

# **The Healthy Minds Network**

# Michigan Technological University

Fall 2024

REPORT OF DATA FROM THE HEALTHY MINDS STUDY



# **HEALTHY MINDS STUDY TEAM**

### **STUDY TEAM**

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### INTRODUCTION

### STUDY PURPOSE

The Healthy Minds Study provides a detailed picture of mental health and related issues in college student populations. Schools typically use their data for some combination of the following purposes: to identify needs and priorities; benchmark against peer institutions; evaluate programs and policies; plan for services and programs; and advocate for resources.

### STUDY DESIGN

The Healthy Minds Study is designed to protect the privacy and confidentiality of participants. HMS is approved by Advarra IRB. To further protect respondent privacy, the study is covered by a Certificate of Confidentiality from the National Institutes of Health.

# Sampling

Each participating school provides the HMS team with a randomly selected sample of currently enrolled students over the age of 18. Large schools typically provide a random sample of 4,000-12,000 students, while smaller schools typically provide a sample of all students. Schools with graduate students typically include both undergraduates and graduate students in the sample.

### **Data Collection**

HMS is a web-based survey. Students are invited and reminded to participate in the survey via emails, which are timed to avoid, if at all possible, the first two weeks of the term, the last week of the term, and any major holidays. The data collection protocol begins with an email invitation, and non-responders are contacted up to three times by email reminders spaced by 2-10 days each. Reminders are only sent to those who have not yet completed the survey. Each communication contains a URL that students use to gain access to the survey.

### **Question Randomization**

There are some questions in the HMS student survey that aren't fielded to all students, and are instead randomly fielded at the individual level. This serves as a way to shorten the survey without giving up data. Qualtrics generates a random decimal greater than 0 and less than 1 for each respondent, and the questions that have been selected for randomization are fielded in two sets: respondents for which the random number is greater than 0 and less than 0.5, and those which the random number is greater than or equal to 0.5 and less than 1. These randomized questions are generally not those we use in our reporting, but those that do appear in this report will be indicated.

### ABOUT THIS REPORT

This data report provides descriptive statistics (percentages, mean values, etc.) using the responses from the administration of the Healthy Minds Student Survey at Michigan Technological University during the Fall 2024 Academic Semester.

# Non-Response Weighting

This report utilizes Qualtrics' Cell-based Weighting, a single variable weighting scheme. In this report, we use overall distribution of sex of enrolled students as a target distribution for responses.

A potential concern in any survey study is that those who respond to the survey will not be fully representative of the population from which they are drawn. In the HMS, we can be confident that those who are invited to fill out the survey are representative of the full student population because these students are randomly selected from the full list of currently enrolled students, or the students invited are all of the school's eligible students. However, it is still possible that those who actually complete the survey are different in important ways from those who do not complete the survey. It is important to raise the question of whether the percentage of students who participated are different in important ways from those who did not participate.

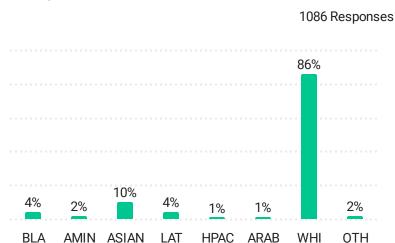
We address this issue by constructing non-response weights. The non-response weights adjust specifically for the fact that female students have consistently higher response rates than male students in our survey (and in most other survey studies). We construct the weights by comparing the female-male composition of our respondent sample to the reported female-male ratio for the full student population at each institution (which is typically available from basic enrollment statistics). If the respondent sample has a smaller percentage of males and larger percentage of females, as compared to the composition of the full student population, then male students in our sample are assigned a higher non-response weight value than female students. This means that weighted estimates are representative of the female-male distribution in the full student population.

For intersex students, we are not able to use this same process, however, because we are generally not able to obtain accurate statistics from administrative data on the representation of this group in the full student population. Therefore, rather than making assumptions, we assign a weight value to students that selected intersex that leaves their representation in the weighted sample the same as in the unweighted sample. In the future, if and when more reliable information becomes available at the full student population level, we will be able to incorporate that information into sample weights for groups other than female and male gender identities.

# **SAMPLE CHARACTERISTICS (N=1,105)**

Measures are calculated among all respondents unless otherwise indicated

### RACE/ETHNICITY

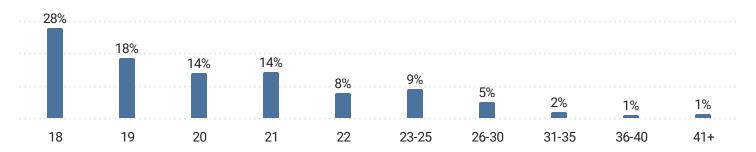


### **ABBREVIATIONS:**

- · WHI White or Caucasian
- BLA African American/Black
- · LAT Hispanic/Latino
- · AMIN American Indian/Alaskan Native
- · ARAB Arab/Middle Eastern or Arab American
- · ASIAN Asian/Asian American
- · HPAC Native Hawai'ian / Pacific Islander
- OTH Other/Self-Identify

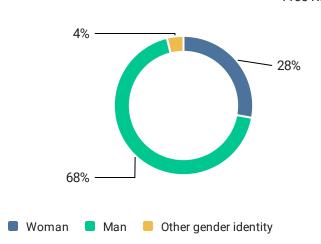
# AGE

1105 Responses



### **GENDER IDENTITY**

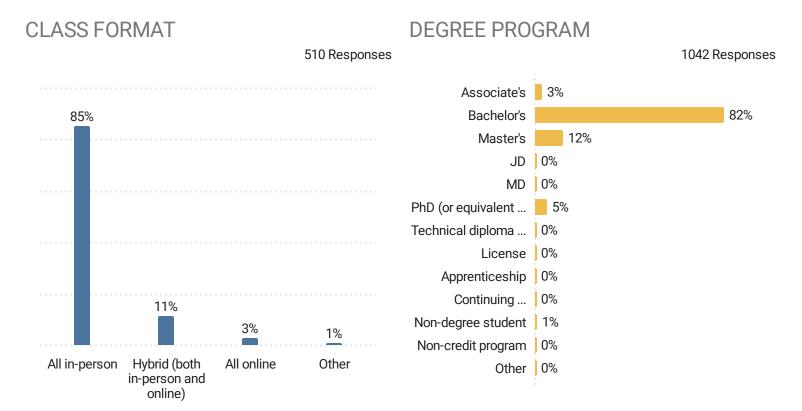
1100 Responses



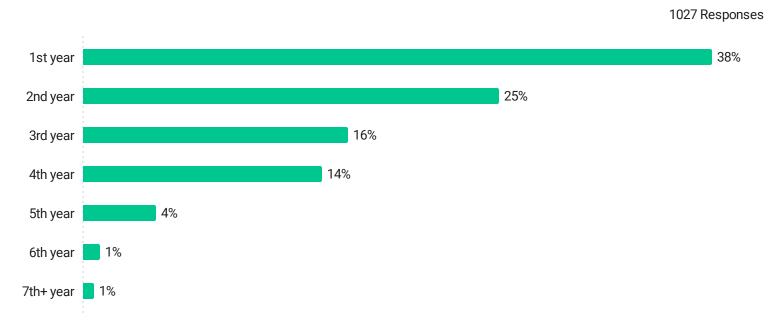
### "OTHER GENDER IDENTITY" INCLUDES:

- Transgender women
- Transgender men
- Genderqueer/Gender nonconforming
- · Gender non-binary
- · Self-identified gender

# SAMPLE CHARACTERISTICS, CONTD.



### YEAR IN PROGRAM



### **SOCIOECONOMIC FACTORS**

### LIVING ARRANGEMENT

1024 Responses

Field	Percentage
On-campus housing, residence hall	44%
On-campus housing, apartment	9%
Fraternity or sorority house	2%
On- or off-campus co-operative housing	0%
Off-campus, non-university housing	40%
Off campus, with my parents(s)/guardian(s) (or relatives)	4%
Other	1%
I am currently houseless / homeless	0%

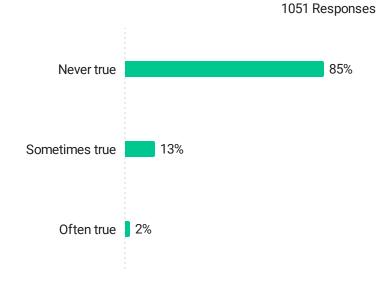
### HOUSING INSTABILITY

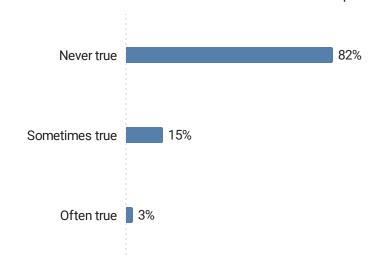
Within the past 12 months I was worried about not having stable housing.

# **FOOD INSTABILITY**

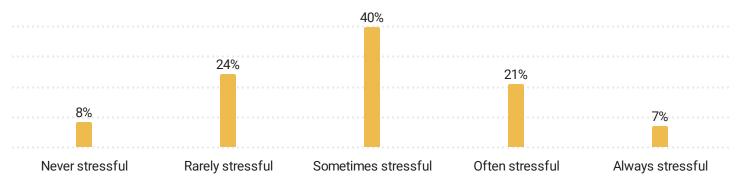
Within the past 12 months I was worried whether our food would run out before we got money to buy more.

1051 Responses





How would you describe your financial situation right now?



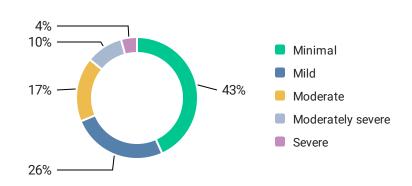
### PREVALENCE OF MENTAL HEALTH PROBLEMS

### **DEPRESSION SCREEN**

953 Responses

Depression is measured using the Patient Health Questionnaire-9 (PHQ-9), a nine-item instrument based on the symptoms provided in the Diagnostic and Statistical Manual for Mental Disorders for a major depressive episode in the past two weeks (Spitzer, Kroenke, & Williams, 1999).

Following the standard algorithm for interpreting the PHQ-9, symptom levels are categorized as severe (scores ≥20), moderately severe (scores 15-19), moderate (scores 10-14), mild (scores 5-9). There is no name for the category of scores from 0-4, so we use "minimal."



# 953 Responses 8% 16% Minimal Mild Moderate Severe

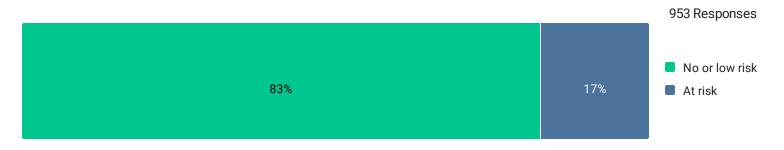
### **ANXIETY SCREEN**

Anxiety is measured using the GAD-7, a seven-item screening tool for screening and severity measuring of generalized anxiety disorder in the past two weeks (Spitzer, Kroenke, Williams, & Lowe, 2006).

Following the standard algorithm for interpreting the GAD-7, symptom levels are categorized as severe (scores ≥15), moderate (scores 10-14), mild (scores 5-9), and minimal (scores 0-4).

# RISK OF EATING DISORDER

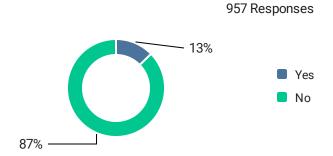
Risk for eating disorders is measured using the SDE, a five-item screening tool designed to identify subjects likely to have an eating disorder (Maguen et al., 2017). The SDE is not intended for use as a diagnostic tool; rather, answering "Yes" to 3 or more questions (the "At risk" category) indicates need for further investigation.



### SUICIDALITY AND SELF-INJURIOUS BEHAVIOR

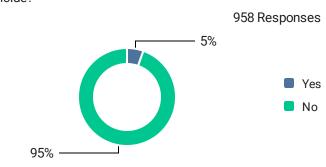
### SUICIDAL IDEATION

In the past year, did you ever seriously think about attempting suicide?



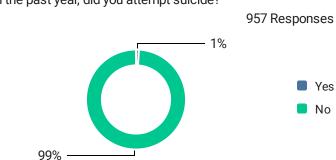
### **SUICIDE PLAN**

In the past year, did you make a plan for attempting suicide?



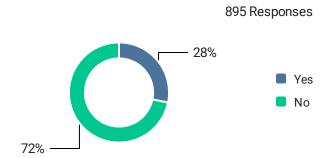
### SUICIDE ATTEMPT

In the past year, did you attempt suicide?



### SELF-INJURIOUS BEHAVIOR

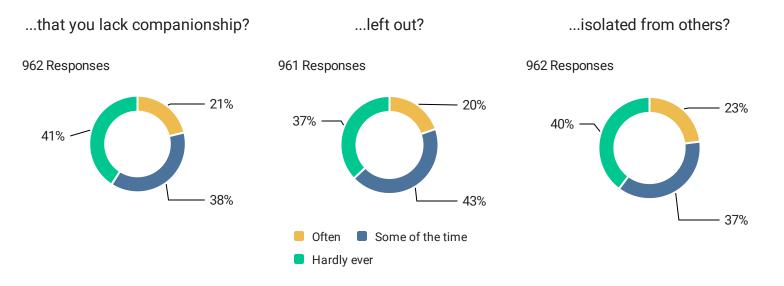
Non-suicidal self-injury (past year)



# LONELINESS SCALE

Loneliness is measured using the UCLA three-item Loneliness Scale (Hughes, Waite, Hawkley, & Cacioppo, 2004).

# How often do you feel...



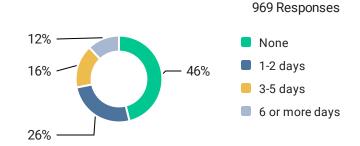
### LIFETIME DIAGNOSIS OF MENTAL DISORDERS

Have you ever been diagnosed with any of the following conditions by a health professional (e.g., primary care doctor, psychiatrist, psychologist, etc.)? (Select all that apply)

	936 Responses
Mental Health Diagnosis	Percentage of Responses
Depression (e.g., major depressive disorder, persistent depressive disorder)	21%
Anxiety (e.g., generalized anxiety disorder, phobias)	25%
Eating disorder (e.g., anorexia nervosa, bulimia nervosa)	3%
Psychosis (e.g., schizophrenia, schizo-affective disorder)	0%
Personality disorder (e.g., antisocial personality disorder, paranoid personality disorder, schizoid personality disorder)	1%
Substance use disorder (e.g., alcohol abuse, abuse of other drugs)	1%
Bipolar (e.g., bipolar I or II, cyclothymia)	2%
Obsessive-compulsive or related disorders (e.g., obsessive-compulsive disorder, body dysmorphia)	4%
Trauma and Stressor related disorders (e.g., post-traumatic stress disorder)	4%
Don't know	6%
No, none of these	58%
Neurodevelopmental disorder or intellectual disability (e.g., attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), intellectual disability, autism spectrum disorder)	13%

# ACADEMIC IMPAIRMENT

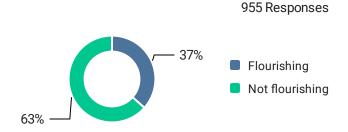
In the past 4 weeks, how many days have you felt that emotional or mental difficulties have hurt your academic performance?



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### **POSITIVE MENTAL HEALTH**

Positive mental health (psychological well-being) is measured using The Flourishing Scale, an eight-item summary measure of the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener, 2009). The score ranges from 8-56, and we are using 48 as the threshold for positive mental health.



### **HEALTH BEHAVIORS AND LIFESTYLE**

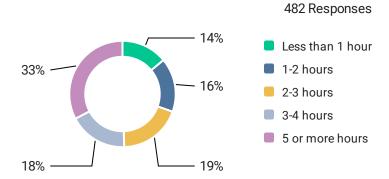
### **DRUG USE**

Over the past 30 days, have you used any of the following drugs? (Select all that apply)

	951 Responses
Substance	Percentage of Responses
Cannabis products that include THC (including smoking, vaping, and edibles)	16%
Cocaine (any form, including crack, powder, or freebase)	0%
Heroin	0%
Methamphetamines (also known as speed, crystal meth, Tina, T, or ice)	0%
Other stimulants (such as Ritalin, Adderall) without a prescription or more than prescribed	1%
MDMA (also known as Ecstasy or Molly)	0%
Opioid pain relievers (such as Vicodin, OxyContin, Percocet, Demerol, Dilaudid, codeine, hydrocodone, methadone, morphine) without a prescription or more than prescribed	0%
Benzodiazepines (such as Valium, Ativan, Klonopin, Xanax, or Rohypnal/Roofies) without a prescription or more than prescribed	0%
Ketamine (also known as K, Special K)	0%
LSD (also known as acid)	1%
Psilocybin (also known as magic mushrooms, boomers, shrooms)	1%
Kratom	0%
Athletic performance enhancers (anything that violates policies set by your school or any athletic governing body)	0%
Other drugs without a prescription	0%
No, none of these	84%

### **EXERCISE\***

In the past 30 days, about how many hours per week on average did you spend exercising?

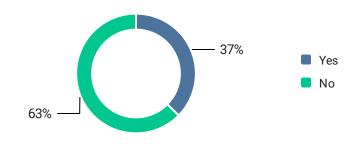


### **ALCOHOL USE**

Over the past 2 weeks, did you drink any alcohol?

960 Responses

OF1 Decrees



<sup>\*</sup>randomly fielded

### **BINGE DRINKING BEHAVIOR\***

The following question asks about how much you drink. A "drink" means any of the following:

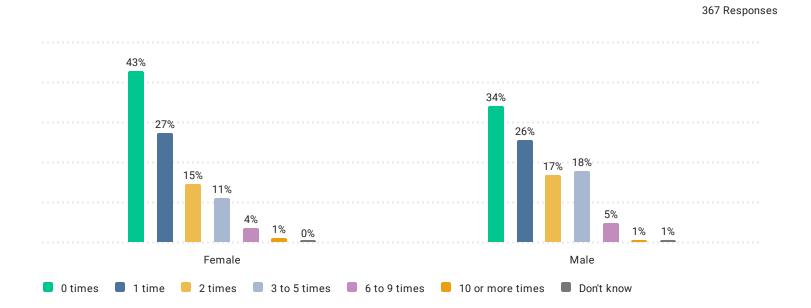
A 12-ounce can or bottle of beer

A 4-ounce glass of wine

A shot of liquor straight or in a mixed drink

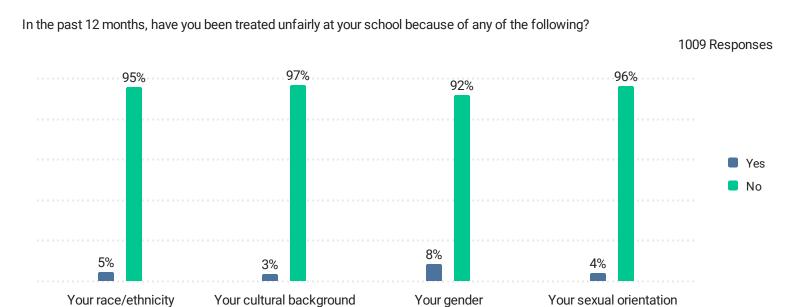
During the last two weeks, how many times have you had 4 (if female), 5 (if male) or more drinks in a row?

\*Among students who indicated having consumed any alcohol within the past 2 weeks



### **CAMPUS CLIMATE**

# **DISCRIMINATION**

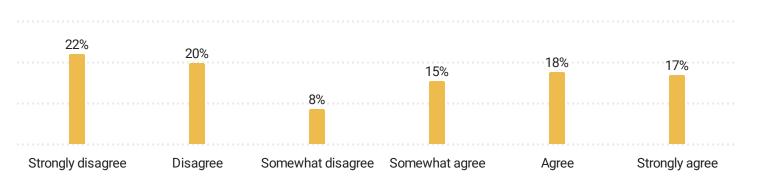


### ATTITUDES AND BELIEFS ABOUT MENTAL HEALTH SERVICES

# PERCEIVED NEED (PAST YEAR)

In the past 12 months, I needed help for emotional or mental health problems or challenges such as feeling sad, blue, anxious or nervous.

944 Responses

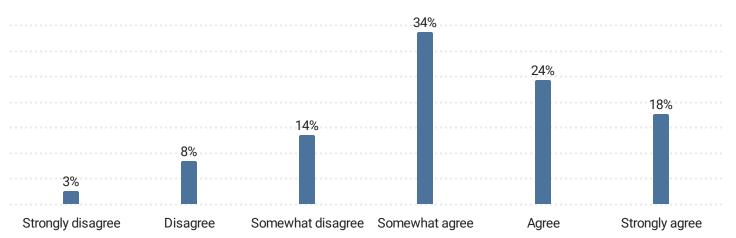


# PERCEIVED NEED (CURRENT)\*

I currently need help for emotional or mental health problems or challenges such as feeling sad, blue, anxious or nervous.

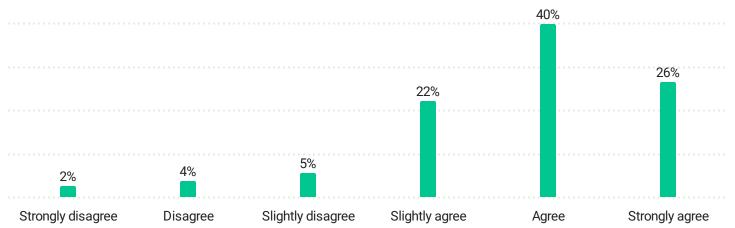
\*Among students who indicated they needed help for emotional or mental health problems in the past year

520 Responses



### KNOWLEDGE OF CAMPUS RESOURCES

If I needed to seek professional help for my mental or emotional health, I would know where to access resources from my school.



### **USE OF SERVICES**

# Psychotropic medication use: past year, all students

In the past 12 months have you taken any of the following types of prescription medications? (Please count only those you took, or are taking, several times per week.)

oonses

Medication Category	Percentage of Responses
Anti-anxiety medications (e.g., lorazepam (Ativan), clonazepam (Klonopin), alprazolam (Xanax), buspirone (BuSpar), etc.)	5%
Mood stabilizers (e.g., lithium, valproate (Depakote), lamotrigine (Lamictal), carbamazepine (Tegretol), etc.)	1%
Sleep medications (e.g., zolpidem (Ambien), zaleplon (Sonata), etc.)	2%
Other medication for mental or emotional health	2%
Don't know	1%
No, none of these	79%
Psychostimulants (e.g. methylphenidate (Ritalin or Concerta), amphetamine salts (Adderall), dextroamphetamine (Dexedrine), etc.)	5%
Antidepressants (e.g., fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), escitalopram (Lexapro), venlafaxine (Effexor), bupropion (Wellbutrin), etc.)	14%
Antipsychotics (e.g., haloperidol (Haldol), clozapine (Clozaril), risperidone (Risperdal), olanzapine (Zyprexas), etc.)	1%

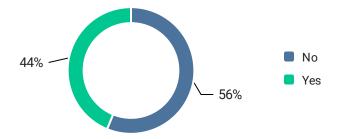
# Psychotropic medication use: past year, among students who screened positive for anxiety (GAD-7 score ≥10) or depression (PHQ-9 score ≥10)

	oco neoponece
Medication Category	Percentage of Responses
Anti-anxiety medications (e.g., lorazepam (Ativan), clonazepam (Klonopin), alprazolam (Xanax), buspirone (BuSpar), etc.)	9%
Mood stabilizers (e.g., lithium, valproate (Depakote), lamotrigine (Lamictal), carbamazepine (Tegretol), etc.)	3%
Sleep medications (e.g., zolpidem (Ambien), zaleplon (Sonata), etc.)	3%
Other medication for mental or emotional health	3%
Don't know	2%
No, none of these	64%
Psychostimulants (e.g. methylphenidate (Ritalin or Concerta), amphetamine salts (Adderall), dextroamphetamine (Dexedrine), etc.)	7%
Antidepressants (e.g., fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), escitalopram (Lexapro), venlafaxine (Effexor), bupropion (Wellbutrin), etc.)	27%
Antipsychotics (e.g., haloperidol (Haldol), clozapine (Clozaril), risperidone (Risperdal), olanzapine (Zyprexas), etc.)	2%

### THERAPY USE: LIFETIME

Have you received counseling/therapy for mental health concerns?

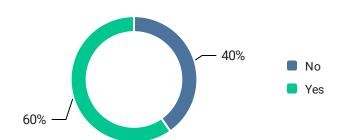
931 Responses



### THERAPY USE: LIFETIME\*

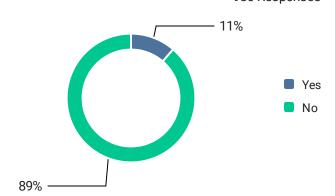
\*Among students screening positive for anxiety (GAD-7 score ≥10) or depression (PHQ-9 score ≥10)

365 Responses



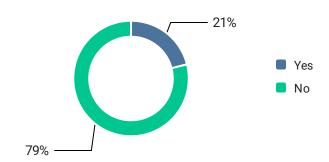
### THERAPY USE: CURRENT

Are you currently receiving counseling or therapy?
930 Responses



### THERAPY USE: CURRENT\*

\*Among students screening positive for anxiety (GAD-7 score  $\geq$ 10) or depression (PHQ-9 score  $\geq$ 10)



### **INFORMAL HELP-SEEKING**

In the past 12 months, have you received counseling or support for your mental or emotional health from any of the following sources? (Select all that apply)

924 Responses

Source of Support	Percentage of Responses
Roommate	16%
Friend (who is not a roommate)	37%
Significant other	25%
Family member	36%
Religious counselor or other religious contact	4%
Support group	2%
Faculty member/professor	3%
Staff member	3%
Other non-clinical source	1%
No, none of these	41%

### **BARRIERS TO HELP-SEEKING\***

In the past 12 months, which of the following have caused you to receive fewer services for your mental or emotional health than you would have otherwise received? (Select all that apply)

	0-10 Neoponoes
Barrier	Percentage of Responses
No need for services	26%
Financial reasons (too expensive, not covered by insurance)	20%
Not enough time	29%
Not sure where to go	19%
Difficulty finding an available appointment	19%
Prefer to deal with issues on my own or with support from family/friends	23%
Privacy concerns	4%
People providing services don't understand me.	13%
Fear of being mistreated due to my identity/identities	4%
Other	10%
No barriers	14%
The clinic or clinician had limits on the number of times I could be seen	4%

<sup>\*</sup>among students who received mental health services in the past year

### **REFERENCES**

### MENTAL HEALTH SCREENINGS

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