

The Relationship Between Mental Health, Stress, and Substance Use Among Missouri College Students

Partners in Prevention (PIP) is Missouri's higher education substance misuse consortium dedicated to creating healthy and safe college campuses. This year, the coalition is comprised of 25 public and private colleges and universities in the state, 24 of whom have data included in the 2023 survey. The campuses in the coalition work to prevent high-risk behaviors by implementing evidence-based strategies including education, social norming campaigns, policy review and enforcement, and more. To measure progress and obtain data needed for the implementation of programs, PIP created the Missouri Assessment of College Health Behaviors (MACHB) Survey. The MACHB is an annual, online survey that has been implemented each spring since 2007. The survey assesses the roles that alcohol, cannabis, other drugs (illegal and prescription), tobacco/nicotine, interpersonal violence, and mental health concerns have on student health and well-being. This research brief will explore the intersection of mental health concerns and substance use among Missouri college students.

Introduction

Although a time of exploration, college often introduces a variety of unfamiliar stressors and new challenges for students.¹ With balancing multiple responsibilities, such as relationships, academics, and finances, students can experience high stress, potentially contributing to increased rates of mental health concerns and substance use as a form of coping.¹ Research has shown that symptoms of depression are more prevalent among college students, which are closely related to substance use disorders (SUD).² Therefore, it is critical to examine the intersection of stress levels and substance use, as well as the intersection of experiencing a mental health concern and substance use, in order for campuses to effectively target students' needs.

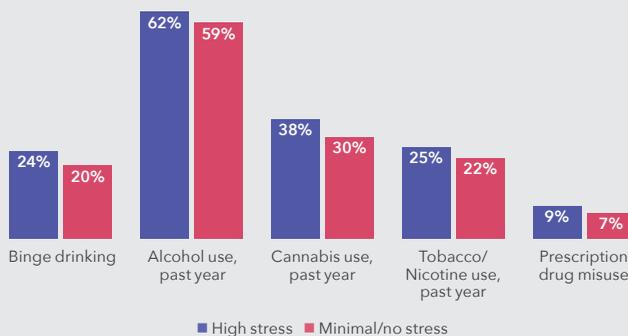
Stress and Substance Use

According to the 2023 MACHB survey, 31% of Missouri collegestudentsreportedexperiencingoverwhelming stress, while 5.2% reported experiencing unbearable stress in the 2 weeks prior to completing the survey. Additionally, 56% of students reported stress that was manageable or little stress, with another 7.5% reporting minimal or no stress. When asked to report what they had done in the past two weeks to relieve stress, 16% of students reported drinking alcohol, 14% reported using marijuana/cannabis, and 8.8% reported using tobacco/nicotine products. However, when we compare students who experienced high stress (overwhelming and unbearable) to students with minimal or no stress, there are noticeable differences in these numbers. Among students with high stress, 20% drank alcohol, 16% used marijuana/cannabis, and 10% used tobacco/nicotine products to relieve stress,

compared to 14%, 12%, and 8.2% among students with minimal or no stress, respectively.

Furthermore, when we compare students who experienced high stress to students experiencing minimal or no stress, there are distinctions in terms of general substance use. Chart 1 further illustrates these differences based on specific substances. Students who reported high stress had higher rates of substance use in all categories compared to students with minimal or no stress. For reference, binge drinking refers to consuming 5+ drinks for men or 4+ drinks for women within a 2-hour period at least once in the past two weeks, while prescription drug misuse refers to using prescription drugs without a doctor's prescription, or a student using their valid prescription in a way other than prescribed.

Chart 1: Stress & Substance Use

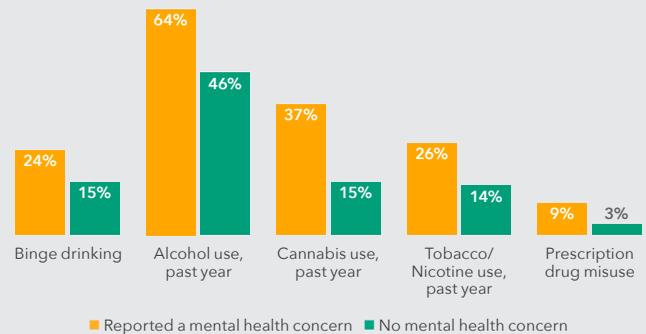


Mental Health and Substance Use

In 2023, approximately 78% of Missouri college students reported experiencing at least one mental health concern in the past year. In particular, the most prominent mental health concerns reported by all students were anxiety (67%), depression (54%), panic attacks (30%), chronic sleep issues (26%), and disordered eating (24%). Unlike the stress-related questions within the MACHB survey, students are not asked to report how they manage or cope with their mental health concerns. However, when comparing students who reported at least one mental health concern in the past year to students who reported no mental health concerns in the past year, there are differences detected in substance use rates, which are

displayed in Chart 2. Students who reported a mental health concern in the past year had higher rates of substance use in all categories compared to students without a mental health concern.

Chart 2: Mental Health & Substance Use



Intersection of Stress, Mental Health, and Substance Use

Due to the connection of higher rates of substance use among students with high stress and students with mental health concerns, it is critical to examine the substance use rates of students who are affected by both. In 2023, approximately 33% of Missouri college students reported experiencing both high stress in the 2 weeks prior to completing the survey and a mental health concern in the past year. When compared to students who only experienced high stress or who only experienced a mental health concern in the past year, we observe the highest rates of substance use among students who reported both.

Among students who experienced high stress and a mental health concern, 24% reported binge drinking, 64% reported drinking alcohol in the past year, 40% used marijuana/cannabis at least once in the past year, 26% used a tobacco/nicotine product at least once in the past year, and 9.1% reported prescription drug misuse.

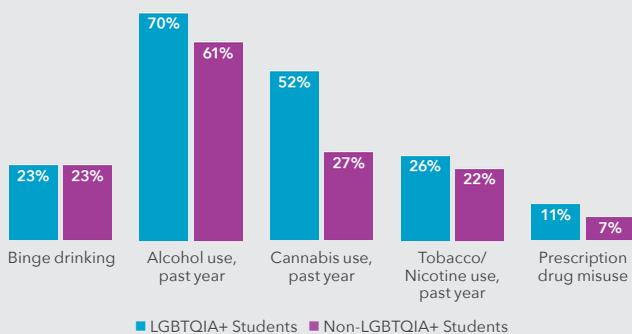
Stress, Mental Health, and Substance Use Among LGBTQIA+ Students

According to the minority stress theory, there are unique stressors connected to having a marginalized

social identity, such as being LGBTQIA+, which can contribute to negative physical and mental health outcomes.³ From the 2023 MACHB data, almost half (48%) of LGBTQIA+ students reported high stress (compared to 31% of non-LGBTQIA+ students), while 94% of LGBTQIA+ students reported experiencing at least one mental health concern (compared to 72% of non-LGBTQIA+ students). As mentioned previously, it is imperative to address students who reported both high stress and mental health concerns since the highest rates of substance use are observed among these students. **When looking at LGBTQIA+ students, almost half (47%) reported both high stress and at least one mental health concern in the past year, compared to only 27% of non-LGBTQIA+ students.**

Additionally, in an effort to cope with minority stress and other negative experiences, LGBTQIA+ students may turn to substances.⁴ Although MACHB data suggests that some substance use has decreased among LGBTQIA+ students, rates of substance use are still high for LGBTQIA+ students. **As shown in Chart 3, the rates of alcohol use, cannabis use, tobacco/nicotine use, and prescription drug misuse among LGBTQIA+ students are still higher than non-LGBTQIA+ students.**

Chart 3: Comparing the Substance Use Behaviors Between LGBTQIA+ Students and Non-LGBTQIA+ Students in 2023



Conclusion

With higher rates of substance use among Missouri college students who report both high stress and experiencing at least one mental health concern,

campuses should develop programs and policies that address both issues simultaneously. Although we cannot draw conclusions about these factors causing higher rates of substance use, it does elicit concern as to whether substance use is being utilized as a coping mechanism. **In general, as public health and prevention specialists, this data acts as a reminder to take an intersectional approach to stress and mental health in order to effectively meet the needs of students who struggle with their mental health.** Also, as LGBTQIA+ students had higher rates of high stress, mental health concerns, and substance use compared to non-LGBTQIA+ students, it is important to develop targeted programs and interventions that address these issues among LGBTQIA+ students. Since LGBTQIA+ students are more likely to report experiencing barriers to utilizing on-campus resources, as well as restricted access to LGBTQIA+-specific services, campuses should work to eliminate such barriers and develop support programs that are led by LGBTQIA+ students themselves.³

Resources

RESPOND Program

RESPOND is a training program designed to educate the campus community (staff, faculty, and students) on how to identify and address mental health concerns. Developed by Dr. Christy Hutton at the University of Missouri - Columbia, the content of this program includes an overview of mental health issues on college campuses and signs associated with mental health issues, as well as discussions on stigma and culture. Additionally, the course focuses on how to effectively respond with basic listening and empathy, risk assessment at the lay level, support, referral, and taking care of oneself (including appropriate boundaries based on role or personal preference). To learn more about RESPOND, contact Partners in Prevention at pip@missouri.edu.

Students in Distress Videos

These short videos can help individuals navigate difficult conversations with students (or other

individuals) who may need help and are available to share with faculty, staff, or other members of the campus community. They can be found at mopiptraining.org.

The Jed Foundation

The Jed Foundation is a nonprofit organization that works to prevent suicide and promote help-seeking and help-giving behaviors among youth. You can search various mental health topics on their website, such as trauma, depression, or financial stress, from which they will provide resources for that specific issue. Learn more at jedfoundation.org/mental-health-resource-center.

Active Minds

Active Minds is a nonprofit organization that aims to encourage discussions about mental health and provide mental health educational opportunities for young adults. They have a variety of programs and resources available that work to address the stigma surrounding mental health and promote supportive communities. Visit activeminds.org/programs to learn more about Active Minds.

The Trevor Project

The Trevor Project is a national online resource for LGBTQ+ youth. On their website, you can access

a counselor if you need assistance, want more information, or want to be referred to resources near you. The Trevor Project also has a variety of resources that cover topics, such as sexual orientation, mental health, gender identity, and suicide. Visit thetrevorproject.org for more information.

Contact Partners in Prevention at (573) 884-7551.

Report prepared by Hannah Allen, Prevention and Implementation Intern. Data prepared by Meg Mottola, Research Coordinator. Published September 2023.

Citations

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4. The Trevor Project. (2022, January). Substance Use and Suicide Risk Among LGBTQ Youth. Retrieved from <https://www.thetrevorproject.org/research-briefs/substance-use-and-suicide-risk-among-lgbtq-youth-jan-2022/>