

# The Intersection of Stress, Mental Health, 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. The coalition is comprised of 23 public and private colleges and universities in the state. 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 that assesses students' experiences of substance use, mental health and well-being, and interpersonal violence. This brief will focus on trends associated with the intersection of students' experiences of mental health and substance use.

**Note:** The 2020 MACHB data was collected at all campuses in early 2020, prior to campus shutdowns and closings related to the COVID-19 pandemic.

## Introduction

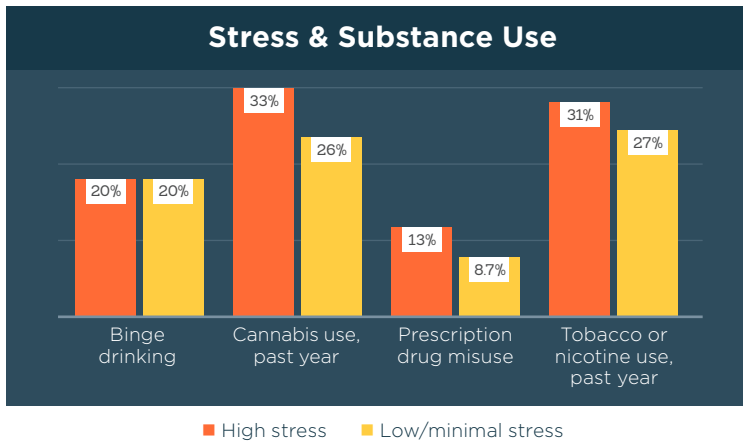
College can be a time of high stress for many students, especially as they learn to navigate new academic and personal difficulties. As a result of that stress, students may experience higher rates of mental health concerns, as well as higher rates of substance use such as alcohol, cannabis, prescription drug, and tobacco use as a means to cope with such concerns. Research from the Substance Abuse and Mental Health Services Administration (SAMHSA) supports this claim, noting that "the prevalence of substance use among adults aged 18 or older differed based on past year mental illness status<sup>1</sup>. It is therefore important that we look at the overlap between stress levels and substance use, as well as the overlap between students who report experiencing a mental health concern and substance use.

## Stress and Substance Use

According to the 2020 MACHB survey, 29% of Missouri college students reported that their stress was overwhelming, with another 4.9% reporting that their

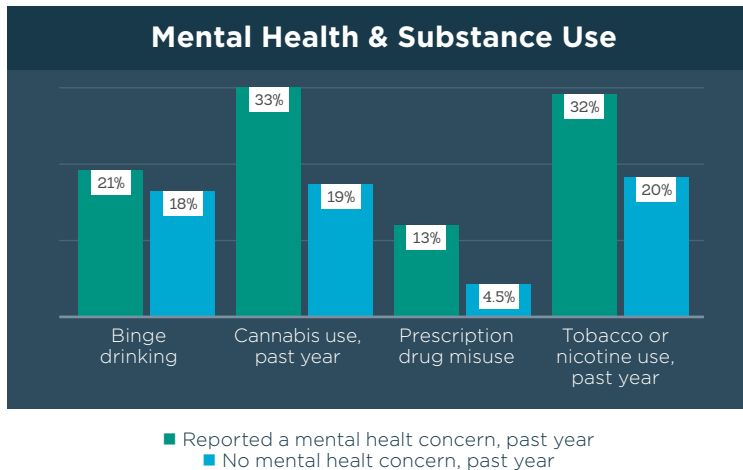
stress was unbearable. The remaining 67% of students reported no or minimal stress. When students were asked to report what they have done in the past two weeks to relieve stress, 8.0% reported using alcohol, 3.6% reported smoking tobacco cigarettes, and 7.0% reported using marijuana/cannabis. However, these numbers differ when we compare students with high stress (overwhelmed and unbearable) to students with no/minimal stress. Among students with high stress, 10% used alcohol, 5.1% smoked tobacco, and 10% used cannabis as a form of stress relief, compared to 6.8%, 2.9%, and 5.4% among students with no/minimal stress, respectively.

We also see differences when it comes to general substance use when we compare students with high stress to students with no/minimal stress. The following chart breaks down these differences based on specific substance. For reference, binge-drinking refers to consuming 5 or more drinks within a 2-hour period at least once in the past two weeks, and prescription drug misuse refers to using prescription drugs without a doctor's prescription, or using in a way other than prescribed:



## Mental Health and Substance Use

Also in 2020, approximately 69% of Missouri college students reported experiencing at least one mental health concern in the past year. Specifically, the most prominent mental health concerns reported by all students were anxiety (61%), major depression (33%), panic attacks (30%), and chronic sleep issues (22%). Unlike the questions in the MACHB related to stress, we do not ask students to report how they relieve or cope with their mental health concerns. However, we do observe a difference in rates of substance use when we compare 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:



## Stress, Mental Health, and Substance Use

Upon seeing the correlation in higher rates of substance use among students with high stress and among students with mental health concerns, it becomes crucial to look at substance use rates among

our students affected by both. In 2020, approximately 28% of Missouri college students reported experiencing high stress and a mental health concern. It is among these students that we see the highest rates of substance use, compared to students who only experienced high stress or who only experienced a mental health concern in the past year.

Among students who experienced high stress and a mental health concern, 21% reported binge-drinking, 35% used cannabis at least once in the past year, 14% reported prescription drug misuse, and 33% used a tobacco/nicotine product at least once in the past year.

## Conclusion

Overall, Missouri college students who report experiencing high levels of stress, report at least one mental health concern, and who experience both high stress and a mental health concern, reported higher rates of substance use compared to students with no or minimal stress and compared to students not affected by mental health concerns. Although we cannot draw conclusions about these factors causing higher rates of substance use, it does bring up the concern regarding whether substance use is being utilized as a coping mechanism. This is an especially worthwhile concern considering we saw higher rates of using substances specifically in response to stress among those students who had high stress, compared to students with no or minimal stress. In general, as public health and prevention practitioners, this data serves as a reminder to take an intersectional approach to stress and mental health in order to best address the needs of our students who are struggling a great deal with their mental health.

## Resources

### Ask. Listen. Refer.

Ask. Listen. Refer. is a free, statewide online suicide prevention training program designed to train and educate students, faculty, staff, and other members of college and university campuses across Missouri. The program trains individuals to 1) identify people at risk for suicide 2) recognize the risk factors, protective factors, and warning signs of suicide, and 3) respond

to and get help for people at risk. Learn more and complete the training at [asklistenrefer.org](https://asklistenrefer.org).

### **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](https://mopiptraining.org).

### **Motivational Interviewing**

Motivational Interviewing (MI) training is online and free for campuses in Missouri. MI training is designed

to train individuals on a client-centered method for enhancing intrinsic motivation to change by exploring and resolving ambivalence (Miller & Rollnick, 2002).

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

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1. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29393/2019NSDUHFFRPDFWHTML/2019NSDUHFFR090120.htm#mhisud>