reaching out to healthcare sometimes it's a bit challenging considering the fact that you will be asked some questions concerning you, and this includes your gender, how you identify yourself, and such kind of stuff, how you relate with the general community and all that. You find that responding to some of the questions it might be quite challenging.* ['Quinn,' a 25-year-old Black non-Hispanic non-binary/genderqueer person]

Participant narratives about barriers experienced when accessing substance use treatment were similar to those faced when accessing general healthcare services and occurred at the structural (e.g., insurance coverage), institutional (e.g., limited bed capacity; rules prohibiting intimate relationships; inconvenient hours of operation) and interpersonal (e.g.,

transphobia from staff) levels that varied across treatment types. Participants described how these barriers made accessing or remaining in treatment challenging. For example, the rigid time offerings of group-based counseling were difficult to adhere to for some participants, and this undermined interest in therapy and contributed to inequities in treatment access. One participant who used multiple substances shared:

> *I don't like group settings. When I do go for treatment they're very strict about when you show up, when you leave kinda thing. I can't follow those kinds of rules, especially 'cause I don't have that kind of time and energy, really.* ['Arley,' 29-year-old white non-Hispanic (transgender) woman]

Suboptimal interpersonal experiences in treatment settings related to gender and substance use stigma and discrimination were reported by participants. Participants recalled transphobic interactions that demonstrated staff had limited training in delivering culturally competent healthcare to TGD people. For example, 'Val' described being denied access to an all-female substance use treatment facility after verifying their prior gender-affirming surgical procedures:

> *I was turned down for a program because the lady said 'Well, what type of surgeries you had?' I said, 'Well, I had an orchiectomy.' She wasn't supposed to ask me those questions. 'Well, we have a policy.' Then I find out there is no policy. Then they apologized because the woman in the women's program should have never asked me that and I shouldn't have been treated like that.* ['Val,' a 60-year-old white non-Hispanic non-binary/genderqueer person]

Importantly, participants described how transphobic environments can lead to avoidance of substance use treatment services: "*I know a lot of trans and LGBT people that don't go into treatment just for that reason of things that I'm talking about* [discrimination] *and how we're treated*" ['Rae', a 50-year-old multiracial transgender woman]. Other participants recounted instances of feeling judged by staff for accessing treatment, particularly if they had a lengthy history of substance use treatment. A few participants recounted experiencing interpersonal difficulties with other clients of substance use treatment programs but did not attribute these to anti-TGD sentiments. For example, some participants shared how gender power dynamics were present in mixed-gender settings, in which men interrupted and spoke over women, which was described as frustrating to women participants.

3.5. Multilevel facilitators of positive substance use treatment experiences

Participants described institutional and interpersonal elements of substance use treatment services that facilitated care and promoted gender inclusivity. Elements of the treatment environment, including rainbow flags, staff pronoun pins, and intake forms that collected individuals' pronouns and correct name, were considered indicators of LGBTQ inclusivity. One participant who lived in recovery housing believed the residence was gender-inclusive because it was operated by queer-identified staff, which was a visible sign of inclusivity. Ground rules for group-based therapy is an avenue to promote an inclusive climate: *"Before each session, they [staff] talk to everybody about how we are all accepted despite our own different gender and sexual orientations. It was accepted. No opinion matters. I wasn't treated with disdain"* ['Nina,' a 22-year-old Black non-Hispanic transgender woman]. Others

like ‘Rae’ who had experience with psychiatric hospitalization for substance use, valued that the structure of treatment enabled getting “*down to the nitty gritty, into the core of the center of yourself to identify and accept and realize what was making you use drugs*” [‘Rae,’ 50-year-old multiracial non-Hispanic transgender woman]. Differences in therapy preferences (e.g., group-based therapy; intensive in-patient programs) demonstrated that facilitators and barriers differed among participants at times.

Many participants reported that staff in treatment environments *“honored”* their gender identity, *“respected”* them, and *“really cared.”* Participants valued staff who were open about sharing their lived experiences as people with a history of a substance use disorder, being TGD, and or also non-heterosexual to establish common ground. ‘Sheela,’ a 23-year-old Black non-Hispanic transgender woman, reflected on their treatment experiences: “*There were nice people* [staff]. *I had people like myself in the sense of the same substance use and sexuality. I could relate with that.*” Having an environment that modeled inclusivity through staff was critical for establishing patient-provider rapport and trust among participants.

Other drivers of substance use treatment engagement included previous positive experiences with other clients. Participants mostly felt welcomed and respected by other clients which engendered positive perceptions of the treatment experience. ‘Sheela’ valued that they could “*interact well*” and “*say what’s on our mind*” with their peers in their group-based treatment setting. A participant who utilized an all-female treatment facility characterized the facility as “*very accepting to the LGBTQ community*” and shared that “*the women there were very accepting. They seem like they cared, and they were open arms. The treatment was good.*” [‘Rae’, a 50-year-old multiracial non-Hispanic transgender woman]

3.6. Recommendations for improving substance use treatment experiences

The most common recommendation participants had to improve the substance use treatment experiences of TGD PWUD was to tailor all healthcare environments to TGD people. Participants endorsed hiring TGD healthcare professionals of color across healthcare settings to improve patient-provider relationships:

> *Getting more gender diverse and POC* [people of color] *into the medical field so that people see themselves in it, and don’t feel alone in this. I think a lot of it is just about visibility and actual chances to build community and support within those programs that make people feel safe.* [‘Sig,’ a 22-year-old white non-Hispanic non-binary/genderqueer person]

Participants felt that diversifying the substance use treatment workforce could help establish identity-based “*affinity groups*” to discuss drivers of stress, like racism, that can contribute to substance use. These conversations are best explored with other people who have experienced similar oppressions:

> *I would be more comfortable being able to sit down with other people of color and stuff to have that open dialogue about how society affects us, like racism and sexism and things like that ‘cause, for me, I know those things play a part in my substance use.* [‘Tisha,’ a 33-year-old Asian non-Hispanic non-binary/genderqueer person]

Some participants recommended training and education for healthcare professionals in TGD health topics and cultural competency: "*It would be helpful if more doctors and nurses had to take discrimination classes"* ['Mick,' a 21-year-old white non-Hispanic transgender man]. 'Quinn' explained that this is especially needed in hospitals where established relationships with providers lack:

> *I just need someone at the hospital that can understand my situation … like someone that cannot just draw conclusions by looking at me, just by looking at my facial hairs, at my voice, then just end up ruling out conclusions that I might be this one, which is not the case. If I thought I could find someone that creates a space for me to express myself, to let him or her know how I will feel or how I want to be referred to, that will be a great thing for me*. ['Quinn,' a 25-year-old Black non-Hispanic non-binary/genderqueer person]

One participant described the need for a harm reduction approach to substance use treatment, to mitigate the perception that disclosing a history of substance use will result in sub-optimal medical care or legal involvement:

> *Rhode Island needs to set up to where if someone admits to using drugs, there's no consequences. They're offered assistance if they want it. If they don't, they don't have to take it. There's no legal ramifications that can take place. No getting your house raided. No bullshit. Not being harassed into a program. Nothing. There needs to be something like that so that people can be honest with their provider and not have to worry about the consequences of doing that.* ['Kelly', a 27-year-old white non-Hispanic transgender woman]

Other recommendations related to navigating the logistical and structural barriers to accessing general healthcare services included expanding the availability of mental healthcare services, providing transportation services, and moving away from a prior authorization model to access healthcare services.

4. Discussion

This qualitative study utilized a socio-ecological framework to explore motivations for substance use and substance use treatment experiences of TGD PWUD living in Rhode Island. Reasons for using substances included enhancement of social and sexual experiences, facilitation of gender affirmation and the self-treatment of unaddressed mental health concerns. Barriers were reported in general healthcare, such as limited insurance coverage and the challenge of locating affirming providers for mental and general healthcare services; these barriers impeded access to substance use treatment. Barriers to optimal treatment experiences within substance use treatment settings were also reported, such as transphobic staff and excessive program rules. Facilitators of substance use treatment were noted, including but not limited to visible signs of inclusivity (e.g., rainbow flags) and TGD staff members, which fostered connections between clients and staff. Recommendations to improve the substance use treatment experiences for TGD people are provided, including to tailor healthcare environments to TGD people and to diversify the substance use treatment workforce by hiring TGD providers of color. Findings can inform multilevel

recommendations to improve the quality of substance use treatment services for TGD people.

Multiple reasons for using substances, including for recreation, pleasure, and self-treatment of mental health concerns were endorsed. Previous qualitative research has highlighted the generative value that substance use can bring to people's social and sex lives, (Freestone et al., 2022; Moyle et al., 2020; Pienaar et al., 2020a, pp. 139–163; Race et al., 2022) and we found this to be true of our sample. We also found that some participants used substances to cope with mental distress, which is consistent with other literature demonstrating that minority stress is associated with the use of substances to cope (Bradford et al., 2013; Felner et al., 2020; Reisner et al., 2015). Interventions to promote the development of health-promoting coping skills instead of substance use may be warranted (Expósito et al., 2023; Zimmerman, 1995). Participants also used substances to explore their gender identity. For some, substance use afforded an opportunity to express their gender in new ways, with one participant attributing their use of psychedelics to the realization that they are non-binary. A qualitative study with TGD people in Australia explored a reframing of intoxication as a channel through which people navigated gender dysphoria and actualized their gender identity, similar to the experiences of some of our participants (Pienaar et al., 2020a, 2020b, pp. 139–163). For others, using drugs interfered with daily life and impeded transition goals. Thus, there are complexities to the gendered dimensions of substance use that warrant further exploration. Our results diverge from the majority of the existing substance use literature centering TGD people that has largely utilized risk-focused frameworks when investigating reasons for substance use (Bryant et al., 2018) by underscoring the importance of centering bodily autonomy, agency, and nuance in conversations about how substances may enrich or harm health.

The extra-medical use of substances to self-treat mental health concerns that went unaddressed because of a dearth of accessible and stigma-free health services was reported by participants. This was reflected by participants who noted the difficulties of locating affirming providers, encounters with providers reluctant to prescribe indicated medications, and the expressed concern about how quickly patient-provider relationships can disband because of staff turnover; given the challenge of locating affirming providers who are not stigmatizing and are knowledgeable about gender-affirming care, losing an affirming provider can be a profound loss that results in withdrawal from health services (McCann & Sharek, 2016). In addition to navigating TGD-specific barriers to health services, TGD PWUD contend with substance use-related stigma that is pervasive throughout healthcare (van et al., 2013). Use of the socio-ecological framework to guide analysis indicated that when TGD and substance use-related stigma manifest as multilevel barriers to care, a unique social oppression forms, resulting in negative healthcare experiences for TGD PWUD. In this context, people may find it easiest or are left with no option but to self-treat their medical needs,(Kelly, Biello, & Hughto, 2023) which has been found in the general population (Harris & Edlund, 2005) and was reported by our participants who used drugs to self-treat mental distress. TGD people have historically had to turn to their personal networks and innovate ways to meet their medical needs when barriers persist to formal healthcare, and our findings, which are derived from a progressive area of the US (Rhode Island State Score Card) indicate that they continue to do so (Glick et al., 2018; Kelly,

Biello, & Hughto, 2023). More work is needed to understand motivations for and the implications of substances to self-treat mental health concerns among TGD populations, particularly in climates where cissexism may be more overt.

Motivation to reduce substance use varied between participants, and this shaped interest in substance use treatment. Some participants expressed no interest in reducing use, whereas others were motivated by the health effects of substance use (e.g., overdose risk), a desire to be more present in social relationships, or have subsistent needs met through in-patient treatment. Several participants reflected on how their attitudes towards substance use evolved from initially believing substance use treatment was for people with more severe addictions as their own substance use intensified; this may be reflective of stigma internalization, which has been associated with delayed engagement in health services for TGD people and PWUD, (Joseph et al., 2023; White Hughto et al., 2015)and previous work demonstrates that this phenomenon is not unique to TGD people (Motta-Ochoa et al., 2017). Additionally, socioeconomic challenges (e.g., homelessness) motivated accessing inpatient services for shelter, food, and a consistent supply of medication. These practical reasons to seek care are consistent with a meta-ethnography that found unhoused people regarded treatment services that provided a clean, safe, and private environment as facilitative of recovery (Carver et al., 2020). For TGD people who have faced decades of social and economic disenfranchisement because of cissexism, (White Huhto et al., 2015) these reasons for entering treatment services may be more salient and underscore the need for providers to be aware of the multifaceted challenges TGD patients may face. Multi-component interventions that address substance use and co-occurring problems, such as housing instability and other health problems like HIV, tailored to TGD populations are needed, (Glynn & van den Berg, 2017) in tandem with structural efforts to eradicate drivers of socioeconomic inequities. Ultimately, the array of motivating reasons for entering substance use treatment underscore the need to tailor treatment to the goals and life circumstances of the individual.

Participants reported structural, logistical, and operational barriers to healthcare services that restricted how participants accessed substance use treatment. This had two primary effects including substance use to self-treat mental health problems and limited experiences being referred to substance use treatment through provider referral. As other researchers have found,(Baguso et al., 2022) most participants learned about treatment through their social networks rather than a provider referral despite the fact that recruitment occurred via harm reduction programs, community organizations, and provider referrals. There is a need to educate healthcare providers and community health workers about the mechanisms through which TGD people can access affirming substance use treatment services. Participants also encountered limited bed capacities, rules prohibiting intimate relationships, and inconvenient hours of operation that varied across treatment types; these barriers are not unique to TGD people and are commonly experienced when accessing and utilizing substance use treatment services (Cernasev et al., 2021). Low-barrier substance use treatment services continue to be needed.

When substance use treatment services were accessed, some participants encountered transphobia, whereas others had affirming experiences with staff and clients. The mixed

experiences of our participants are reflected in other qualitative explorations of TGD peoples' experiences in substance use treatment settings (Colgonis, 2023; Dawes et al., 2022; Lombardi, 2007; Lyons et al., 2015). As has been previously documented, (Lombardi, 2007; Lyons et al., 2015) participants encountered interpersonal stigma including transphobia from staff. These experiences are harmful in the moment and have behavioral implications on engagement with future healthcare services because of anticipated discrimination (Drabish & Theeke, 2022; White Hughto et al., 2015). As was reported by our participants and in other work with TGD PWUD, (Nuttbrock, 2012) transphobia in healthcare settings can lead to the avoidance of healthcare interactions entirely. Moreover, these findings indicate that many of the challenges TGD PWUD faced in the 2000s and 2010s in accessing and navigating substance use treatment have persisted or manifested as new barriers to care across the two decades of this research (Lombardi, 2007; Lyons et al., 2015). Yet positive and affirming experiences were also shared, and this was encouraging to find. Participants appreciated that the built environment contained markers of LGBTQ-inclusivity (e.g., rainbow flags, staff pronoun pins) and conveyed that cisgender clients respected them. However, markers of LGBTQ-inclusivity lose meaning if the knowledge and actions of staff do not reflect the principles represented by these markers. It is unsurprising that participants had mixed experiences with staff given that interventions and trainings to improve the TGD-competence of the healthcare workforce have not been equally adopted (Safer et al., 2016). This is a product of cisheteronormative health services and results in TGD people having to remain suspicious of providers and expend energy educating providers about their medical needs – a finding that has been documented in prior research with TGD people accessing gender-affirming medical care (White Hughto et al., 2017a). Thus, the expanded use of visible markers of inclusivity are insufficient to create inclusive environments, and there remains a need for improvements to the organizational culture of treatment settings to maximize inclusivity.

4.1. Recommendations and future work

There are multilevel ways to improve the substance use treatment experiences for TGD people that should be urgently implemented. In particular, participants echoed calls for a diversification of the healthcare workforce, especially in substance use treatment settings (Colgonis, 2023). Investment in substance use treatment training opportunities for TGD providers of color is needed to ensure that people can see themselves in the providers they encounter; this includes foregrounding PWUD who are in recovery, as their lived expertise helped participants in our study feel more connected to their treatment experiences. Relatedly, existing providers and staff across all forms of healthcare should undergo training in TGD-competent care. Not only have these trainings been shown to be effective at improving providers' capacity to provide affirming care,(Korpaisarn & Safer, 2018; White Hughto et al., 2017b) but substance use treatment providers have explicitly cited TGD-related training as needed in their field (Hughto et al., 2024). Given that participants connected with their peers about substance use and had largely positive experiences in substance use treatment settings with other clients, investing in TGD peer navigators who have lived expertise navigating substance use treatment is needed. To that end, existing treatment centers should adopt affirmative practice models (i.e., an approach to providing care to LGBTQ people that embraces, normalizes, and centers these identities (Hereth &

Durand, 2023) and engage TGD PWUD when efforts are undertaken to improve treatment services. It should be noted that while most participants preferred integration of affirming care into existing substance use treatment services, as opposed to TGD-only substance use treatment programs, TGD people in other research have found TGD-centric substance use interventions successful (Takahashi et al., 2022). This mixed evidence underscores that there is no "one size fits all" care for TGD people who desire substance use treatment and that more research into the acceptability of TGD-centric approaches and the factors that influence treatment preferences is needed. Moreover, given that few participants learned of substance use treatment via provider referral, providers need to be aware of local TGD-affirming treatment centers (Agosto et al., 2019; Hughto et al., 2024). Mobilization of the Screening, Brief Intervention, and Referral to Treatment (SBRIT) model with TGD people is one means to potentially redress this pitfall.

4.2. Limitations

There are limitations to this study. We recruited TGD people who were already linked to healthcare (either via a harm reduction organization, community health center, or healthcare provider) and/or TGD community organizations. Therefore, our findings may not reflect the experiences of TGD people who are not connected to health services or community support. Further, the sample was geographically restricted to Rhode Island. There is a need to explore these experiences in less progressive areas of the US. Only two participants were transgender men, warranting further research with a greater representation of this TGD subpopulation. Additionally, we used a gender identity measure developed in collaboration with TGD people and used in prior research that listed non-binary and genderqueer in the same response (Reisner et al., 2017). Although these identities are often used interchangeably, and we provided an option for people to specify a different identity, non-binary and genderqueer identities are not universally synonymous, and future research should list them as distinct response options on gender identity measures. Also, all participants were adults, though young adults, who report higher substance use compared to the general adult population,(White Hughto et al., 2021) were represented in this sample (n = 5 ≤ 25-years-old). Additional qualitative work that centers the experiences of TGD youth and substance use treatment is also needed. Lastly, it is important to acknowledge that the lived experiences of the research team have affected all aspects of this research including the interpretation of the results. Future research would do well to circulate synthesized findings to participants for validation, as this would help mitigate the risk of misinterpreting participant experiences.

5. Conclusion

This qualitative study utilized a socio-ecological framework to understand how cissexism operates jointly across levels of stigma to affect motivations for substance use and substance use treatment experiences among TGD people. Participants reported varied motivations for substance use that had generative and adverse effects on social, psychological, and physical health; this included the extra-medical use of substances to self-treat mental health concerns when health services were inaccessible or withheld due to stigma (Kelly, Biello, & Hughto, 2023). Participants faced structural and institutional barriers to general healthcare

services that impaired access to substance use treatment services, which reinforced the use of substances (Baguso et al., 2022; Colgonis, 2023; Lombardi, 2007; Lyons et al., 2015). Participants also encountered providers not trained in TGD-affirming care practices in substance use treatment settings. Improvements to the referral process to access treatment are indicated, substance use treatment programs should adopt affirming treatment models so that TGD people can benefit from appropriate care that meets their needs, and TGD providers of color should be trained and hired. Lastly, improvements to substance use treatment services alone cannot fully address the sociopolitical and historical factors, such as the ongoing war on drugs and cissexism, that continue to disempower TGD people; thus, our findings point to the need for societal and structural changes to improve substance use treatment experiences for TGD PWUD.

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Table 1

Participant demographics (N = 12).

	n
Age (in years)	
mean; Range: 21–63	36
Gender	
Non-binary or genderqueer	5
Transgender woman	4
Transgender man	1
Man	1
Woman	1
Race	
Black, non-Hispanic	5
White, non-Hispanic	5
Multiracial, non-Hispanic	1
Asian, non-Hispanic	1
Sexual orientation	
Bisexual	4
Straight	2
Queer	2
Gay	1
Pansexual	1
Lesbian	1
Unsure	1
Housing	
Apartment	9
House	2
Friend or family's place	1
Employment status past 30 days	
Part time	7
Full time	2
Unemployed	3
Income sources past 30 days *	
Sex work	7
Reselling goods	4
Selling drugs	3
Social assistance/disability	3
Paid volunteer work	2
Asking online	1
Gig work (e.g., dog walking)	1

Notes:

[*] Participants could select all that applied.

Table 2

Participant health conditions.

	n
Health rating	
Very good	2
Good	3
Fair	5
Poor	2
Medical Conditions, yes *	
Any mental health condition	11
Any substance use disorder	8
Alcohol use disorder	6
HEP-C	3
Respiratory disease	4
HIV	1**
Past year overdose frequency	
No overdose events	6
One overdose	2
Two overdoses	1
Three or more overdoses	3

Notes:

* Participants could select all that applied:

** Participant reported not currently using antiretroviral therapy.

Table 3

Participant substance use and treatment access history.

Substance use, past 30-days *	
Cocaine	10
Alcohol	9
Marijuana	8
Methamphetamine	4
Crack	3
Heroin/fentanyl or “dope”	3
Opioids	1
Benzodiazepines	2
Use of drug of choice, weekly frequency	
One or fewer times per week	3
Three to four times per week	5
Daily	4
Route of administration, past 30 days *	
Ingestion	9
Inhalation	9
Snorting/sniffing	6
Injection	1
Substance use treatment accessed, past 6 months (n=9)	
Counseling	7
Support groups	6
Recovery housing	4
Detox	3
Residential treatment	3
Independently stopped use	2

Notes:

* Participants could select all that applied.