

# Western Michigan University ScholarWorks at WMU

**Honors Theses** Lee Honors College

2-24-2021

# The Impact of COVID - 19 on the Student Experience: A WMU Student Survey and Study

**Henry Thiry** Western Michigan University, thiryhj@gmail.com

Follow this and additional works at: https://scholarworks.wmich.edu/honors\_theses



Part of the Human Resources Management Commons

#### **Recommended Citation**

Thiry, Henry, "The Impact of COVID - 19 on the Student Experience: A WMU Student Survey and Study" (2021). Honors Theses. 3405.

https://scholarworks.wmich.edu/honors\_theses/3405

This Honors Thesis-Open Access is brought to you for free and open access by the Lee Honors College at ScholarWorks at WMU. It has been accepted for inclusion in Honors Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



# The Impact of COVID-19 on the Student Experience: A WMU Student Survey and Study

# Henry James Thiry

Spring 2021

A Thesis Submitted in Fulfillment of the Requirements for the Lee Honors College at Western Michigan University

# Thesis Chair

Dr. Christine Moser, Department of Economics

Thesis Committee Members

Dr. Alan Poling, Department of Psychology

#### [I] Introduction

Over the past year it has become clear that the COVID-19 pandemic has drastically changed college students' everyday lives. Students are less likely to be employed or rely less on wage income and are also less likely to get very ill and die because of COVID-19. Moreover, courses moving online, loss of social connection, and drastic changes in the lives of students' parents and other family has negatively impacted many students' ability to thrive. In order to measure the impact of COVID-19 on the student experience at Western Michigan University, I conducted a survey of students based on a survey used by over 20 colleges and universities.

I find that student experiences varied widely. Most students were at least satisfied with Western Michigan University's overall response to the COVID-19 pandemic and students continue to feel as though they belong at Western Michigan University. Consistent with other studies, one-third of Western Michigan University respondents did have trouble paying for school. Additionally, mental health and stability were a concern for a large number. Mental health has shown itself to be a large concern in other studies looking at the impact of COVID-19 on students. Finally, consistent with other studies, I found that a significant number of Western Michigan University students believe COVID-19 will delay their graduation. However, it does not appear that most of those who responded plan to stop taking courses at Western Michigan University altogether because of the COVID-19 pandemic.

Understanding the magnitude of the pandemic's effect on students' lives at Western Michigan University will aid in the University supporting its current student population as well as ensuring the university is set up to support students holistically long term. This thesis aims to review current literature surrounding the impact of COVID-19 on students, comprehensively

explain how this survey, specifically, was administered, how each survey question was responded to, highlight respondent demography, and discuss how we can move forward, together.

#### [II] Literature Review

\_\_\_\_\_Students' mental health has long been a concern, but the COVID-19 pandemic has brought a renewed focus to this issue. A study by Hegde et al. (2020) concludes that students have reported an overall increase in stress and anxiety due to the pandemic. Specifically, the stress around becoming ill themselves or their friends and family becoming ill is high. Students have also reported that the pandemic has reduced their ability to concentrate. These stressors have been further exacerbated by the reduction in ability to sleep soundly and not being able to see others outside of their immediate household. As a result, students have sought support from others and used other coping strategies, both positive and negative (Hedge et al., 2020).

An article, by Kerr (2020), stated that an increased rate of depression, anxiety, PTSD, eating disorders, and other potentially life threatening mental illnesses can be attributed to the pandemic. Researchers have become especially alarmed because the vast majority of mental illnesses begin prior to someone turning 25 years old. Students are especially vulnerable to long term damage to their mental health. Research also suggests that social isolation could present itself as historical trauma later in life.

A study by Araya et al. (2020) found that students' current finances and/or future opportunities have also been negatively impacted by the COVID-19 pandemic. A survey conducted with 1,500 respondents, at one of the largest public institutions in the United States, found that 40 percent of students lost some form of (future) income such as a job or internship and 13% of respondents reported that their graduation will be delayed. In this study, lower-income students were 55% more likely to delay their graduation than their higher-income counterparts. This study also reported that, for the first time since the Great Depression, more

young adults, including, but not limited to college students, are living with their parents than are not.

A report by the Economic Policy Institute (2020) found that students' abilities to afford their education during the COVID-19 pandemic coincide closely with their ability to adapt to a fully remote or hybrid learning environment. Middle class and wealthy students have access to at-home computers and reliable internet service, whereas poor and lower class students often do not. The rapid transition to fully remote learning in March 2020 left many students unsure of what the immediate future would hold. Since then, universities have begun loaning out computers to students and some internet providers have offered WiFi connections at little or no cost. Even after students have been afforded the resources they need to have the opportunity to succeed, many instructors have been ill equipped to provide comparable instruction to what was provided in an in-person environment. As students become increasingly dissatisfied with their educational experience, absenteeism has continued to increase. In order to ensure an uncontrollable spiral within higher education does not occur, or is at the very least, more controllable, a multilayer approach is necessary (Economic Policy Institute, 2020).

Higher education institutions have been largely tasked with deciding for themselves if they will be fully in-person, follow a hybrid model, or be fully online. As of the Fall 2020 semester, The Chronicle of Higher Education reported that 4% of colleges and universities were fully in-person, 21% followed a hybrid model, 10% were fully online, 34% were primarily online, 23% were primarily in person, 3% were undetermined, and 5% were delivered in an "other" way. For many years, higher education has had to adapt in order to more effectively meet the needs of a student population that is increasingly diverse, students that are tasked with caring for other family members, students that must work full-time in order to make ends meet, students

with disabilities, and students that cannot readily afford their housing and food. It is clear that the COVID-19 pandemic has not created the problems we are seeing now, but rather exacerbated them.

The Chronicle of Higher Education goes on to say that throughout history, students have had to decide whether to continue their education at a particular institution, transfer to a different institution, or drop out entirely. The COVID-19 pandemic has highlighted these trends even further. While college students still believe that higher education is valuable, how valuable remains uncertain. As the cost of college hasgreatly outpaced inflation in remarkable terms in recent years, students wonder if what they are paying is the "right" amount. Furthermore, four in ten students believe that paying what they are is a bad deal for an online education.

According to Third Way, Roughly 52% of college students have been deemed "essential" workers. College continues to be difficult to pay for and many students are stuck in jobs that may jeopardize their health and wellbeing. Furthermore, some college students had to retain their jobs, if they could, in order to purchase items that would make transitioning to an online education more smooth. About 40% of college students have reported needing to purchase items solely for the purpose of engaging in virtual learning. Laptops, headphones/mics, and printers topped the list at 44%, 27%, and 24%, respectively, for the students that did purchase items. Finally, students are reporting significant worries about how the COVID-19 pandemic will impact their long term economic outlook. One of the actions many institutions are taking in order to quell students' present economic concerns is enacting a discount if all courses are delivered in an online modality.

# [III] Survey and Data Collection

The Student Experience in the Research University, "an academic and policy research collaboration based at Center for Studies in Higher Education at the University of California – Berkeley", originally administered this survey to 10 US public research universities between May and July 2020 and have since delivered it to others. The aim of the study completed by the SERU was to share best practices among member universities, propose relevant policy implementation and furthered research, and to aid other universities that are facing the same challenges relating to the COVID-19 pandemic (Center for Studies in Higher Education).

This survey measures five specific areas, including: (1) the transition to remote instruction, (2) the financial impact of COVID-19 on students, (3) student health and wellbeing, (4) belonging and engagement, and (5) future plans. The motivations behind doing this research was to evaluate how Western Michigan University students were responding to the COVID-19 pandemic in a number of ways and how this related to efforts by the university to quell difficulties that many are/were facing. Another motivation was to be able to speak to ways the students could further cope and suggest efforts that could be undertaken by the university to assist those impacted.

Universities including the University of California, Rutgers University, University of Florida, University of Michigan, University of Minnesota, University of Oregon, and the University of Pittsburgh have used this survey to understand how the COVID-19 pandemic has affected students. In the case of this particular survey, not all original SERU survey questions were included in the survey distributed to 1,000 randomly selected Western Michigan University undergraduate and graduate students. However, the broad goal of the survey remained consistent with its original form.

Questions specific to the experience of graduate students as well as questions specific to the international student experience at Western Michigan University were omitted from the survey I distributed. There were also a number of "prewritten wildcard questions" omitted from the survey I used. Questions were not necessarily added to the original survey, rather, made specific to Western Michigan University.

I received approval from the Western Michigan University Institutional Review Board to distribute the survey via Qualtrics. Ultimately, 93 surveys were completed over a period of four weeks. Below, table 1 describes demographics of those who responded, such as living arrangements and relocation, class standing, being an in-state or out-of-state student, gender identity, sexual orientation, parents' education, socioeconomic status, and having a responsibility to care for others.

**TAble 1. Demographics** 

Living before the COVID-19 pandemic	Campus residence hall or campus-owned apartment/house	Sorority/fraternity or co-op student housing	Off-campus apartment or house	Other	
	22.2%	1.4%	63.9%	12.5%	
Class standing	Freshman	Sophomore	Junior	Senior	Graduate Student
	19.2%	15.1%	23.3%	27.4%	15.1%
Status	In-state student	International student	Out-of-state student		
	82.2%	5.5%	12.3%		
Employed during pandemic	Yes	No			
	47.2%	52.8%			
Gender identity	Man	Woman	Prefer not to answer	Prefer to self-describe	
	31.5%	61.6%	4.1%	2.7%	
Sexual orientation	Heterosexual or straight	Gay or lesbian	Bisexual	Asexual	Prefer not to answer/questioning
	72.6%	5.5%	11%	1.4%	8.2%
Highest education for parents	Bachelor's	Less than HS/secondary graduate	HS/secondary school graduate	Graduate or professional degree	Some college/Associate's
	41.7%	2.8%	9.7%	27.8%	16.7%
Social class growing up	Low-income or poor	Working class	Middle class	Upper-middle or professional-middle	Wealthy
	8.3%	26.4%	34.7%	29.2%	1.4%
Disability	40.3% - total	22.2% - emotional or mental health concern/condition			

Sample populations closely align with the university populous in terms of class standing. The population is distributed as 16.14%, 16.71%, 19.38%, 24.39%, and 19.21 for Freshman, Sophomore, Junior, Senior, and Graduate students, respectively. The remaining 4.17% of

students are undergraduate certificate or undergraduate non-degree seeking. Sample populations in terms of gender were more different than the university population. Responses were disproportionately from women. This is partly due to the university only recording "man" and "woman". The difference was -16.26% and +9.36% for men and women, respectively.

## [IV] Survey Responses

Section four of this thesis describes the responses from the survey that was distributed to 1,000 Western Michigan University Graduate and Undergraduate students. Overall, students were more satisfied than not with the handling of the COVID-19 pandemic. Students' finances and emotional state were, and continue to be, negatively impacted by the pandemic, however. Students still exhibit a sense of belonging at Western Michigan University and plan to continue their education here until graduation. However, anticipated graduation dates for students have often been delayed. The five subsections that follow are: (a) transition to remote instruction, (b) the financial impact of COVID-19 on students, (c) student health and wellbeing, (d) belonging and engagement, and (e) future plans.

### (a) The Transition to Remote Instruction

This section presents student responses regarding transitioning to remote learning as well as this modality's perceived quality.

As shown in table 2.1, 66.7% of respondents were either satisfied or very satisfied with support they received from instructors to learn online. A smaller percentage, 58.7% were satisfied or very satisfied with the overall quality of courses moved online. 64% were satisfied or very satisfied with Western Michigan University's overall response to the COVID-19 pandemic. Although a large majority of students were satisfied with the university's response, only 51.7% of respondents felt that they were able to adapt to the online delivery of instruction.

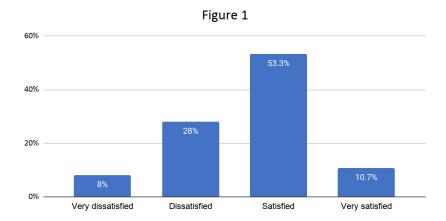
Even as this was the case, table 2.2 indicates that the largest obstacle for students in transitioning was the lack of motivation for online learning at 22.1% (column 1). Further, the largest reported obstacle was that course content was not appropriate for online learning at 49.4%

(column 2). Finally, the table reports that about a fifth of respondents reported enjoying learning in an online format (column 3).

Table 2.1 - Transition to remote instruction

Table 2.1 focuses on support from instructors in transitioning to remote learning and overall quality of students' academic experience.

	Very dissatisfied	Dissatisfied	Satisfied	Very satisfied
Support you received from instructors to successfully learn online	6.7%	26.7%	60%	6.7%
The overall quality of your courses that were moved online	13.3%	28%	48%	10.7%
Satisfaction with Western Michigan University's overall response to the COVID-19 pandemic	8%	28%	53.3%	10.7%
	Not at all well	Slightly well	Well	Very well
How well were you able to adapt to the new online instruction implemented by Western Michigan University in response to the COVID-19 pandemic?	15.3%	32.9%	38.8%	12.9%

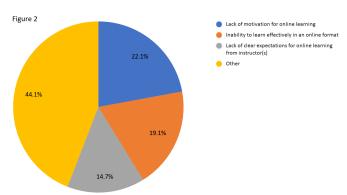


Overall response to the COVID-19 pandemic?

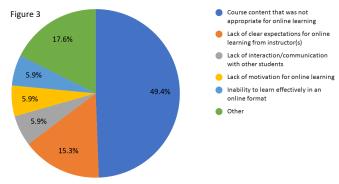
Table 2.2 - Experience with online learning (top three responses reported)

Table 2.2 focuses on positive and negative aspects of online learning.

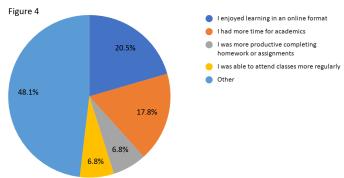
Which obstacle was the most challenging to your successful transition to online learning during the COVID-19 pandemic?	Which of the following academic factors, if any, were an obstacle to your successful transition to online learning during the COVID-19 pandemic?	Which of the following academic factors, if any, were positive experiences associated with your online learning during the COVID-19 pandemic?
Lack of motivation for online learning (22.1%)	Course content that was not appropriate for online learning (49.4%)	I enjoyed learning in an online format (20.5%)
Inability to learn effectively in an online format (19.1%)	Lack of clear expectations for online learning from instructor(s) (15.3%)	I had more time for academics (17.8%)
Lack of clear expectations for online learning from instructor(s) (14.7%)	Lack of interaction/communication with other students (5.9%)	I was more productive completing homework or assignments (6.8%)
	Lack of motivation for online learning (5.9%)	I was able to attend classes more regularly (6.8%)
	Inability to learn effectively in an online format (5.9%)	



Which obstacle was the most challenging to your successful transition to online learning during the COVID-19



Obstacle to your successful transition to online learning during the COVID-19 pandemic?



Positive experiences associated with your online learning during the COVID-19 pandemic?

# (b) The Financial Impact of COVID-19 on Students

This section presents how the COVID-19 pandemic, in many ways, hindered students' financial wellbeing.

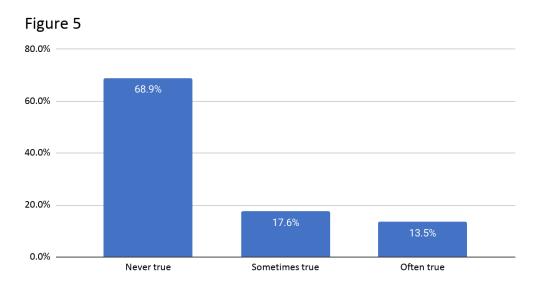
As reported in table 3.1, 20.3% of respondents were either sometimes or often worried about running out of food before being able to buy more. Further, the table reports 13.5% of respondents running out of food because it didn't last either sometimes or oftentimes. Nearly one third of respondents reported being worried about paying for the cost of housing either sometimes or oftentimes. 12.3% of respondents were unable to pay their housing costs on time either sometimes or oftentimes. Table 3.2 also reports that more than a third of respondents had a more difficult time paying for their education in fall 2020 than pre-pandemic semesters. This

may be partly due to an unexpected increase in spending for technology (27%), losing off-campus employment (16.2%), and losing on-campus employment (10.8%). Table 3.3 indicates that close to 15% of respondents reported caring for children and/or adults during the pandemic and almost half had to relocate during this time.

Table 3.1 - Financial impact of COVID-19 on Students

Table 3.1 focuses on students' ability to pay for housing and food.

	Never true	Sometimes true	Often true
I was worried whether my food would run out before I got money to buy more	79.7%	13.5%	6.8%
The food that I bought just didn't last, and I didn't have money to get more	86.5%	5.4%	8.1%
I worried I would not have enough money to cover the cost of my housing	68.9%	17.6%	13.5%
I was unable to pay all of the cost of my housing on time	87.7%	6.8%	5.5%



I worried I would not have enough money to cover the cost of my housing

# Table 3.2 - Paying for education

Table 3.2 focuses specifically on students' ability to pay for their education in Fall 2020 and how that compared to paying for their education in previous semesters.

	Not at all difficult	Slightly difficult	Difficult	Very difficult	Extremely difficult
How difficult was it to pay for your education in fall 2020 at Western Michigan University?	32.5%	35%	12.5%	15%	5%
	Less difficult	About the same	More difficult		
Compared to pre-pandemic semesters, how difficult was paying for your education in fall 2020?	3.03%	60.61%	36.36%		

Table 3.3 - Extenuating circumstances

Table 3.3 focuses on a few extenuating circumstances students may have had during the COVID-19 pandemic.

	Yes	No
Care for children during the pandemic	12.5%	87.5%
Care for adults (18 yrs+) during the pandemic	15.3%	84.7%
Relocate during the pandemic	41.1%	54.8%

# (c) Student Health and Wellbeing

This section presents the mental and physical health of students. Mental health appears to be a much larger factor in student wellbeing. However, a percentage of students do report never being physically safe.

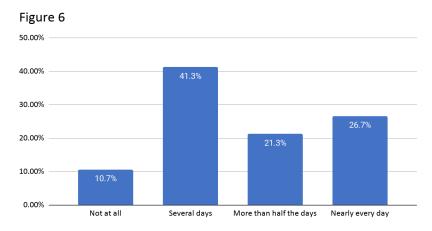
As reported in table 4.1, on average, 37.65% of respondents reported being bothered by various problems either more than half the days or nearly every day over the last two weeks. Whereas, on average, 62.33% of respondents reported being bothered by various problems either not at all or several days over the last two weeks. As shown in table 4.2, of those who responded, said that they never were living in a place that was free from abuse: physical/emotional (5.4%), drug/alcohol (2.7%), or because of their identity (5.4%). To compound the trauma that many are facing, 22.2% reported an emotional or mental health condition or concern, as shown in the demographics section.

To cope, 93.2% of students checked in with friends and/or family during the COVID-19 pandemic.

#### Table 4.1 - Mental State

Table 4.1 focuses on the mental state of students' at Western Michigan University during the past two weeks, occurring during the COVID-19 pandemic.

Over the last two weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things.	24%	44%	14.7%	17.3%
Feeling down, depressed, or hopeless	32%	41.3%	13.3%	13.3%
Feeling nervous, anxious, or on edge	10.7%	41.3%	21.3%	26.7%
Not being able to stop worrying	22.7%	33.3%	24%	20%



Over the last two weeks...Feeling nervous, anxious, or on edge

Table 4.2 - Mental and physical safety.

Table 4.2 focuses on the physical and mental safety of students where they lived.

	Never true	Sometimes true	Often true
I had a place to live that was free from physical/emotional violence or abuse	5.4%	8.1%	86.5%
I had a place to live that was free from drug and/or alcohol abuse	2.7%	8.1%	89.2%
I had a place to live where my identity was respected (e.g., gender identity, sexual orientation, race/ethnicity)	5.4%	5.4%	89.2%
I had a place to live where I felt safe and protected		14.9%	85.1%

family during the COVID-19	93.2%	
pandemic		

# (d) Belonging and Engagement

This section presents students' perceived belonging at and support from Western Michigan University during the COVID-19 pandemic.

As reported in table 5, 74.3% of respondents reported feeling at least somewhat valued at Western Michigan University. Conversely, 8.2 more percentage points responded reporting feeling like they belong at WMU. However, just over half, 56.8% of the respondents reported that WMU supported them during the COVID-19 pandemic. This is suggestive that other entities or friends and family supported students during the COVID-19 pandemic.

Disagree Somewhat disagree Strongly Somewhat Agree Strongly disagree agree agree I feel valued as an 8.1% 9.5% 8.1% 36.5% 32.4% 5.4% individual at Western Michigan University I feel that I belong at 4.1% 6.8% 6.8% 33.8% 39.2% 9.5% Western Michigan University I feel that Western 12.2% 12.2% 18.9% 32.4% 20.3% 4.1% Michigan University supported me during the COVID-19 pandemic

Table 5 - Belonging and Engagement

# (e) Future Plans

This section presents students' plans for Spring '21 (when the writing of this thesis took place) as well as post Spring '21 plans, including eventual graduation.

As seen in table 6.1, over 90% of respondents planned to take courses in Spring 2021 and beyond. Finally, roughly one third of respondents reported that the COVID-19 pandemic would delay when they expect to graduate. It is also noteworthy that almost a third of respondents reported that they did not know if the pandemic would delay their graduation. In terms of

specific (anticipated) graduation dates, 6.7% reported fall 2020, 20% reported spring/summer 2021, 6.7% reported fall 2021, 20% reported spring 2022, 37.3% reported after, and the remaining 9.3% reported that they were not sure when they would graduate.

Table 6.1 - Academic Future

	Yes	No	I'm not sure
Do you plan to take courses at Western Michigan University in spring 2021?	90.9%	7.3%	1.8%
Do you plan to return to Western Michigan University to continue your education after spring 2021?	94.3%	0%	5.7%
Do you expect the COVID-19 pandemic to delay the semester or term you intended to graduate?	32.4%	39.7%	27.9%

#### **University Support**

As the data shows, Western Michigan University did an overall positive job in transitioning to a remote learning environment and students continue to feel as though they belong. In order to understand the true impact of COVID-19 on the student experience, longitudinal data must be collected to understand to what extent students feel as though they belong after returning to "normal", assuming that occurs at some point.

Per conversation with Kara Wood, Western Michigan University Associate Vice

President for Community Partnerships, many decisions around the pandemic came as directives

from either the Kalamazoo County Health Department and/or the state of Michigan. Many safety
related decisions were out of the university's control and it was less possible to curtail any
negative student reaction. This could have played into why students were understanding of the
situation. However, the university did address concerns about mental health. Counseling has
been made available to students via telehealth, so long as they reside in Michigan. In addition, an
app, called WellTrack, has been made available to students at no additional cost. The app aims to

mitigate stress, anxiety, and depression. These health indicators were identified as some of the main issues in the survey distributed to students, as seen in table 4.1.

Mello and West write, as campuses move forward in returning to in-person learning, they can look to other crises throughout history, such as forest fires, school shootings, etc. Unlike these other natural and human-induced disasters, the COVID-19 pandemic, experts argue, will take fifteen to twenty years for universities to fully recover from, if even possible. It is also expected that fewer students will enroll in colleges in the coming years. However, the demand for resources, especially counseling, is expected to increase. This presents universities with unique challenges. There will be a loss in revenue but a higher demand for services. In order to have the most effective recovery possible, Western Michigan University must have students at the decision making table. Santa Rosa Junior College president said in the article, "I see this is an opportunity for our students to see how to make a difference, and challenge them to address some of these issues in a way that we weren't successful in doing in our previous generation."

All stakeholders at Western Michigan University must be brought together to ensure this occurs. Members of the student population, faculty, staff, and administrators all have a critical role to play.

#### Limitations

There were a number of limitations to this study. For example, the survey was distributed to only 1,000 Western Michigan University students. Sending it to 3,000 students may have resulted in closer to 250 responses, which was the desired outcome. The limited response rate made it impossible to conclude anything about a specific subset of students, such as socioeconomic status - poor, as any subgroup may have had five or fewer responses.

Furthermore, the survey was only distributed to students enrolled in Fall 2020 and therefore, students who didn't enroll or who dropped out entirely were not included in the survey. Understanding why students stopped pursuing their education would help the administration prevent others from dropping out and find ways to bring students back.

#### **Conclusion**

It is my hope that this research shows how Western Michigan University students have been impacted by the COVID-19 pandemic and highlight some ways the university can assist its students now and in the future. From the survey that was distributed to 1,000 Western Michigan University undergraduate and graduate students, it can be concluded, the mental health of Western Michigan University students has been negatively impacted by the COVID-19 pandemic; the finances of students have also been negatively impacted. Fortunately, students have been satisfied with the overall response to the pandemic by the university, students continue to feel as though they belong, and they anticipate continuing their education here for the foreseeable future.

In many other types of crisis, such as the financial crisis in 2008, you would be able to connect, in-person, with friends and family to talk through emotions. Now, we are largely left with connecting virtually. We are left feeling alone in a situation that involves and impacts all of us, however, as shown, unequally. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This thesis focuses on the most prominent responses for each question and/or survey topic. Thus, some responses are omitted from the data sets and can be made available upon request.

#### Works Cited

- Auccejo, E., French, J., Araya, M., & Zafar, B. (2020, November 1). *The impact of COVID-19 on student experiences and expectations: Evidence from a survey*. ScienceDirect. https://www.sciencedirect.com/science/article/abs/pii/S0047272720301353?utm\_campaig n=Economic%20Studies&utm\_content=94903295&utm\_medium=email&utm\_source=h S\_email
- Chu, A. (2020, May 4). How will colleges recover from coronavirus? Campuses that survived disasters offer clues. NBC News.

  https://www.nbcnews.com/news/education/how-will-colleges-recover-coronavirus-campuses-survived-disasters-offer-clues-n1197731
- Fishman, R., & Hiler, T. (2020, September 2). New Polling from New America & Third Way on COVID-19's Impact on Current and Future College Students. Third Way.

  https://www.thirdway.org/memo/new-polling-from-new-america-third-way-on-covid-19s
  -impact-on-current-and-future-college-students
- García, E., & Weiss, E. (2020, September 10). COVID-19 and student performance, equity, and U.S. education policy: Lessons from pre-pandemic research to inform relief, recovery, and rebuilding. Economic Policy Institute.

  https://www.epi.org/publication/the-consequences-of-the-covid-19-pandemic-for-education-performance-and-equity-in-the-united-states-what-can-we-learn-from-pre-pandemic-relief.

esearch-to-inform-relief-recovery-and-rebuilding/

- Here's Our List of Colleges' Reopening Models. (2020, October 1). The Chronicle of Higher Education.
  - https://www.chronicle.com/article/heres-a-list-of-colleges-plans-for-reopening-in-the-fall/
- Kerr, E. (2020, April 27). *How College Students Manage Coronavirus Stress*. U.S. News and World Report.
  - https://www.usnews.com/education/best-colleges/articles/how-college-students-are-mana ging-coronavirus-stress
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020, September 3). *Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study*. Journal of Medical Internet Research. https://www.jmir.org/2020/9/e21279/
- Student Experience in the Research University (SERU) | Center for Studies in Higher Education. (2021). UC Berkeley. https://cshe.berkeley.edu/seru