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# The Prevalence and Determinants of Substance Use Disorders Among Sexual Minority Adults in the United States

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THE PREVALENCE AND DETERMINANTS OF SUBSTANCE USE DISORDERS AMONG  
SEXUAL MINORITY ADULTS IN THE UNITED STATES

by

KATHERYN OLMOS

A thesis submitted in the fulfillment of the requirements for the  
Honors in the Major program in Sociology in the College of Sciences  
and in the Burnett Honors College  
at the University of Central Florida  
Orlando, Florida

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Thesis Chair: Dr. Jason A. Ford, Ph.D.

## **ABSTRACT**

Substance Use Disorders (SUD) continue to be a significant public health concern as drug use reaches a worldwide high. Research has consistently shown that lesbian, gay, and bisexual (LGB) individuals are at a heightened risk of having an SUD than their heterosexual counterparts. While notable work has been done to understand the factors contributing to SUD among LGB populations, there is a substantial gap in research regarding the intersection of race/ethnicity and sexual identity. This study aims to address this gap by investigating the disparities in SUD among sexual minorities across different racial/ethnic and sex groups and the determinants that underlie these disparities. This research involves a statistical analysis of combined data from the 2021-2022 National Survey on Drug Use and Health (NSDUH) to explore prevalence rates and identify demographic and socioeconomic factors associated with disparities in SUD among sexual minority adults (ages 18 and older) in the United States, considering factors such as race/ethnicity, gender, socioeconomic status, religiosity, familism, and language. By understanding the prevalence and determinants of SUD within this population, healthcare providers, policymakers, and advocates can work together to develop prevention and intervention strategies to reduce these disparities and improve the overall well-being of LGB individuals in the United States.

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## **CHAPTER ONE: INTRODUCTION**

About 4.3 percent of adults (age 18 or older) identify as lesbian/gay and bisexual (LGB) (Medley et al., 2016), also referred to as sexual minorities. People who identify as LGB have diverse experiences with discrimination, stigma, and other challenges that hinder their overall well-being. Several studies have found that sexual minorities are disproportionately affected by interrelated stressors, such as sexual assault, violence, and harassment (Perry & LeBlanc, 2021). The stigma and discrimination associated with sexual minorities are significant factors involved in health disparities among sexual minorities. As a result of coping with marginalization, sexual minorities are disproportionately affected by substance use disorders (SUD and mental health issues (Spiker et al., 2021; Slater et al., 2017). LGB individuals experience higher rates of alcohol use, smoking, marijuana use, and illicit drug use than their heterosexual counterparts (Schuler et al., 2021). These disparities are exceptionally higher for Bisexual women (Medley et al., 2016; Kerridge et al., 2017; CBSHQ, 2023). In 2020, approximately 41.3 percent of sexual minority adults (ages 18 or older) reported using marijuana in the past year (CBSHQ, 2023), compared to 18.7 percent of the general population (NIH, 2023). Furthermore, sexual minority adults are approximately twice as likely to misuse opioids (CBSHQ, 2023), both prescription opioids or heroin and have an alcohol use disorder in the past year than the general population (NIH, 2023).

SUD continue to be a significant public health concern as drug use reaches a worldwide high. According to the United Nations Office of Drugs and Crime, in 2021, there were approximately 39.5 million individuals worldwide suffering from an SUD. Research has consistently shown that LGB individuals are at a heightened risk of having an SUD than their

heterosexual counterparts. While substantial work has been done to understand the factors contributing to SUD among LGB populations, there is a notable gap in research concerning the intersection of ethnicity and sexual identity. This thesis aims to address this gap by investigating the prevalence of SUD among sexual minorities and the determinants which underlie these disparities. This study will involve a statistical analysis of data from the 2021-2022 National Survey on Drug Use and Health (NSDUH) to explore prevalence rates and identify demographic and socioeconomic factors associated with disparities in SUD among various racial/ethnic sexual minority adults (ages 18 and older, considering factors such as financial hardship, familism, and religiosity). The findings are expected to expose disparities concerning SUD among sexual minorities as well as factors influencing such disparities. By understanding the prevalence and determinants of SUD within this population, healthcare providers, policymakers, and advocates can work together to develop prevention and intervention strategies to reduce these disparities and improve the overall well-being of LGB individuals in the United States.

## **CHAPTER TWO: LITERATURE REVIEW**

Social and economic factors contribute to the disproportionate rates of SUD among sexual minorities. Individuals facing economic hardship, such as poverty and limited economic opportunities, may have heightened levels of stress, and individuals may use substances as a coping mechanism (Spiker et al., 2021). Studies show that sexual minorities face more economic disparities than their heterosexual counterparts, including lower income despite having the same occupation, education, and experience, more use of public assistance and food stamps, and more cash assistance (Schuler et al., 2021). Furthermore, economic instability can also hinder access to education and resources that could prevent or treat SUD. Educational attainment can result in better socioeconomic outcomes and access to resources. Research shows that with LGB individuals with a high school diploma or lower are 67 percent more likely to have a SUD than those who obtain a college education (Barnes et al., 2014). Economic instability and limited educational opportunities can impede access to information and services related to substance use prevention and treatment.

Hispanic LGB individuals in the United States experience unique stressors and experiences with discrimination compared to non-Hispanic LGB individuals. Few studies have focused on the intersectionality of sexual minority status and Hispanic ethnicity in relation to SUD. Many researchers have acknowledged that individuals with a sexual minority status and ethnic minority status increase disparities and marginalization, with combined experiences of homophobia and racism (Rogers et al., 2017; Slater et al., 2017). Hispanics in the United States have lower income, higher rates of poverty, lower educational attainment, and are more likely to work in high-risk/low-social position occupations (Morales et al., 2002), which may increase the



risk of SUD. Language barriers may also impact access to education, employment, and healthcare. Cultural aspects of the Hispanic community, such as familial support and religion, may serve as SUD prevention tools and treatment for Hispanic LGB individuals.

### **Family**

Familism is defined as a cultural value that places an emphasis on strong family bonds and prioritizes family relationships for social support (Calzada et al., 2013; Valdivieso-Mora, 2016). Many scholars have identified familism as a significant cultural value among Hispanic cultures (Calzada et al., 2013; Katiria Perez & Cruess, 2014; Valdivieso-Mora, 2016). With a strong emphasis on familial ties, the family becomes a source of guidance and is taken into consideration when making decisions. Family members can provide support during times of distress. This emphasis on family has been associated with lower rates of substance use, lower rates of mental health problems, and better psychological adjustment (Calzada et al., 2013). Few studies have explored the influence of family ties on SUD among Hispanic LGB individuals. However, one study found that Hispanic sexual minorities experience more familial rejection and adverse mental health outcomes than non-Hispanic sexual minorities (Przeworski & Piedra, 2020). Hispanic cultural norms tend to prioritize traditional gender roles and conservative religious beliefs that create negative perceptions of sexual minorities. In one study, sexual minority men reported discrimination from families who upheld traditional gender roles as a source of stress, which resulted in them moving away from family (Przeworski & Piedra, 2020). Nevertheless, familial ties and support may decrease the likelihood of SUD and promote overall well-being among Hispanic LGB individuals.

## **Religion**

Religion holds significant cultural value in the Hispanic community. Religion can provide social support and promote healthy behaviors that can decrease the likelihood of adverse health outcomes, such as SUD. Religious activities, such as prayer and other forms of worship, can incur positive emotions and act as a positive coping mechanism for stress, resulting in positive mental health outcomes. Some studies find that religious involvement decreases the risk of alcohol use disorder (Meyers et al., 2017), tobacco use disorder, and cannabis use disorder (Livne et al., 2021). The frequency of religious involvement is essential in the extent to which its benefits impact an individual. Hispanics who have high levels of religious involvement have a lower likelihood of depression, anxiety, and SUD than Hispanics who have low to moderate levels of religious involvement (Moreno & Cardemil, 2018). Few studies explore the relationship between religion and adverse mental health outcomes, such as SUD among the Hispanic LGB community. However, research shows that LGB adults report lower attendance of religious services than their heterosexual counterparts (Schuler et al., 2021). This may be due to conservative religious beliefs among Hispanic communities that condemn sexual minorities. Individuals who identify as LGB may distance themselves from religion due to the fear of discrimination. LGB individuals may turn to substances to cope with the internal conflict between their sexual or gender identity and their religious beliefs. Nevertheless, one study found that Hispanics reported feeling supported when they turned to religion regarding their struggle with their sexual minority status (Gattamorta & Quidley-Rodriguez, 2018). In another study, being religious increased abstinence from drinking and decreased the risk of harmful substance

use among sexual minority women (Drabble et al., 2016). Therefore, lack of religion or religious participation may increase the risk of SUD among Hispanic sexual minorities.

### **Conclusion**

A consistent source of social support can promote better health outcomes for sexual minorities (Perry & LeBlanc, 2021). However, many studies find that Hispanic LGB individuals have lower rates of family connectedness and higher rates of social isolation (Schuler et al. 2021; Kim & Fredriksen-Goldsen, 2016), which may increase the likelihood of SUD. Studies show that social networks can equip sexual minorities with healthy coping resources and social support, promoting overall well-being (Perry & LeBlanc, 2021). Social networks, such as family and religion, can provide emotional support and mediate the impact of discrimination and stigma for Hispanic LGB individuals. Ultimately, cultural aspects of the Hispanic community are valuable in identifying determinants and possible protective factors of SUD among Hispanic LGB individuals, to create culturally sensitive preventative measures and treatment.

## **CHAPTER THREE: HYPOTHESIS**

It is expected we will find disparities in SUD between Heterosexual and sexual minority adults. Adults who identify as LGB will exhibit a higher likelihood of reporting an SUD than Heterosexual adults. The relationship between sexual identity and SUD will vary across different racial groups. More specifically, Black and Hispanic sexual minorities will show a higher likelihood of reporting an SUD than non-Hispanic White counterparts. It is anticipated that bisexual Hispanic females will demonstrate heightened rates of reporting an SUD.

Sexual minority adults who have higher levels of religiosity will have a decreased likelihood of having an SUD. This association may be stronger among Hispanic sexual minorities due to their strong cultural connection to religion. However, proximity to family members may mitigate the effects of religiosity, as familial support may be beneficial in the prevention and treatment of SUD among sexual minorities. Therefore, LGB adults who have reported living with family are anticipated to exhibit lower rates of SUD.

## CHAPTER FOUR: METHODOLOGY

### Data

Data will be acquired from the National Survey on Drug Use and Health (NSDUH), combined 2021-2022. The NSDUH is an annual survey conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA) to collect public use data on substance use, SUD, mental health, and use of treatment services among the civilian, noninstitutionalized U.S. population aged 12 and older. Survey respondents are identified through an independent, multistage area probability design for each state and the District of Columbia to capture a nationally representative sample. The NSDUH excludes questions about sexual identity for minors ages 12-17, confining this study to U.S. adults aged 18 years or older (N = 89,431). The NSDUH collects all survey items to increase accuracy and honesty using computer-assisted survey interviewing. Further information regarding the methodology of the NSDUH is available elsewhere (CBSHQ, 2023). Due to the use of publicly available data, the institutional review board at the University of Central Florida determined this project to be exempt.

### Measures

**SUD.** The NSDUH identifies individuals with a substance use disorder (SUD) based on the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders criteria, which includes illicit drug or alcohol dependence or abuse (DSM-V, 2013). We will utilize data on reported past year illicit drug or alcohol use SUD, coded no versus yes.

**Sexual Identity.** To evaluate sexual identity, the NSDUH asks participants, “Which one of the following do you consider yourself to be?” and provides the following answer choices:

“heterosexual, that is straight,” “lesbian or gay,” “bisexual,” and “don’t know.” For this study, participants who did not respond to this question or responded with “don’t know” were excluded from our analysis. This analysis includes data from respondents who reported identifying as Heterosexual, Lesbian, Gay, or Bisexual.

**Race and Sex.** We will use a combined measure of sex and race, including male white non-Hispanic, female white non-Hispanic, male black non-Hispanic, female black non-Hispanic, male Hispanic, female Hispanic, and other male or female.

**Familism.** Familism may influence the likelihood of having a SUD. Familism will be identified by proximity to family members so we will include a measure of household (HH) composition. We will analyze whether the respondent lives with children under the age of 18 or family members aged 65 or older, coded 0 = no, 1 = yes.

**Religiosity.** The NSDUH does not include questions about specific religions. However, it does contain questions reflecting the influence of religious or spiritual beliefs, such as asking participants the number of times they have attended religious services in the past 12 months, coded 0 = fewer than 5 times or 1 = 6 or more times. The data also contains information on how important the participant’s religious beliefs are to them, coded 0 = disagree or 1 = agree.

**Language.** This study will also include a sub-analysis of how well Hispanic participants speak English to identify its role in access to resources. Language capability will be analyzed by the number of participants who completed the interview in English or Spanish and by how well the participants reported speaking English (1) very well (4) not at all.

**Health.** SUD may be affected by health disparities so we will also include a measure of overall health, coded 0 = excellent, very good, good or 1 = fair or poor. Mental health will be

determined by whether the participants have had serious psychological distress in the past year. Since health can be influenced by access to healthcare, we will also analyze whether the respondents are covered by any type of health insurance (insured vs. uninsured).

**Demographics.** Basic demographic variables will be measured for potential confounding factors, including age (18-25, 26-34, 35-49, 50+), marital status (married, widowed, separated/divorced, or never married), education level (less than high school, high school, some college/2-year college degree, or 4-year college degree), employment (full-time, part-time, unemployed, not in labor force), and type of county where respondent resides (large metro, small metro, or nonmetro). To further identify income and potential economic hardship, we will include an analysis on income and whether the participants participated in one or more government assistance program.

### **Analytic Strategy**

The initial phase of the analysis involved examining the association between sexual identity and the likelihood of reporting an SUD. Then, a bivariate chi-square test was used to examine the association between sexual identity and the likelihood of reporting an SUD within each racial/ethnic group and sex category independently. This test addresses our main research question, allowing us to identify any significant differences in SUD prevalence between sexual identity and racial/ethnic subgroups. Following the bivariate analysis, three separate logistic regression models were constructed for white, black, and Hispanic males. Similarly, logistic regression analyses were conducted for females, including three separate models, one for white, black, and Hispanic respondents. The logistic regression models allow us to look at the

association between sexual identity and SUD while accounting for the influence of all the variables within the model.



## CHAPTER SIX: RESULTS

The characteristics of the samples for all measures are displayed in Table 1. From a sample of 89,431 adult respondents, 91.29% reported being heterosexual, 2.63% homosexual, and 5.64% bisexual. Additionally, 17.79% of respondents reported having an SUD in the past year, including 16.29% of heterosexuals, 29.32% of homosexuals, and 37.15% of bisexuals.

*Table 1: Sample Characteristics*

	<b>All Respondents</b>	<b>Heterosexual</b>	<b>Homosexual</b>	<b>Bisexual</b>
	N = 89,431	N = 78,192	N = 2,710	N = 8,157
Substance Use Disorder	17.79%	16.29%	29.32%	37.15%
Heterosexual	91.29%	---	---	---
Homosexual	2.63%			
Bisexual	5.64%			
White Male	30.70%	31.36%	36.69%	18.48%
White Female	31.80%	31.16%	24.85%	45.48%
Black Male	5.50%	5.68%	6.52%	2.33%
Black Female	6.46%	6.34%	7.08%	7.93%
Hispanic Male	8.40%	8.52%	10.56%	5.26%
Hispanic Female	8.45%	8.24%	7.05%	12.19%
Other (Male/Female)	8.67%	8.67%	7.21%	8.29%
18-25 years old	13.35%	11.41%	20.27%	40.96%
26-34 years old	15.66%	14.74%	21.02%	28.06%
35-49 years old	24.42%	24.73%	23.88%	19.31%
50 years and older	30.94%	49.10%	34.82%	11.64%
Married	48.73%	51.05%	24.42%	23.19%
Widowed	6.05%	6.42%	2.20%	1.67%
Divorced/Separated	14.27%	14.59%	9.67%	11.07%
Never Married	30.94%	27.92%	63.36%	64.05%
Employed Full-Time	45.84%	45.88%	51.03%	43.90%
Employed Part-Time	12.41%	11.93%	13.87%	19.37%
Unemployed	4.69%	4.36%	7.76%	8.62%
Not in Labor Force	37.04%	37.81%	27.32%	28.09%
High School Dropout	10.03%	10.14%	6.18%	9.26%
High School Graduate	26.96%	27.10%	22.42%	26.37%
Some College	30.40%	29.92%	32.94%	37.22%
College Graduate	32.58%	32.82%	38.44%	27.12%
Government Assistance	20.97%	20.54%	22.26%	27.19%
Uninsured	9.29%	9.11%	8.62%	12.01%

	<b>All Respondents</b>	<b>Heterosexual</b>	<b>Homosexual</b>	<b>Bisexual</b>
Large Metropolitan	54.30%	54.10%	63.16%	52.27%
Small Metropolitan	31.28%	31.19%	28.57%	34.81%
Non-Metropolitan	14.44%	14.69%	8.26%	12.90%
Psychological Distress	14.39%	12.00%	26.96%	46.66%
Poor Health	15.24%	14.99%	17.97%	17.85%
Lives with Child (17 years or younger)	33.25%	33.47%	16.60%	36.84%
Lives with Adult (65 years or older)	31.17%	32.72%	18.70%	12.15%
Church Attendance (6+)	27.34%	28.77%	11.83%	11.57%
Importance of Religious Beliefs	64.91%	67.02%	43.27%	40.45%

The results shown in Table 2 identify the association between sexual identity and SUD, based on individual gender/race groups. When examining the impact of race and sexual identity on SUD among white adults, we uncover some significant findings. For both males (38.90%) and females (39.45%) the highest prevalence of SUD was among bisexual adults. For female Black adults, sexual minorities had a higher prevalence of SUD compared to heterosexual adults, but there was no significant difference between homosexual and bisexual adults for male Black adults. Lastly, for both male (33.77%) and female (34.54%) Hispanics, homosexual adults reported the highest prevalence of SUD.

*Table 2: Substance Use Disorder by Sexual Identity*

	<b>Heterosexual</b>	<b>Homosexual</b>	<b>Bisexual</b>	<b>Chi-Square</b>
White Males	19.63%	32.10%	38.90%	32.08***
Black Males	22.70%	30.56%	32.78%	1.25
Hispanic Males	20.74%	33.77%	31.47%	3.41*
White Females	13.36%	21.26%	39.45%	192.56***
Black Females	12.72%	32.10%	32.25%	30.02***
Hispanic Females	10.94%	34.54%	25.28%	61.87***

Table 3 shows the results of three separate logistic regressions that examine the association between sexual identity and SUD across racial/ethnic groups among males. The only significant finding related to sexual identity was that white bisexual males (AOR = 1.32) were more likely to report having an SUD than white heterosexual males. There were no significant differences for sexual identity for Black or Hispanic adults. Several variables were significantly associated with SUD across each racial/ethnic group and are worth noting. Adults who reported serious psychological distress were more likely to report an SUD. Adults with a child under age 18 in the household or those who attended church more frequently were less likely to report an SUD. Finally, the English language variable among Hispanic adults was significant, as respondents whose English was worse were less likely to report an SUD.

*Table 3: Logistic Regression for Male Adults*

	<b>White Males</b> N = 24,633	<b>Black Males</b> N = 4,236	<b>Hispanic Males</b> N = 6,313
Heterosexual	---	---	---
Homosexual	1.35	1.27	1.16
Bisexual	1.32*	1.27	1.21
18-25 years old	---	---	---
26-34 years old	1.18*	1.55**	1.61**
35-49 years old	1.07	1.42	1.17
50 years and older	0.66**	0.88	0.73
Married	---	---	---
Widowed	0.91	1.35	0.13*
Divorced/Separated	1.66***	1.04	1.24
Never Married	1.43***	1.24	1.11
Employed Full-Time	---	---	---
Employed Part-Time	1.03	0.76	1.13
Unemployed	1.16	1.21	0.97
Not in Labor Force	0.80*	0.81	1.00
High School Dropout	---	---	---
High School Graduate	0.69**	0.97	1.14
Some College	0.79	0.77	1.06
College Graduate	0.69**	0.68	0.86
Government Assistance	1.52***	1.45*	1.42**
Uninsured	1.24*	0.85	0.79

	<b>White Males</b>	<b>Black Males</b>	<b>Hispanic Males</b>
Large Metropolitan	---	---	---
Small Metropolitan	0.97	0.99	1.14
Non-Metropolitan	0.89	0.79	0.82
Psychological Distress	2.38***	2.89***	2.51***
Poor Health	1.49***	1.57*	1.17
Lives with Child (17 years or younger)	0.80**	0.77*	0.69**
Lives with Adult (65 years or older)	0.72**	0.62**	1.03
Church Attendance (6+)	0.72***	0.55*	0.50**
Importance of Religious Beliefs	0.80**	0.99	0.86
English - Very Well	---	---	---
English - Well			0.64**
English - Not Well			0.46**
English - Not at all			0.30**

- \*  $p < .05$ . \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 4 presents three distinct logistic regression analyses that examine the association between sexual identity and SUD across racial/ethnic female groups. This analysis indicated many notable findings. Among homosexuals, Black (AOR = 2.55) and Hispanic (AOR = 2.22) females held a significantly greater likelihood of reporting an SUD than their heterosexual counterpart. Bisexual females across all racial/ethnic groups were significantly more likely to report an SUD than their heterosexual counterparts. Several variables were found to be significantly related to reporting an SUD. Female adults who report serious psychological distress are significantly more likely to report a SUD. Additionally, female adults with a child under 18 were significantly less likely to report a SUD. Lastly, female adults who reported poorer English were significantly less likely to report an SUD.

Table 4: Logistic Regression for Female Adults

	White Females N = 30,659	Black Females N = 5,703	Hispanic Females N = 8,169
Heterosexual	---	---	---
Homosexual	0.88	2.55**	2.22**
Bisexual	1.82***	1.86***	2.12***
18-25 years old	---	---	---
26-34 years old	1.22*	1.07	1.16
35-49 years old	1.21	1.23	1.03
50 years and older	0.93	0.66	0.62
Married	---	---	---
Widowed	0.71	1.19	0.99
Divorced/Separated	1.34*	1.68*	1.50
Never Married	1.43***	1.33	1.52*
Employed Full-Time	---	---	---
Employed Part-Time	1.12	1.13	0.85
Unemployed	1.13	1.24	0.89
Not in Labor Force	0.96	0.79	0.63***
High School Dropout	---	---	---
High School Graduate	1.02	0.98	1.18
Some College	1.28	1.15	1.25
College Graduate	1.14	0.98	1.10
Govt. Assistance	1.35***	1.32	1.36**
Uninsured	1.12	1.04	0.90
Large Metropolitan	---	---	---
Small Metropolitan	0.84*	0.78	0.96
Non-Metropolitan	0.85	0.71	0.87
Psychological Distress	2.95***	3.36***	2.89***
Poor Health	1.22*	0.93	1.43*
Lives with Child (17 years or younger)	0.75**	0.74**	0.70*
Lives with Adult (65 years or older)	0.67*	0.79	0.64*
Church Attendance (6+)	0.52***	0.48***	0.88
Importance of Religious Beliefs	0.83**	1.02	0.67**
English - Very Well	---	---	---
English - Well			0.80
English - Not Well			0.49*
English - Not at all			0.13*

• \*  $p < .05$ . \*\*  $p < .01$ , \*\*\*  $p < .001$

## CHAPTER SEVEN: DISCUSSION

This study examined disparities in SUD between heterosexuals and sexual minorities at the intersection of race/ethnicity and gender. For the purpose of this study, sexual minorities are identified as homosexual and bisexual individuals and are compared to heterosexuals. This analysis indicated that sexual minority adults in this nationally representative sample were more likely to report having an SUD compared to the general U.S. population, with bisexual individuals demonstrating the most disproportionate rates of SUD reporting, consistent with previous research (Spiker et al., 2021; Slater et al., 2017).

Significant disparities were uncovered when accounting for race/ethnicity and gender. Non-white sexual minority males and females exhibited higher rates of SUD than their non-Hispanic White counterparts. Within racial/ethnic groups, this analysis revealed that Black sexual minority adults evidenced a higher prevalence of reporting an SUD than their heterosexual counterparts, with no differences found among Black homosexual and bisexual adults. These findings have been evident in other recent research (Kelly et al., 2021). Additionally, Hispanic homosexual adults reported the highest prevalence of SUD. This trend was consistent among females and males. Using an intersectional approach, the heightened unique stressors faced by individuals belonging to multiple marginalized groups may contribute to these disparities. This finding aligns with recent research associating the relationship between sex, race, and sexual identity with SUD (Meriegh & Bradford, 2014).

When examining the association between sexual identity and SUD across racial/ethnic groups among males, significant findings were revealed. White bisexual males were found to be more likely to report having an SUD compared to white heterosexual males. However, there

were no significant differences in sexual identity for black or Hispanic males, similarly found in recent research (Kelly et al., 2021; Schuler et al., 2020).

The analysis among racial/ethnic female groups revealed compelling findings which were not significant among males. Black and Hispanic sexual minority females exhibited significantly higher likelihoods of reporting an SUD compared to their heterosexual counterparts.

Furthermore, bisexual females across all racial/ethnic groups were significantly more likely to report an SUD than their heterosexual counterparts. These disparities were higher among racial/ethnic minority bisexual women. These findings were consistent with a similar study using the 2015-2018 NSDUH which found significant disparities in substance use among Black and Hispanic sexual minority women, especially bisexual women, compared to their white counterpart (Schuler et al., 2020).

Several variables were significantly associated with SUD across each sex and racial/ethnic group, including serious psychological distress, household composition, and frequency of church attendance. Adults who reported serious psychological distress were more likely to report an SUD. Adults with a child under age 18 in the household or those who attended church more frequently were less likely to report an SUD. Sexual minority adults are at higher risk of experiencing family rejection and lack of social support, which tends to result in heightened stress and, thus, more risky behaviors, such as substance use (Matthews et al., 2014). Other studies have indicated that religiosity can promote psychological well-being among sexual minorities by providing a source of social support (Barnes & Meyer, 2012).

Notably, the sub-analysis conducted on Hispanic sexual minorities and the English language variable was significant, as respondents whose English was worse were less likely to report an

SUD. This finding was consistent among males and females. The ability to speak English is a valuable predictor of acculturation. Research has shown that heightened levels of acculturation are correlated with a higher chance of experiencing discrimination, thus increasing the likelihood of coping through substance use (Mathews et al., 2014).

The Minority Stress Model is commonly used to contextualize the adverse health outcomes experienced by minorities. This notion was first introduced to analyze mental health issues among LGB individuals, articulating that sexual minorities face diverse social stressors, such as homophobia and discrimination which results in a higher risk of experiencing negative mental health outcomes (Meyer, 2003). Research has consistently shown that sexual minorities are disproportionately affected by SUD, largely due to coping with the discrimination and stigma associated with being a sexual minority (Matthews et al., 2014). The stress that comes along with identifying as a sexual minority accumulates when an individual is a member of multiple marginalized communities. This may be the case for bisexual females, who have consistently been shown to be at a heightened risk for adverse health outcomes, such as SUD (Medley et al., 2016; Kerridge et al., 2017; CBSHQ, 2023; Schuler et al., 2020). Bisexual females have such adverse health outcomes because of the discrimination bisexuals face from both the heterosexual and homosexual communities along with the marginalization that comes from being a woman (Ehlke et al., 2020). The minority stress model can be used to further analyze the combined influence of race/ethnicity, sexual identity, and gender on SUD among racial/ethnic minority LGB women, who have multiple marginalized identities that increase stress.



## **Limitations**

While the NSDUH serves a valuable resource in providing data on substance use and associated behaviors, there are some limitations to consider. Firstly, the NSDUH collects data from noninstitutionalized individuals aged 12 and older residing in households, potentially excluding certain populations such as homeless individuals, those in correctional facilities, and institutionalized individuals. This sampling bias may limit the generalizability of the findings to these excluded populations. Additionally, the NSDUH utilizes a cross-sectional approach, meaning it captures data at a single point in time and cannot track changes over time, resulting in challenges in establishing causality. Furthermore, the NSDUH relies on self-reported data, which can be subject to biases in survey data. Still, the NSDUH uses self-interviewing to help with potential bias. However, research shows that self-reported data tends to be reliable for substance use and sexual identity (Johnston & O'Malley, 1986). Moreover, it is important to consider non-response and self-selection biases in a study such as the one utilized. Though the NSDUH is designed to collect data from a nationally representative sample, a significant portion of the population declined to participate in this study. As a result, certain groups may be underrepresented in the sample. To address this concern, weighting techniques were employed. Adjusting data to account for non-response helps mitigate potential biases and improve accuracy in results. Lastly, the NSDUH lacks questions and answer choices pertaining to diverse sexual and gender identities. Further research is needed to address the needs of diverse marginalized identities.

## **Recommendations**

This study provides various significant findings to guide future research on SUD among sexual minorities. This study uncovered significant associations between sexual identity, race/ethnicity, and SUD among women that were not found among men. The Minority Status Model can be useful in research regarding the heightened risk of adverse health outcomes, such as SUD, among sexual minority women, especially bisexual women and racial/ethnic minority LGB women. Through the use of this framework, future work on SUD can result in a further understanding of minority stress to develop ways to reduce the likelihood of adverse health outcomes among sexual minorities of diverse backgrounds.

Furthermore, there is a lack of research and data regarding the long-term outcomes of religious involvement and familial support in terms of treating SUD. A longitudinal investigation could be helpful in finding the efficacy rate of familism and religiosity in treating SUD among sexual minorities. Additionally, qualitative research can be useful to gather more insight regarding the experiences of sexual minorities when it comes to religiosity, familial support, intersecting identities, and SUD. Further research is needed to include gender-nonconforming participants, such as non-binary and transgender individuals.

## **CHAPTER EIGHT: CONCLUSION**

The findings of this study shed light on the disparities in SUD among sexual minority adults in the United States, especially among sexual minority women, highlighting the importance of adopting an intersectional approach to the minority stress model for understanding these complex concerns. This research underscores the need for a comprehensive understanding of the intersecting factors contributing to SUD disparities among sexual minority adults. By acknowledging the complexity of these disparities and addressing the unique challenges faced by individuals with multiple marginalized identities, policymakers and healthcare providers can develop more targeted prevention and intervention programs to mitigate the adverse effects of substance misuse within marginalized communities.

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