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## Substance Use and Misuse among Sexual and Gender Minority Youth

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### Abstract

Sexual and gender minority youth are at greater risk for substance use and misuse compared to their heterosexual and cisgender peers. This select review of the literature found that recent studies continue to document disparities in substance use. These disparities are partially explained by general and unique stressors as well as social, interpersonal, and cultural factors experienced by sexual and gender minority youth. There are many gaps in the literature, including limited research on protective factors or interventions to prevent or decrease substance use. Despite emerging empirical literature over the past two years, more research is needed to address sexual and gender minority youth's greater risk for substance use. Innovative methodologies and interdisciplinary efforts are needed to help advance our understanding of disparities in substance use in order to reduce and eliminate them and create more affirming experiences for sexual and gender minority youth.

### Keywords

Sexual minority; gender minority; substance use; substance misuse; youth; adolescents

### Introduction

Substance use and misuse among youth is a significant public health problem. Sexual minority youth (SMY; e.g., gay, lesbian, bisexual, queer, or youth with same-sex attractions or behaviors) and gender minority youth (GMY; e.g., transgender, non-binary) are at greater risk for substance use and misuse compared to their heterosexual and cisgender (i.e., non-transgender) peers. Sexual and gender minority disparities are documented along the substance use spectrum from willingness to use substances [1], earlier ages of initiation [2], and greater use and misuse of several substances and their related consequences [••3, 4]. There is increased attention in the literature documenting these disparities and identifying social, psychological, and cultural factors explaining their etiology. The purpose of this

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paper is to provide a concise and select review of the literature in PsycInfo and PubMed on substance use and misuse among sexual and gender minority youth (SGMY) published from 2016 to 2018.

### What are Recent Trends in Substance Use Disparities?

**Sexual orientation disparities.**—Supporting prior work, several recent studies using population- and community-based samples document sexual orientation disparities in substance use. Domestic and international research indicates that SMY are more likely than heterosexual youth to use alcohol, multiple forms of tobacco and nicotine products (e.g., smokeless tobacco, e-cigarettes), marijuana, synthetic marijuana, and illicit drugs recently and in their lifetime [3•, 5,6,7,8•,9]. Sex confers greater risk for substance use, with sexual minority females being at heightened risk [10]. Additionally, bisexual youth and youth with both same- and other-sex attractions are at greater risk for substance use disparities compared to monosexual (e.g., heterosexual, gay, lesbian) and youth with other-sex or same-sex attractions [11, 12]. There is a lack of research examining sexual orientation disparities in substance among racially diverse samples; however, recent work shows that Black and Latinx SMY are more likely to use substances, such as cigarettes, alcohol, and illicit drugs, compared to their heterosexual peers of the same racial or ethnic background [13, 14]. Although substance use among young sexual minority men increases from adolescence into adulthood, there are some noted racial differences among SMY based on type of substance or drug [15]. For example, Black young sexual minority men had lower increases in alcohol use from adolescence to adulthood compared to their White sexual minority counterparts, whereas Latino young sexual minority men had higher increases compared to their White counterparts later in their alcohol use trajectories [15].

Substance use has been decreasing among the youth population over the past few decades, and recent research has focused on understanding whether these trends also translate to declines in sexual orientation disparities. Despite declines in cigarette smoking among all adolescents, sexual orientation disparities persist between SMY and heterosexual adolescents [2, •16]. There are similar declines in alcohol use more generally among youth, yet, SMY continue to have higher rates of alcohol use than heterosexual youth [•17]. These trends also reflect greater risk for girls and young women. Specifically, one study found that sexual orientation disparities in substance use are unchanged and to some extent worsened over time between sexual minority girls compared to heterosexual girls; in contrast, sexual orientation disparities among males narrowed over time [•18].

**Gender identity disparities.**—Research documenting disparities between transgender and cisgender youth is quite limited and greatly needed. Emerging work in the extant literature indicates that transgender youth are two to four times as likely as cisgender youth to use substances recently and in their lifetime, initiate substance use at earlier ages, and use substances in school settings [19–22•]. For example, transgender youth are more likely to use alcohol, cigarettes, prescription pain medication, inhalants, and other drugs (e.g., cocaine) than cisgender peers [20, 21].

Research using community and convenience samples supports these findings and extends this work to document unique disparities for subgroups of transgender youth. In addition to higher rates of alcohol consumption and hazardous use, transgender youth are more likely to experience alcohol-related consequences than cisgender youth (e.g., poor academic, social, or sexual consequences; [4]). Studies specifically on non-binary youth's substance use are rare, but one study found that they have high risk for substance use and other health outcomes [23]. The intersection of minority sexual orientation and gender identity also confers greater substance use risk; specifically, young transwomen between the ages of 16 to 24 years who identify as a sexual minority have higher rates of hazardous drinking and illicit prescription drug use than young transwomen who identify as heterosexual [24].

### **Why Do Disparities in Substance Use Exist and What Drives SGMY's Substance Use?**

There are several etiological factors that explain SGMY's greater risk for substance use and misuse. The majority of theoretical and empirical literature has focused on the role of stress, social norms, interpersonal, and cultural factors.

**Overall stress.**—SGMY experience several adverse and stressful experiences at significantly higher rates than heterosexual and cisgender peers [25, 26]. Three recent studies using nationally-representative datasets demonstrate that traumatic experiences may partially explain SGMY's greater risk for substance use compared to heterosexual and cisgender peers. For instance, victimization (e.g., being threatened by a weapon, bullying, sexual victimization) can partially explain sexual orientation disparities (i.e., injection drugs, cocaine, methamphetamine, and heroin; [27]; alcohol use among bisexual females; [12]) and gender identity disparities in substance use (i.e., heavy episodic drinking, cigarettes, marijuana, illicit drugs, and polysubstances; [19]).

**Stress unique to SGMY.**—Over and above general stressors that all youth may experience, the minority stress model posits that SGMY experience unique stress (i.e., minority stress) specific to their stigmatized identities (e.g., heterosexist, biphobic, or transphobic bullying, discrimination, family rejection) which puts them at greater risk for substance use [28]. This widely examined model has much support in the literature, including meta-analytic work demonstrating that the strongest predictors of substance use among SGMY were minority stress-related factors [29]. Recent work supports this body of research and has advanced it by identifying mechanisms that help explain the relationship between minority stress and substance use. For example, minority stress is associated with more hazardous drinking for SGMY [22, 30••] and alcohol-related consequences for young sexual minority women over time [31]. This relationship is strongest for SGMY who initiate drinking at earlier ages [32]. Moreover, a longitudinal study found that SGMY who were thrown out of their homes by their parents in adolescence were more likely to use substances into adulthood [33].

In addition to distal minority stressors (e.g., SGMY-specific victimization or discrimination), SGMY experience proximal minority stressors, which are the internalization of stigma into one's self concept (e.g., internalized heterosexism or transphobia) or concealment of one's sexual or gender identity [28]. These proximal stressors are also associated with increased

substance use. Internalized heterosexism is associated with cigarette use among young sexual minority men [34]. Additionally, internalized heterosexism is associated with binge drinking only among young sexual minority men with high negative or positive urgency, a factor of impulsivity, compared to those with low urgency [35].

SGMY may turn to substances as a method to deal with negative affect and stress associated with minority stress. For example, using marijuana or drugs to cope mediated the association between sexual orientation-based victimization and marijuana and other drug use problems in a cross-sectional study of young sexual minority men [36]; drinking to cope and drinking to enhance pleasure also mediated the associations between internalized heterosexism and alcohol use problems [36]. Likewise, SMY drank on weekdays as a coping strategy (i.e., minimize worries) and to deal with concerns of rejection by other peers [37]. Moreover, GMY describe drinking to reduce stress, social anxiety, and self-esteem issues as motivations for their alcohol use [4].

**Social, interpersonal, and cultural factors.**—Social learning theory has been utilized as an organizing framework to understand sexual minorities' substance use [38]. Social learning theory posits that behaviors (e.g., substance use) are learned, influenced by the social context, and multiple mediating processes (e.g., cognitions about substance use) explain the relationship between learning and the manifestation of the behavior [39]. For instance, in addition to minority stress, affiliating with substance-using peers partially explains sexual orientation disparities in substance use among youth [30].

There is a burgeoning literature base focusing on social and interpersonal factors driving substance use among SGMY. In a large study of college students, sexual minority students endorsed more favorable beliefs regarding drug use and greater perceived social reinforcement (i.e., greater social rewards from drug use); consequently, these factors partially explained their higher rates of novel drug use (e.g., synthetic marijuana) compared to heterosexual students [7]. Similarly, SMY endorse higher descriptive social norms (i.e., perceptions of the number of close peers who use substances) and permissive injunctive social norms (i.e., perceptions of substance use as approved by others) than heterosexual peers, and these norms partially account for disparities in multiple substances [40]. It is important to note that norms are also shaped by the targeted marketing efforts of tobacco and alcohol companies toward SGMY [41].

The SGMY community is an important resilience factor; however, recent research has documented its potential drawbacks. Since LGBTQ bars were initially the only safe spaces for SGM individuals to find community and resist oppressive norms, they also involved substance use; consequently, substance use became an intertwined part of LGBTQ community events and norms. In fact, recent research shows that participation in the LGBTQ community is associated with greater substance use among SMY [42•] and affinity with the gay community is associated with being a smoker among young sexual minority men [34].

## What might Help Mitigate SGMY's Risk for Substance Use?

There is limited research examining empirically-based prevention or treatment interventions to help address SGMY's substance use. Among the extant literature, individual, family, and structural factors provide important targets for intervention [43••].

There are currently no empirically developed treatment interventions developed specifically to target SGMY's substance use. Recent work has examined integrated systems of care models more generally and found support for their efficacy in managing substance use among SGMY in the welfare system (e.g., [44]) or who are experiencing homelessness [45]. Although these are important treatment approaches, they are limited to subgroups of SGMY who are further marginalized. Culturally-sensitive treatments may be useful as SGMY are interested in the affirmation and social supports that culturally tailored group smoking cessation interventions would provide; however, they have concerns that other group members would trigger their smoking [46••].

Given that a prior family-based intervention reduced drug use among SGMY[47], future work needs to target parental and family experiences of SGMY. In fact, recent work shows that parent connectedness and parental monitoring play an important role in preventing and decreasing substance use among SGMY [••48–50].

School engagement and structural factors, such as school-level organizations or state or federal-level legislation, also influence SGMY's substance use [•51]. SMY who are engaged in school are less likely to use alcohol over time [52]. SGMY in schools with student organizations focused on SGMY and their allies are less likely to use substances than youth without these organizations [53]. SMY living in jurisdictions with SGMY-affirmative school climates are less likely to have heavy episodic drinking days than SMY living in non-affirming jurisdictions [•54]. Taken together, future interventions should work to create an affirming and supportive environment for SGMY by passing inclusive policies and legislation and integrating affirming programs into schools.

**Future Directions**—Despite emerging empirical literature over the past two years, more research is needed to better understand SGMY's greater risk for substance use, and especially among sub-groups who are at greatest risk (e.g., bisexual, female, and transgender youths) or who are understudied (e.g., racial and ethnic minorities). Additional work is needed to disentangle differences in disparities by sexual orientation identity, attraction, and behavior as well as gender identity, transition, and expression. Since most studies aggregate youth across ages, more attention is needed to discern unique factors associated with use in young adolescence as compared to young adulthood [55]. There is also a significant need to identify resilience factors as well as mechanisms that can be targets of prevention and treatment for SGMY. Given differences in types of substance use, work is also needed to understand unique etiological factors that may explain use and addiction to certain substances over others. Finally, given the overreliance on correlational research, different methodologies (e.g., laboratory research) are needed to advance the field. For example, pilot geospatial research has demonstrated that spatial clustering was associated with tobacco use, wherein SMY were more likely to use tobacco in certain regions of a city over others [56]. Similar innovative and interdisciplinary work is needed to help advance our understanding

of disparities in substance use in order to eliminate them and create more affirming experiences for SGMY.

## Acknowledgements

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## Abbreviations

<b>SMY</b>	sexual minority youth
<b>GMY</b>	gender minority youth
<b>SGMY</b>	sexual and gender minority youth
<b>LGBTQ</b>	lesbian, gay, bisexual, transgender, queer

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### Highlights

- Sexual and gender minority youth are at greater risk for substance use and misuse.
- Disparities are partially explained by general and unique stressors, social, interpersonal, and cultural factors.
- Gaps in the literature include limited research on protective factors or interventions to prevent or decrease substance use.