



Results from the Modified College Student Health / COVID-19 Survey: Mental Health and Academic Impact

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On March 11, 2020 the World Health Organization announces infections from a novel coronavirus, first identified in China, had surged within multiple countries and had reached the level of a pandemic. Previously aware of the infectious nature of the virus, the University of Minnesota suspended the study abroad programs in China (January 31), South Korea (February 27) and Italy (February 29) and subsequently cancelled all study abroad programs by March 15, 2020, asking all study abroad students to return to the United States. The rationale for those decisions lay not only in what was occurring within other countries but also the increasing presence of the virus within US borders. On March 6, 2020 the first documented case of COVID-19 in Minnesota was diagnosed in a Ramsey County resident. On March 7, 2020 two University of Minnesota students self-quarantined upon returning to the US after being exposed to the virus while travelling in Europe. The first positive test for the virus among the student population occurred on March 7, 2020. On March 13, 2020 the University decided to move to an online class structure, closing the campus to in-person learning due to the increasing concerns related to the spread of the coronavirus. This decision occurred while the students were off campus during Spring Break, requesting that they not return to campus. The online instruction format remained in-place for the remainder of the spring term and eventually extended to include the summer sessions. On March 25, 2020, through an executive order, Governor Tim Walz mandated a “Stay-at-Home” policy asking residents to remain in their homes except to buy groceries and engage in a limited list of essential activities.

Students accustomed to on-campus learning, engaging with other students on a daily basis and participating in normal campus activities were now faced with adapting to an entirely new environment for learning and socializing. What impact did these changes have on students? Did it impact their mental health? Were students more stressed? What factors impacted their academic and mental health the most? Were there disparities in outcomes based on these changes associated with sexual orientation, ancestry/race or disability status?

To answer some of these questions, a survey was developed based on modifications to the Boynton Health College Student Health Survey adding in questions focused on issues related to COVID-19. The survey was distributed to a random sample of University of Minnesota undergraduate and graduate students enrolled on the Duluth and Twin Cities campuses. The survey was conducted between

April 21, 2020 and May 5, 2020 and distributed to 7,668 students. A total of 2,067 students completed the survey for an overall response rate of 26.9%. The final survey population was comprised of 69.9% undergraduates, 28.0% graduate students and 2.1% who were non-degree seeking. The gender breakout was 58.3% female, 35.3% identified as male and 2.1% selected a non-binary response option. Black, Indigenous and People of Color (BIPOC) represented 24.0% of the survey respondents and 7.8% reported being an international student.

Results of the survey will be presented based on the aggregated responses from both the Duluth and Twin Cities campuses. In addition, results will be presented for students by disability status, ancestry/race and sexual orientation. Disability status, ancestry/race and sexual orientation are based on self-reported responses to survey questions.

Mental Health

Students were asked to report if they were diagnosed with any of 11 mental health conditions within the past 12 months or within their lifetime.

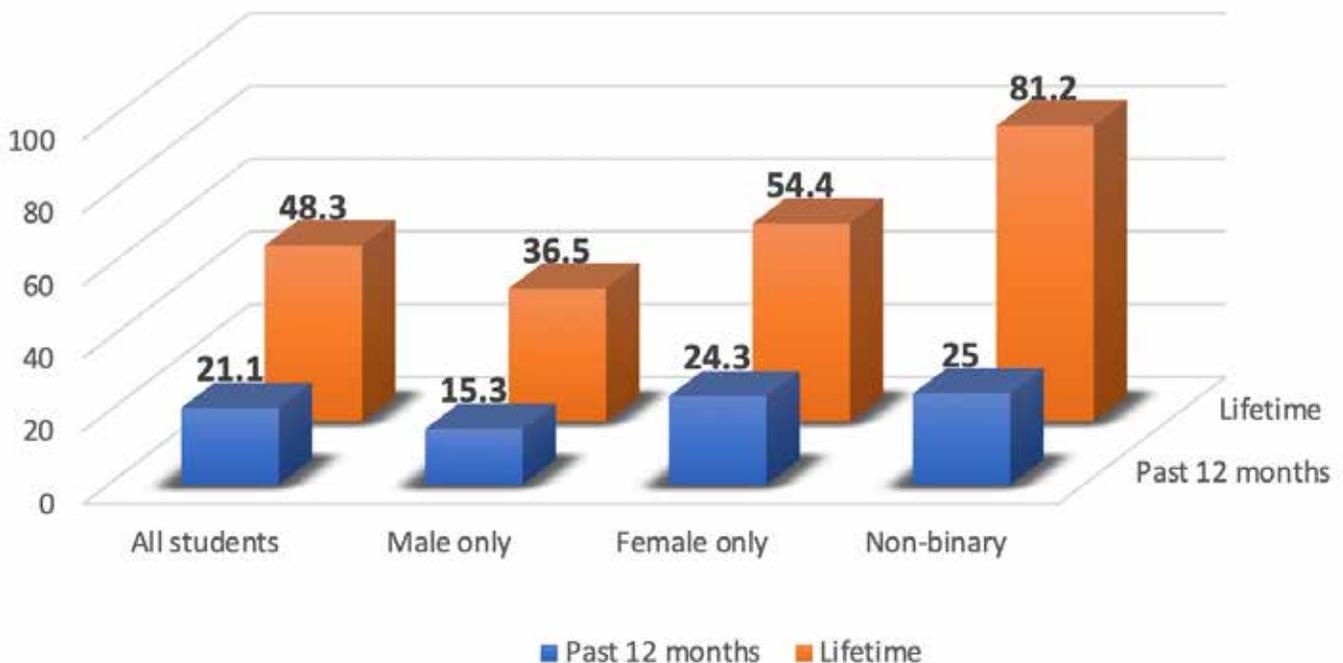
The highest rates of being diagnosed with a mental health condition both within lifetime or within the past 12 months are among females and students identifying as non-binary. The three most frequently diagnosed mental health conditions within lifetime were anxiety (38.3%), depression (30.4%) and panic attacks (18.6%). The most frequently diagnosed mental health conditions within the past 12 months were identical to those within lifetime with the rates being anxiety (14.7%), depression (9.9%) and panic attacks (7.0%).



I miss... not being scared of going out to see people.

I miss... the sense of hope I had about graduation... I am now graduating into this disaster.

Diagnosed with a Mental Health Condition



Diagnosed: Mental Health Condition-Lifetime Comparison Data from CSHS 2018

All Students: 40.1% • Males: 29.4% • Females: 47.3% • Gender Nonbinary: 83.3%

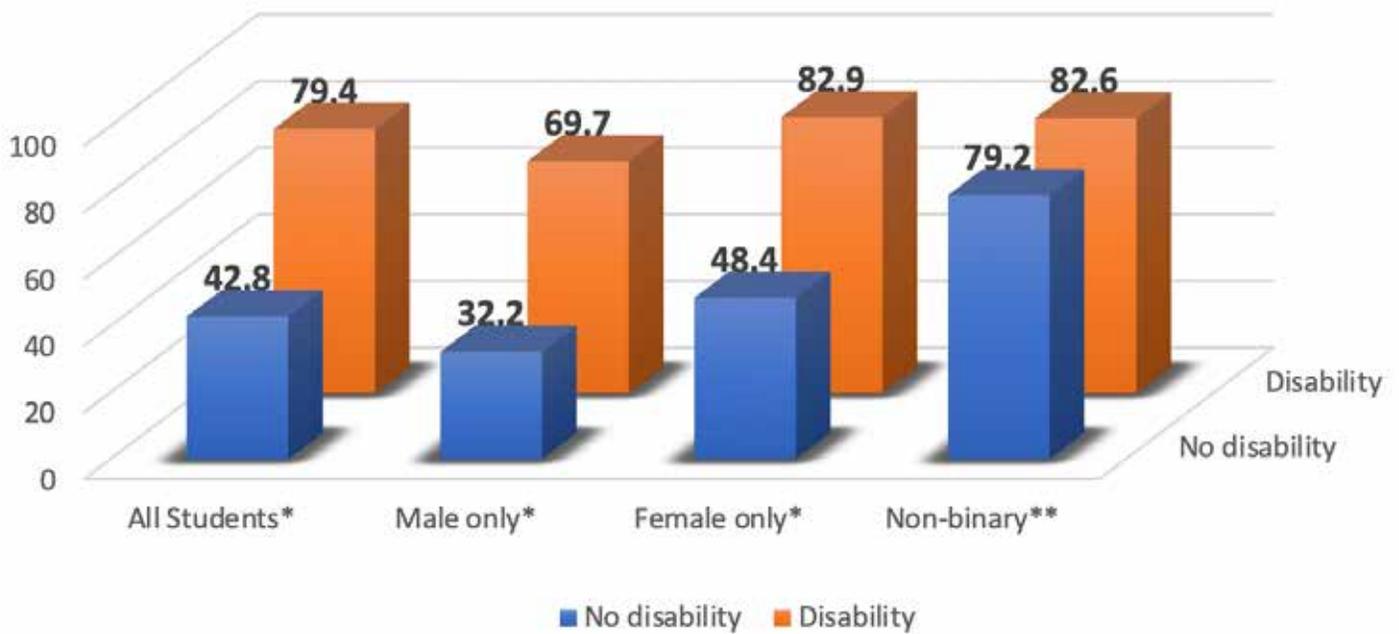
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I miss... being able to learn in the classrooms, I cannot teach myself certain things and it's becoming difficult.

I miss... being on campus.

Students who identified having a disability consistently reported being diagnosed with at least one of the 11 mental health conditions within their lifetime at higher rates than students who indicated they did not have a disability (79.4% vs 42.8%, respectively). Both female and non-binary identifying students with and without a disability reported higher rates of diagnosis of a mental health condition than students identifying as male. Among students with a disability, the two most frequently diagnosed mental health conditions within their lifetime were anxiety (67.8%) and depression (63.6%). A similar pattern was seen with diagnosis within the past 12 months: anxiety (24.3%) and depression (19.9%).

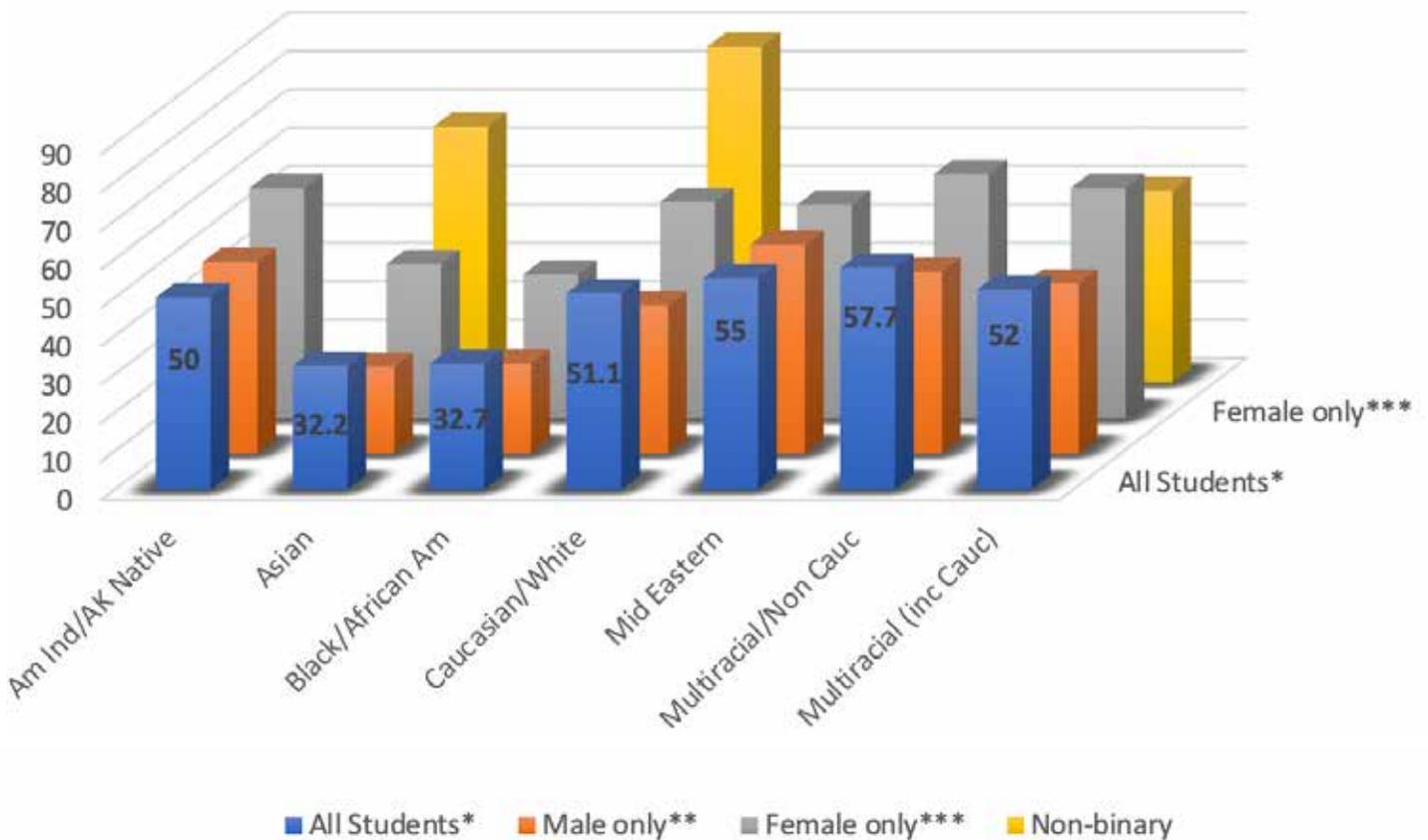
Diagnosed with a Mental Health Condition within Lifetime by Disability Status



*Statistically significant $p < .000$ by disability status within gender category

**Statistically significant $p = .003$ by disability status within gender category

Diagnosed with a Mental Health Condition within Lifetime by Ancestry/Race



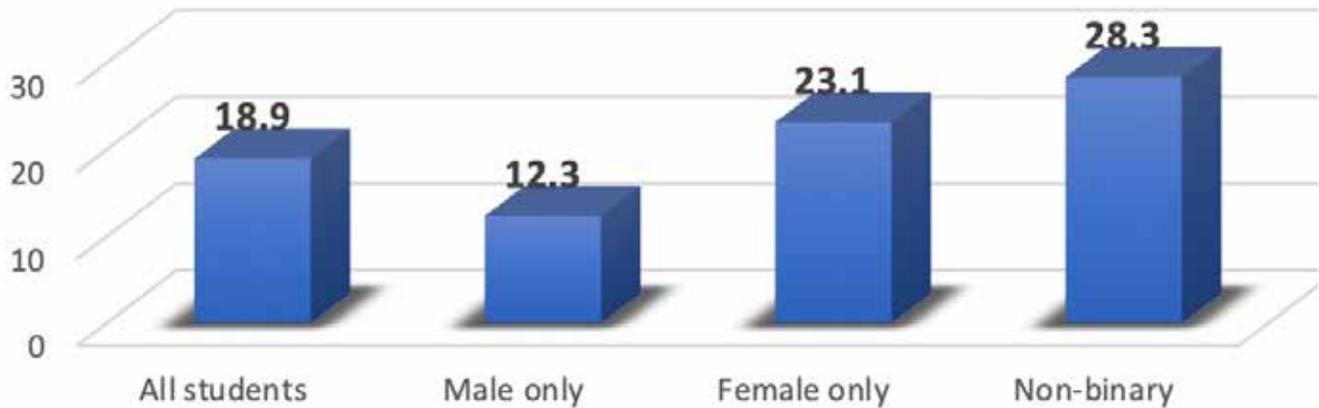
*Statistically significant $p < .000$ by gender within racial/ancestry category
 **Statistically significant $p = .001$ by gender within racial/ancestry category
 ***Statistically significant $p = .003$ by gender within racial/ancestry category

The highest rates of being diagnosed with a mental health condition within lifetime were reported among students reporting their ancestry/race as Middle Eastern (55.0%) or those selecting multiple race categories not including Caucasian/White (57.7%). The lowest rates of reported mental health diagnosis occurred within students identifying as Asian (32.2%) or Black/African American (32.7%).

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I enjoy... being able to do schoolwork/classes on my own time.

Currently Taking Medication for a Mental Health Condition



Currently Taking Medication Comparison Data from CSHS 2018

All Students: 15.3% • Males: 9.6% • Females: 19.4% • Gender Nonbinary: 44.4%

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I enjoy... being able to slow down and enjoy things more.

It's nice to be able to slow down and reconnect with myself.

Approximately one-in-five (18.9%) students are currently taking a prescription medication for a mental health condition. Students who identify as female or non-binary had the highest rates, which aligns with the reported higher rates of being diagnosed with a mental health condition.

Students with a reported disability had higher rates of taking medication for a mental health diagnosis compared to students who report not having a disability (42.6% vs 15.1%, respectively). Compared to other ancestry/race and gender categories male students identifying as American Indian/Alaskan Native had the highest rate of medication use rate (33.3%), along with females identifying as Middle Eastern (33.3%) and Asian students identifying as gender non-binary (33.3%).

More than one-in-eight (13.2%) students are currently seeing a mental health provider using the telehealth format. Approximately one-in-three (29.2%) students who identify as non-binary indicated they were currently getting assistance for their mental health via telehealth.

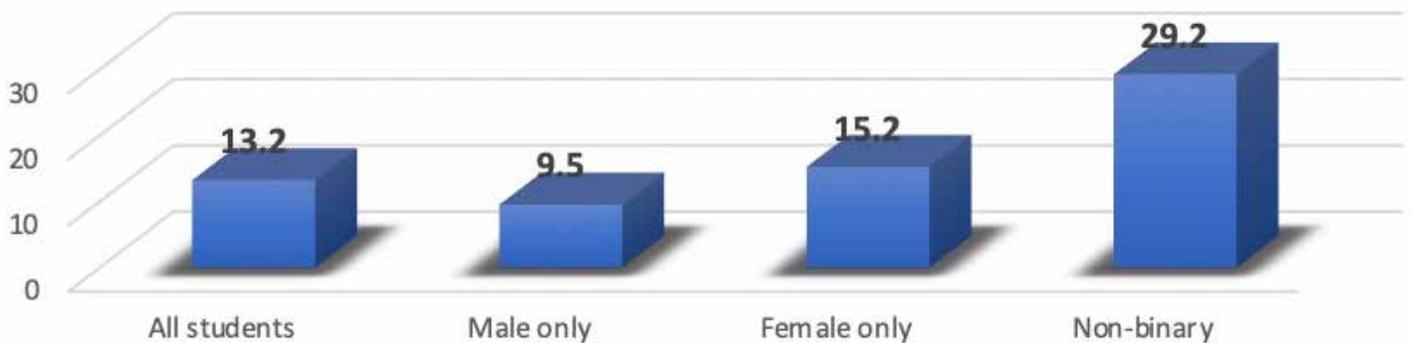
Among students with a reported disability, males had the highest reported rate (29.3%) of using telehealth for therapy. In general, students with a disability were twice as likely to report seeing a provider for a mental health condition using telehealth compared to students who did not report having a disability (28.0% vs. 10.8%). Compared to other ancestry/race and gender categories, non-binary students who reported being Asian were the mostly likely to utilize telehealth for mental health therapy (66.7%). Students who identified as Black/African American were the least likely to report seeing a mental health provider using the telehealth format (4.1%).

Overall, 1.8% of students indicated they contacted a crisis line within the past 30 days. Considerably higher rates were reported by students with a disability (3.8%), and students identifying as Middle Eastern (5.0%). The highest rates were reported by American Indian/Alaskan Native identifying students (8.3%).

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I miss... being able to talk to my therapist (I am unable to continue therapy because I am not living in Minnesota).

Currently Seeing a Mental Health Counselor/Therapist Using Telehealth



Currently Seeing a Therapist Comparison Data from CSHS 2018

All Students: 13.6% • Males: 7.4% • Females: 17.2% • Gender Nonbinary: 48.1%

Mean Days of Poor Mental Health within the Past 30 Days

	Mean(sd)
All students	8.86(8.5)
Males	6.77(7.9)
Females	9.89(8.5)
Gender non-binary	15.19(9.1)

Higher mean days of poor mental health were reported among students who identified as having a disability compared to students who reported no disability. Males with a disability averaged 7.60 days of poor mental health compared to 5.84 days among males without a disability. Among females

with and without a disability the means were 15.91 vs 8.67 days, respectively. Students who identify as gender non-binary with a disability averaged 18.86 days compared to their peers without a disability averaging 12.08 days.

The highest mean days of poor mental health among males based on race/ancestry identification were reported by those identifying as Middle Eastern (13.27 days). In contrast, the lowest mean number of days among males were among Asian-identifying students. For females, the highest mean number of days was also Middle Eastern (12.89 days), followed closely by American Indian/AK Native (12.6 days), Multiracial including White (12.07 days) and Multiracial not including White (11.88 days). The lowest female rates by race/ancestry were among students identifying as Black/African American (6.27 days).

Students who identified as gender non-binary did not have a sufficient sample size to run the data by race/ancestry.

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My academics have been better and I've spent more time off my phone and with my family.

I miss... being able to utilize study spaces and resources outside of my home.

Mean Days of Adequate Sleep within the Past Seven Days

	Mean(sd)	Statistics
All students	4.03(2.0)	
Students with a Disability	3.10(2.2)	F(1,1876)=73.558; p=.000
Students with no Disability	4.18(1.9)	
American Indian/AK Native	3.08(2.5)	F(8,2018)=2.36; p=.016
Asian	4.14(1.9)	
Black/African American	3.40(1.9)	
Middle Eastern	3.70(2.3)	
White	4.07(1.9)	
Multiracial not including White	3.31(2.2)	
Multiracial including White	3.82(2.2)	

On average students reported obtaining slightly more than 4 days of adequate sleep within the past 7 days. The mean number of days of adequate sleep among all students from the 2018 CSHS was 3.42(1.9) days. Students who reported having no disability reported the highest mean days of adequate sleep (4.8 days) with the lowest mean days of adequate sleep (3.08 days) being reported among students identifying as having a American Indian/ Alaska Native racial/ancestry background. Most studies looking at sleep have associated sleep quality and duration with better academic performance (Eliasson et al, 2010; Gilbert et al, 2010).

Among all students who averaged less than 4 days of adequate sleep within the past seven days, 65.3% indicated that they were sleeping less than they normally are used to sleeping. Only 20.1% of students who averaged more than 4 days of adequate sleep reported sleeping less than normal for them.

Impact of Health and Personal Issues on Academic Performance During the Coronavirus Outbreak Past 30 Days — All Students

Students were asked to respond to the following question:

During the past 30 days, how have the following affected your academic performance?

The response options:

- I do not have the issue/not applicable;
- I have this issue — my academics have not been affected; and
- I have this issue — my academics have been affected.

Health or Personal Issue	Report having the issue (%)		Among those with the Issue – Indicate the issue impacted their academics (%)	
	Spring 2020 – within past 30 days	CSHS 2018 – within past 12 months	Spring 2020 – within past 30 days	CSHS 2018 – within past 12 months
Alcohol use	18.6	20.2	18.6	12.0
Any Disability	12.5	10.7	71.6	55.2
Chronic Health Condition	14.0	11.8	19.0	20.9
Concern for Family Member or Friend	50.7	33.7	41.1	29.7
Eating Disorder	7.8	6.0	36.1	27.5
Excessive Computer/Internet Use	65.2	49.3	59.8	42.2
Financial Difficulties	34.8	33.9	40.5	26.3
Food Insecurity	6.6	7.3	43.9	24.4
Homelessness	1.1	1.0	59.1	33.3
Marijuana Use	9.4	10.4	22.5	16.2

Health or Personal Issue	Report having the issue (%)		Among those with the Issue – Indicate the issue impacted their academics (%)	
	Spring 2020 – within past 30 days	CSHS 2018 – within past 12 months	Spring 2020 – within past 30 days	CSHS 2018 – within past 12 months
Mental Health Issue	52.8	39.9	65.3	56.4
Pregnancy	1.5	3.5	36.7	28.8
Relationship Issue with Roommate/ Housemate	20.0	21.5	46.0	27.7
Relationship Issue with Someone Other Than Roommate/Housemate	18.6	22.4	46.5	34.2
Serious Injury	2.3	3.5	46.7	48.7
Sexual Assault	1.7	3.6	28.6	43.1
Sexually Transmitted Infection	0.6	2.0	33.3	13.2
Sleep Difficulties	50.5	45.1	57.9	53.9
Stress	80.0	74.6	63.6	51.3
Upper Respiratory Infection (Cold/Flu, Sinus, Strep, etc)	9.3	31.5	42.2	38.7

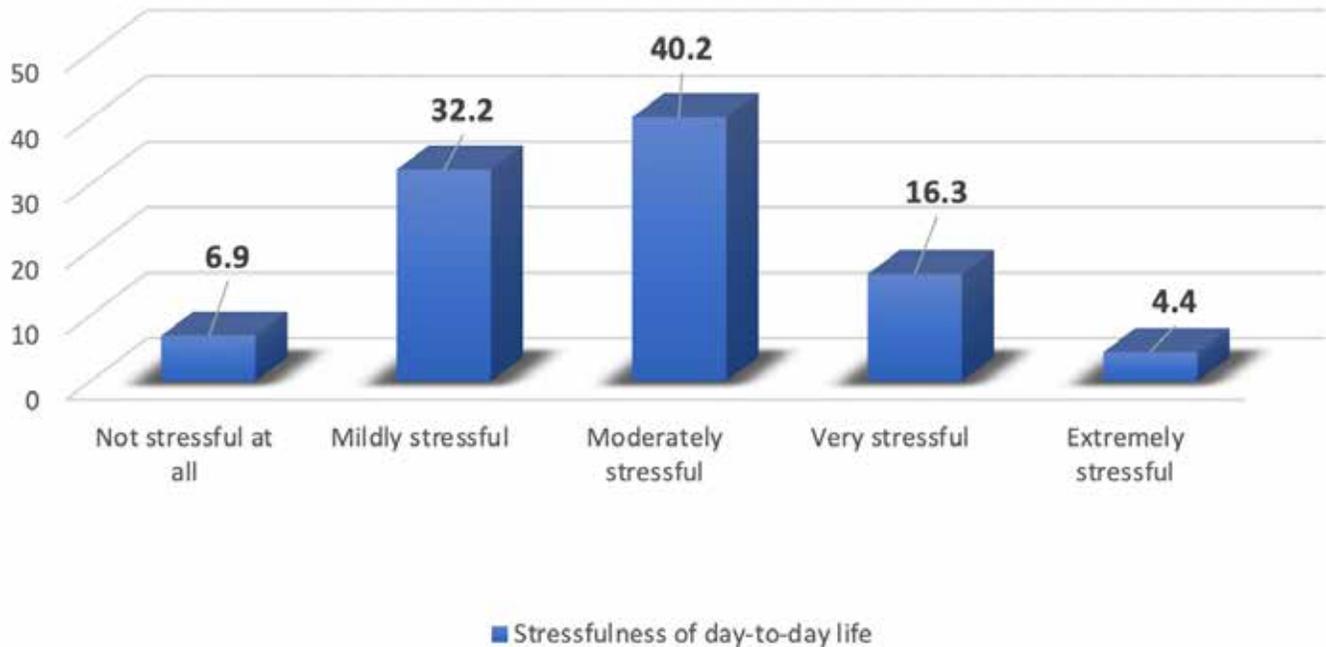
In April 2020, among all students, the issues that had the highest prevalence rates were stress (80.0%), excessive computer/internet use (65.2%), mental health issue (52.8%), concern for family member or friend (50.7%) and sleep difficulties (50.5%). Among those students who reported having a particular issue, the health or personal issue that appeared to have the most profound impact from their perspective were: any disability (71.6%), mental health issue (65.3%), stress (63.6%), excessive computer/internet use (59.8%) and homelessness (59.1%).



I work in an essential service, so every day is laced with a little fear.

Stress Related to Closing of Campus As a Result of the Coronavirus Outbreak

How stressful is your day-to-day life as a result of the coronavirus outbreak?
– All Students



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I miss... not having to judge if something will be threatening to my health.

I miss... being able to go to class because I have been struggling with online classes and I definitely took them for granted.

Students with a disability reported higher levels of stress (very stressful or extremely stressful) in their day-to-day life compared to students who reported having no disability (40.7% vs 16.6%, respectively).

Higher levels of stress (very stressful or extremely stressful) in their day-to-day life by self-reported racial/ancestry designation were as follows: Middle Eastern (40.0%), Black/African American (32.0%), multiracial not including White (28.8%), multiracial including White (27.7%), Asian (17.2%), White (19.4%) and American Indian/Alaskan Native (16.6%).

COVID-19 Related Mental Health Stressors Among All Students

Issue	Percent		
	Never	Sometimes/ half the time	Most of the time/Always
Hard to do online classes	6.4	37.1	56.5
Worry about maintaining grades	14.0	38.6	47.4
Difficulty balancing school and other responsibilities	13.3	48.2	38.5
Concerned about future career (disrupted job/ internship)	10.4	36.2	53.4
Problems with job (losing job, safety)	38.8	35.8	25.4
Worry about financial problems, money, economy	14.2	49.2	36.6
Worry about discrimination towards me or others	34.1	37.9	28.0
I feel less motivated	5.2	35.8	59.0
I feel bored, cooped up, or antsy	7.0	40.4	52.6
I feel sad or disappointed	11.2	54.8	34.0
I feel stressed or overwhelmed	6.0	48.0	46.0
I feel anxious or worried	9.4	48.2	42.4
I feel lonely or isolated	19.5	50.1	30.4
I am bothered by having too much unscheduled or unstructured time	19.9	45.4	34.7
Having difficulty adjusting to new living situation	22.6	52.3	25.1

The issues listed above were directly associated with the Covid-19 environment. Among all students that participated in the survey, the five issues that had the highest rates for “most of the time /always” were: feeling less motivated (59.0%), hard to do online classes (56.5%), concerned about future career (53.4%), feeling bored, cooped up or antsy (52.6%) and worry about maintaining grades (47.4%). Among students with a disability the five highest rates for “most of the time/always” were: feeling less motivated (75.8%), hard to do online classes (73.0%), feeling stressed or overwhelmed (71.5%), concerned about future career (71,1%) and feeling anxious or worried (69.7%). Students identifying as American Indian/Alaskan Native indicated the two highest issues were feeling less motivated (55.8%) and worry

about maintaining grades (54.5%); Asian students reported the top two issues as concerned about future career (53.4%) and worry about discrimination (45.6%); students who self-reported as Black/African American were concerned about future career (70.8%) and maintaining grades (57.5%); students identifying as Middle Eastern were feeling less motivated (75.0%) and maintaining grades (72.2%); White students reported feeling less motivated (60.8%) and hard to do online classes (58.1%); for students designated as multiracial (not including White) the issues were feeling less motivated (71.1%) and maintaining grades (61.4%) and finally students identifying as multiracial (including White) reported the two highest issues as hard to do online classes (68.0%) and feeling bored, cooped up and antsy (60.8%).

References:

- Eliasson AH, Lettlen CJ. (2010). Early to bed, early to rise! Sleep habits and academic performance in college students. *Sleep. Breath.* 14, 71-75.
- Gilbert SP, Weaver CC. (2010). Sleep quality and academic performance in university students: A wake-up call for college psychologists. *J. Coll. Stud. Psychother.* 24, 295-306.