



# SERU COVID-19 SURVEY

## **The Experiences of Undergraduate Students with Physical, Learning, Neurodevelopmental, and Cognitive Disabilities During the Pandemic**

**Krista M. Soria, Bonnie Horgos, Igor Chirikov, and Daniel Jones-White**

The COVID-19 pandemic has disproportionately impacted students with physical, learning, neurodevelopmental, and cognitive disabilities who are enrolled at large public research universities, according to the Student Experience in the Research University (SERU) Consortium survey administered from May to July 2020 of 30,099 undergraduate students at nine universities. Approximately 6% of respondents ( $n = 1,788$ ) reported having at least one disability (physical, learning, neurodevelopmental, or cognitive).

Students with physical, learning, neurodevelopmental, and cognitive disabilities were more likely than students without disabilities to experience **financial hardships** during the pandemic, including unexpected increases in spending for technology, unexpected increases in living expenses, and loss or reduction in income (from family members or personal wages from off-campus employment). Furthermore, students with disabilities were also **more likely to experience food and housing insecurity compared** to students without disabilities.

Students with physical, learning, neurodevelopmental, and cognitive disabilities were **less likely to believe that they feel like they belong on campus** and **less likely to agree that the campus supported them during the pandemic**. Students with those disabilities also experienced higher rates of **major depressive disorder and generalized anxiety disorder** than students without disabilities. Students with disabilities were also **less likely to live in safe environments** compared to students without disabilities.

As institutional leaders continue to adapt to higher education during the COVID-19 pandemic, we encourage them to consider the impact different instructional modalities may have in perpetuating disparities for students with disabilities.

## Students with Disabilities

In the SERU COVID-19 survey, we asked undergraduate students whether they had a 1) physical disability, 2) learning disability (e.g., dyslexia or a speech disorder), or 3) neurodevelopmental or cognitive disability (e.g., autism or attention deficit disorder). Students could respond either “yes” or “no” to either of those options, including a combination of those options. We report the response rates by students’ self-identified disability in Table 1.

**Table 1**

***Students’ Response Rates by Disability Type***

	<i>n</i>	%
Students with physical disabilities only	249	0.8
Students with learning disabilities only	364	1.2
Students with neurodevelopmental or cognitive disabilities only	897	3.0
Students with physical disabilities and neurodevelopmental or cognitive disabilities	78	0.3
Students with physical disabilities and learning disabilities	32	0.1
Students with learning disabilities and neurodevelopmental, or cognitive disabilities	138	0.5
Students with physical disabilities and learning disabilities and neurodevelopmental, or cognitive disabilities	30	0.1
Students without disabilities	28,311	94.1

## Financial Hardships

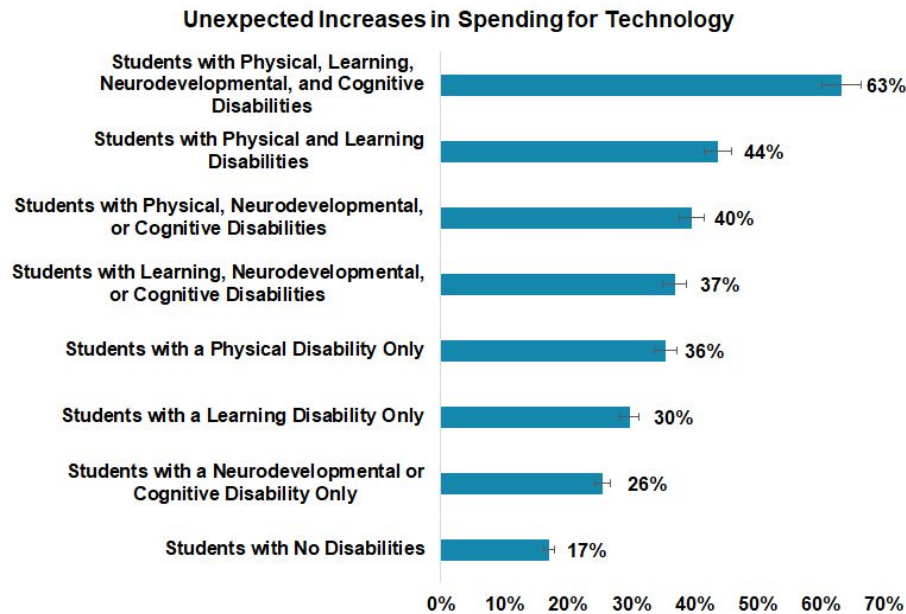
We asked students if they experienced a series of financial hardships during the COVID-19 pandemic. While we have reported only a few examples of the largest differences between students without disabilities and students with disabilities below, readers can view our full results for all financial hardship items [here](#).

Notably, *most* of the differences reported in financial hardships below are statistically significant ( $p < .05$ ) between the students with disabilities and the students without disabilities. For instance, students with disabilities were much more likely to have experienced unexpected differences in spending for technology (Figure 1) compared to students without disabilities. Close to two-thirds of students with all disabilities (physical, learning, neurodevelopmental or cognitive)—63%—experienced unexpected increases in spending for technology. Overall, between 26% to 63% of students with disabilities experienced unexpected increases in spending for technology compared to only 17% of students without disabilities.

Additionally, students with disabilities were also far more likely to experience unexpected increases in living expenses compared to students without disabilities (Figure 2). Fifty-nine percent of students with physical and learning disabilities experienced unexpected increases in living expenses compared to 34% of students without disabilities. While most students with disabilities experienced higher rates of increased living expenses compared to students without disabilities, students with all disabilities (physical, learning, neurodevelopmental, or cognitive) had lower rates (33%) than students without disabilities (34%).

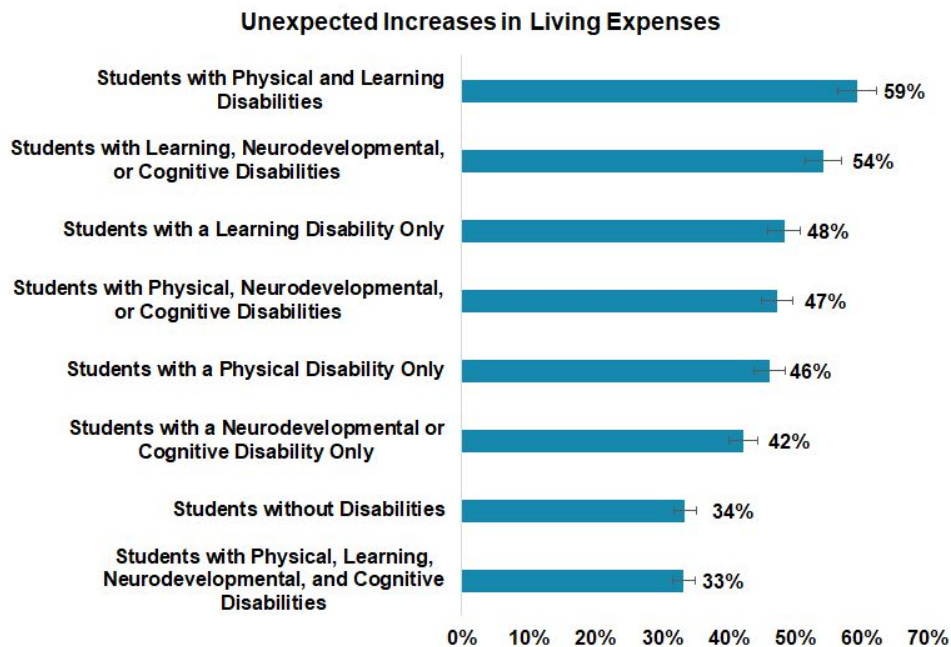
**Figure 1**

***Students Who Reported Experiencing Unexpected Increases in Spending for Technology, by Disability***



**Figure 2**

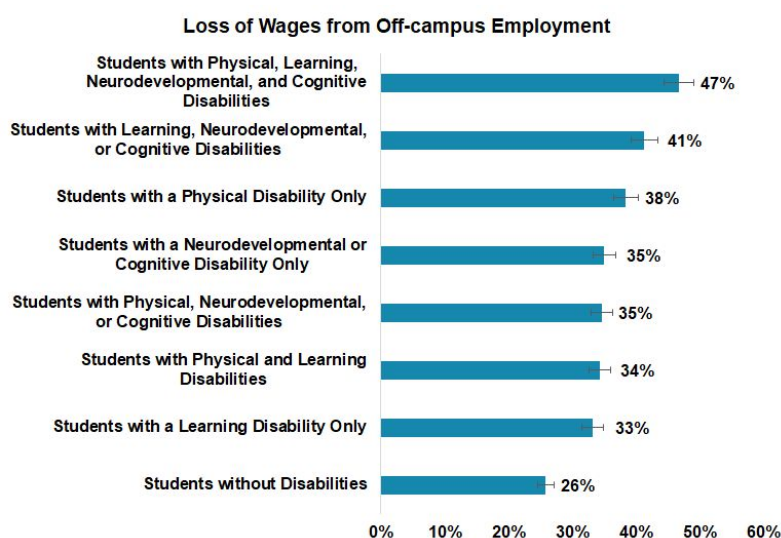
***Students Who Reported Experiencing Unexpected Increases in Living Expenses, by Disability***



Additionally, our results suggest that students with disabilities were also far more likely to experience lost wages from off-campus employment compared to students without disabilities (Figure 3). Students with all disabilities (physical, learning, neurodevelopmental, or cognitive) were nearly twice as likely to experience the loss of off-campus employment wages compared to students without disabilities (47% and 26%, respectively). Furthermore, students with disabilities were more likely than students without disabilities to experience the loss or reduction of income of other family members (Figure 4).

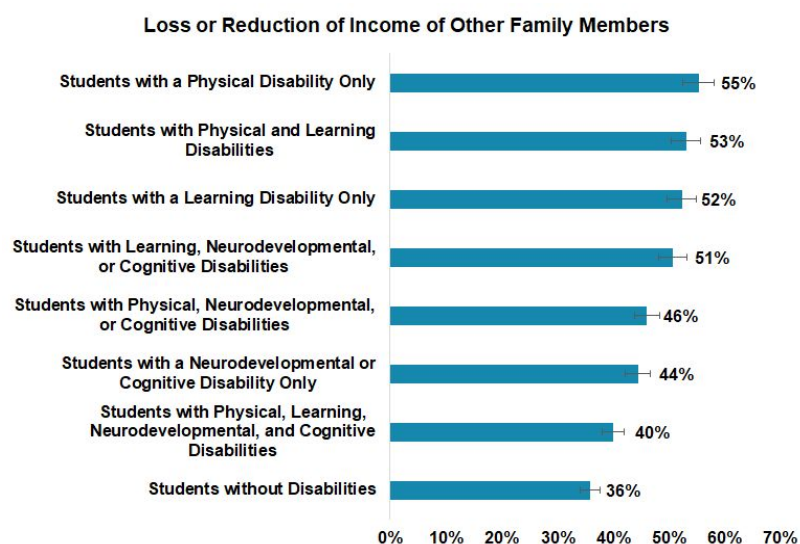
**Figure 3**

***Students Who Reported Lost Wages from Off-campus Employment, by Disability***



**Figure 4**

***Students Who Reported the Loss or Reduction of Income of Other Family Members, by Disability***





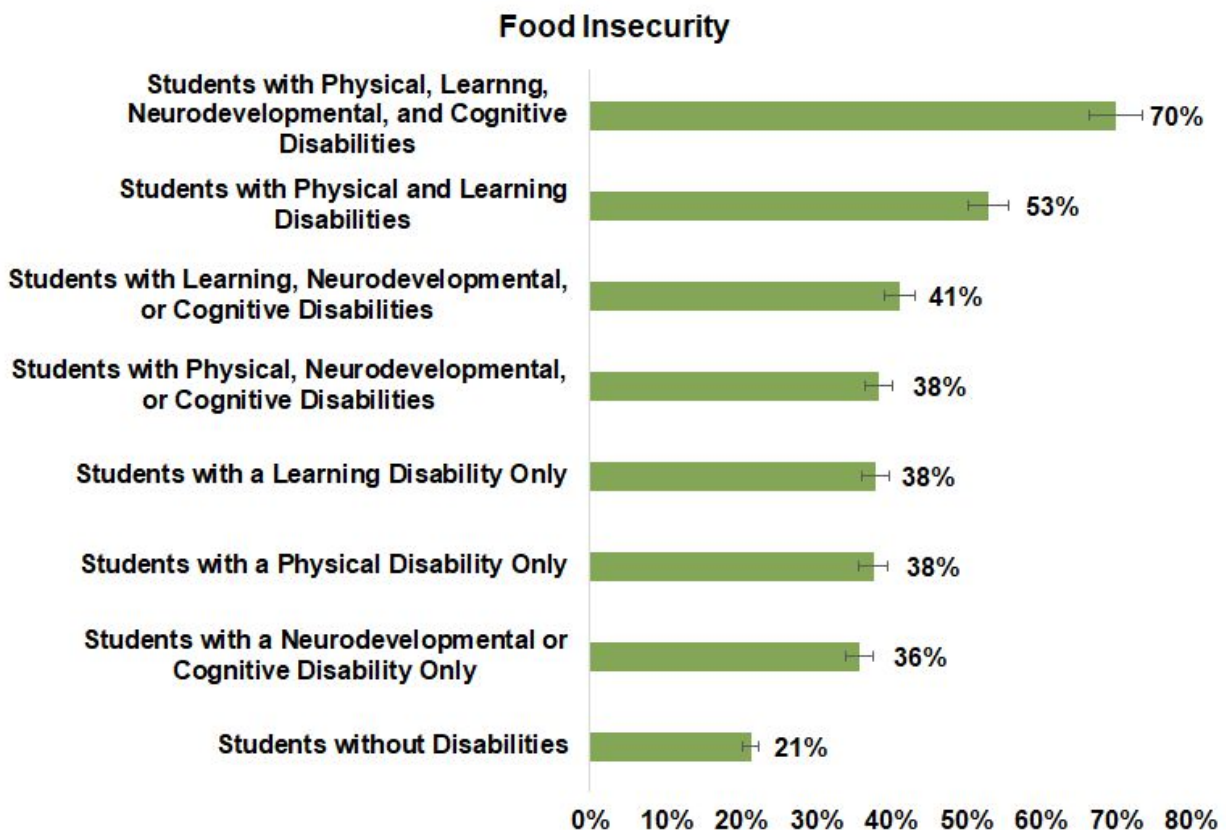
## Food Insecurity

We used a two-item food insecurity screen to identify students' food insecurity (Hager et al., 2010). We asked students how often they were worried whether their food would run out before they got money to buy more, and how often the food that they bought didn't last and they didn't have money to get more. A response of "often true" or "sometimes true" to either statement indicates a positive screen for food insecurity.

As demonstrated in Figure 5, students with disabilities were more likely to experience food insecurity compared to students without disabilities. In fact, students with all disability types (physical, learning, neurodevelopmental, or cognitive) were over three times more likely than students without disabilities to experience food insecurity (70% and 21%, respectively). Furthermore, students with physical and learning disabilities were more than twice as likely as students without disabilities to experience food insecurity (53% compared to 41%).

**Figure 5**

***Undergraduates' Food Insecurity During the Pandemic, by Disability***



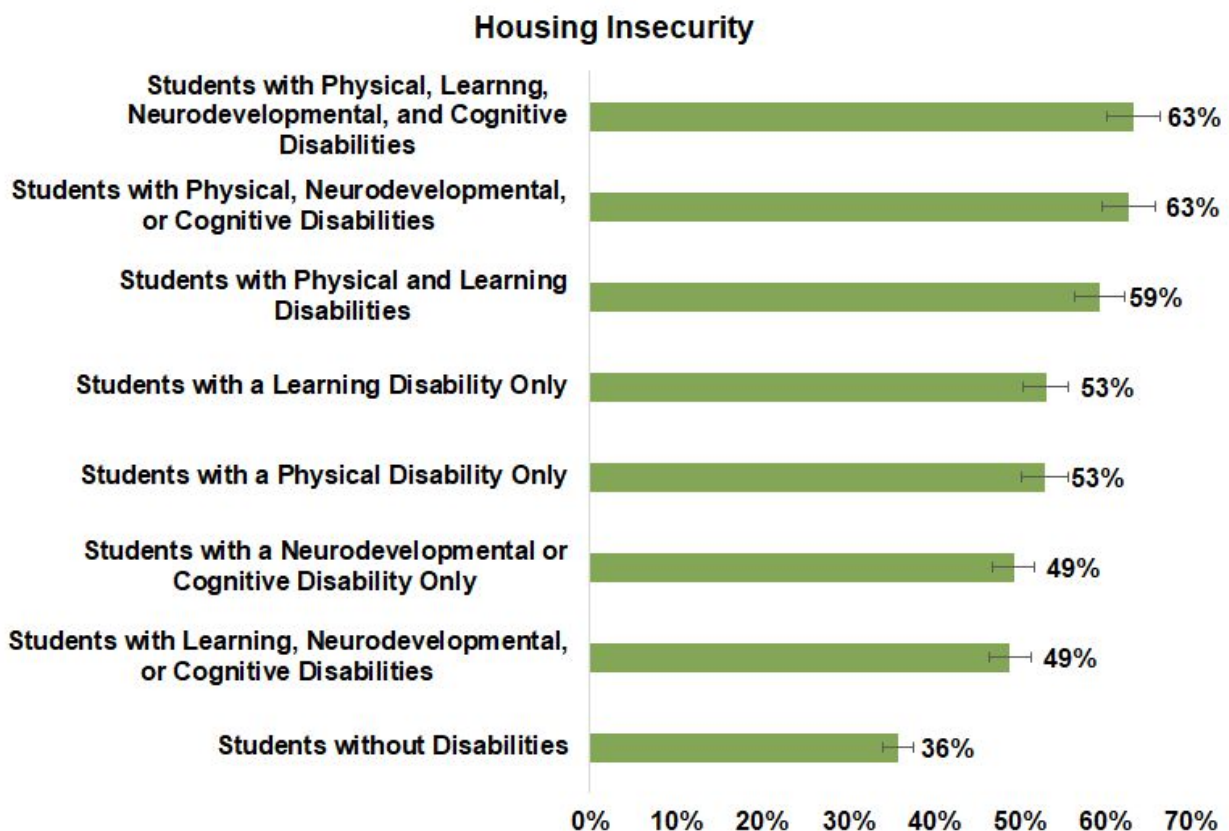
## Housing Insecurity

We used a two-item housing insecurity screen modeled after the two-item screen for students' food insecurity (Hager et al., 2010). We asked students how often they were worried that they would not have enough money to cover the cost of their housing and how often they were unable to pay all of the costs of their housing on time. A response of "often true" or "sometimes true" to either statement indicates a positive screen for housing insecurity.

Similar to food insecurity, students with disabilities experience housing insecurity at much higher rates than students without disabilities. Specifically, close to two-thirds (63%) of students with all disabilities (physical, learning, neurodevelopmental, or cognitive) and students with physical, neurodevelopmental, or cognitive disabilities experienced food insecurity compared to 36% of students without disabilities (Figure 6).

**Figure 6**

***Undergraduates' Housing Insecurity During the Pandemic, by Disability***

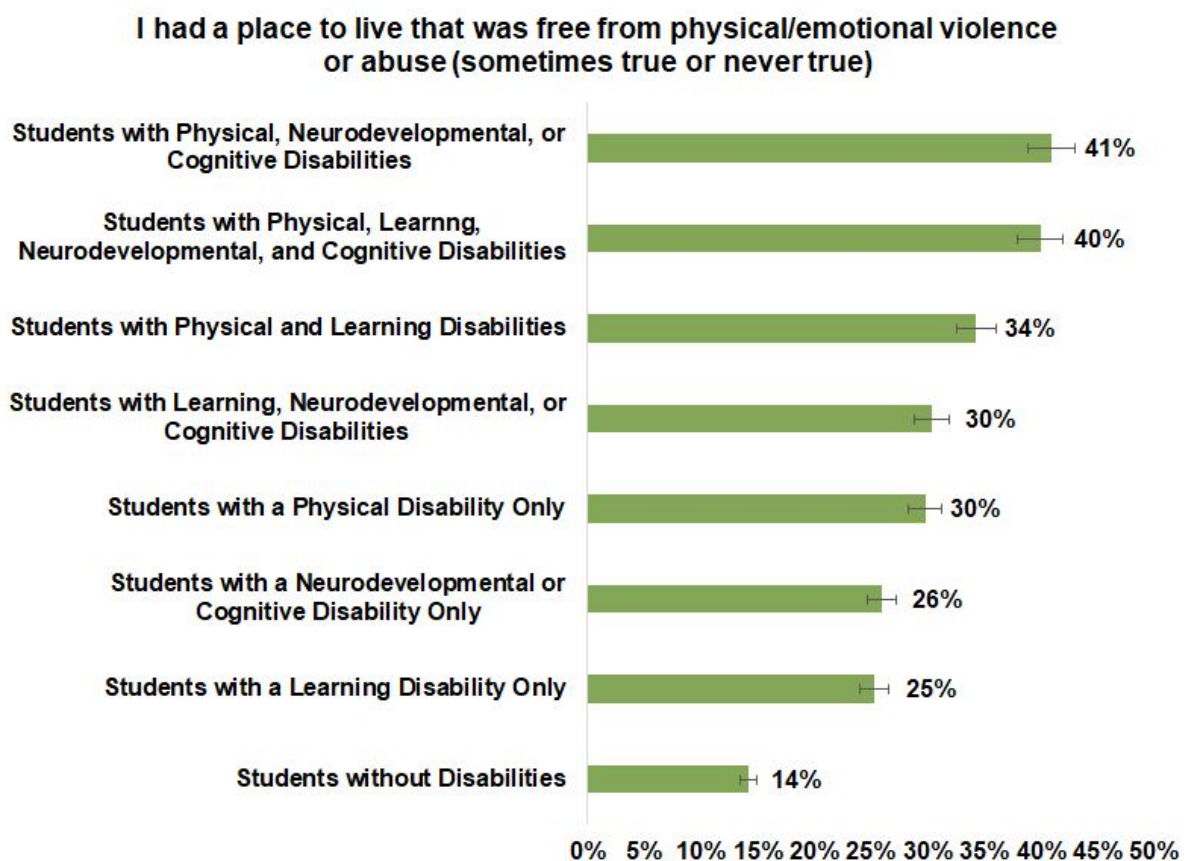


## Safety

We asked students to indicate whether it was never true, sometimes true, or often true that they experienced safety or respect in their living situation. Our survey results suggest that students with disabilities were significantly ( $p < .05$ ) more likely than students without disabilities to live in places during the pandemic that were not free from physical or emotional violence or abuse (Figure 7). Specifically, students with disabilities were, in some cases, over twice to three times more likely to indicate that it was “never true” or “sometimes true” that they lived in a place free from physical or emotional violence or abuse.

**Figure 7**

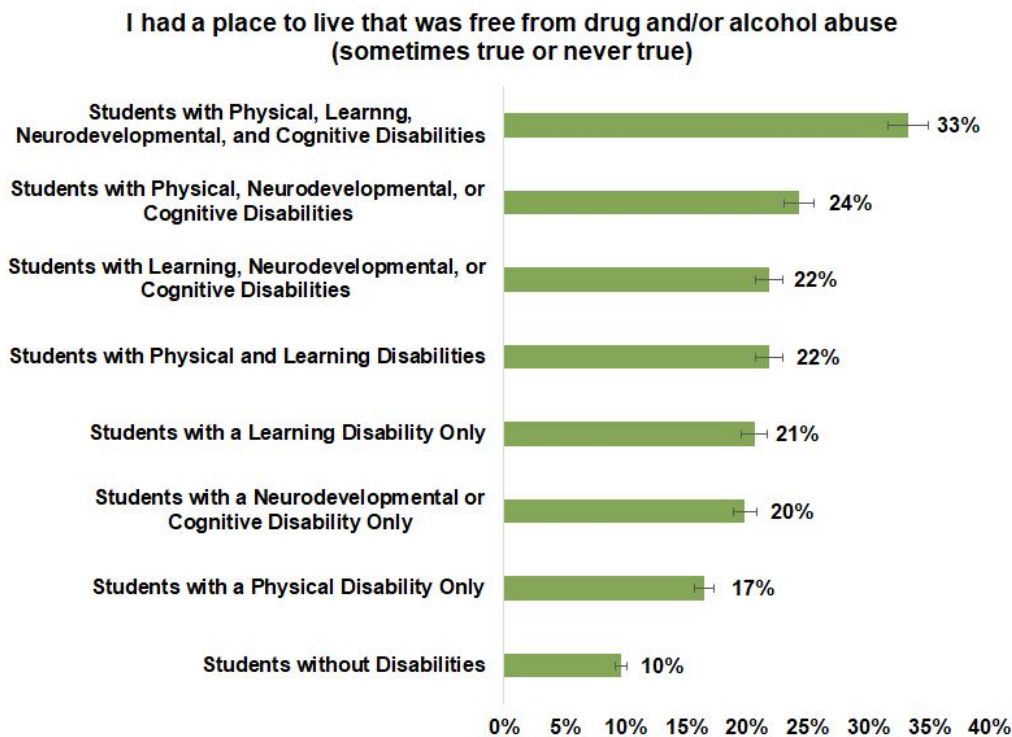
### *Undergraduates’ Safety During the Pandemic, by Disability*



We asked students to indicate whether it was never true, sometimes true, or often true that they lived in a place that was free from drug and/or alcohol abuse. Our survey results suggest that students with disabilities were significantly ( $p < .05$ ) more likely than students without disabilities to live in places during the pandemic that were not free from drug and/or alcohol abuse (Figure 8). Specifically, students with disabilities were, in some cases, over twice to three times more likely to indicate that it was “never true” or “sometimes true” that they lived in a place free from drug or alcohol abuse.

**Figure 8**

***Undergraduates' Safety During the Pandemic, by Disability***



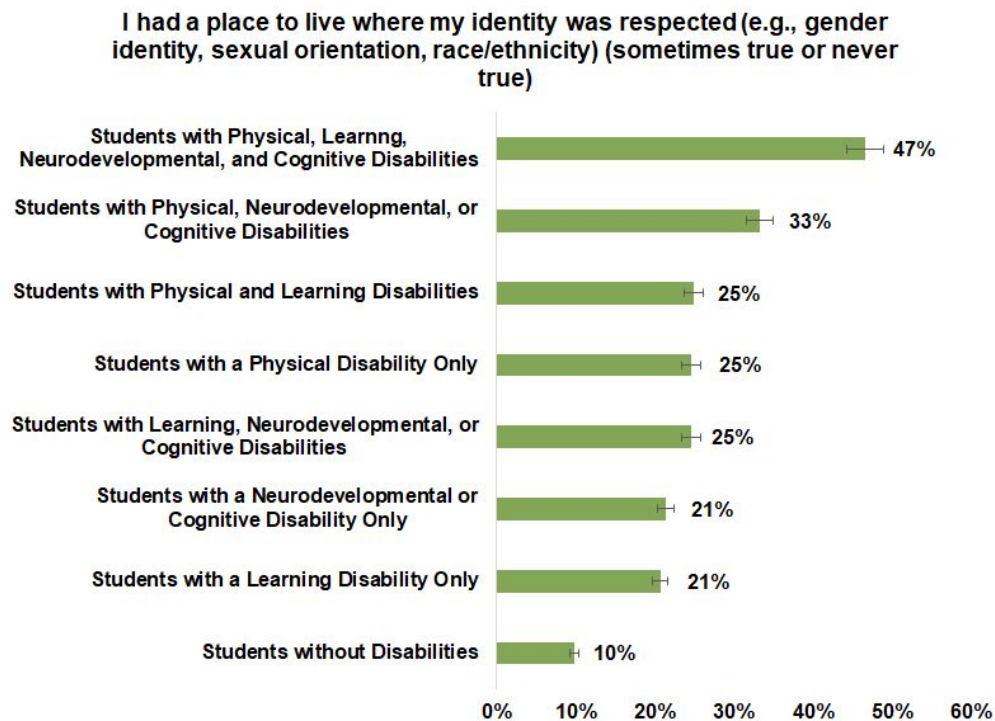
We also asked students to indicate whether it was never true, sometimes true, or often true that they had a place to live where their identity was respected. Our survey results suggest that students with disabilities were significantly ( $p < .05$ ) more likely than students without disabilities to live in places where their identity was not respected (Figure 9). Specifically, students with disabilities were, in some cases, over twice to four times more likely to indicate that it was “never true” or “sometimes true” that they had a place to live where their identity was respected.

As indicated in Figure 10, students with disabilities were also significantly ( $p < .05$ ) more likely than students without disabilities to indicate that it was never true or sometimes true that they had a place to live where they felt safe and protected. Specifically, students with disabilities were, in some cases, over twice to almost five times more likely to indicate that it was “never true” or “sometimes true” that they had a place to live where they felt safe and protected.



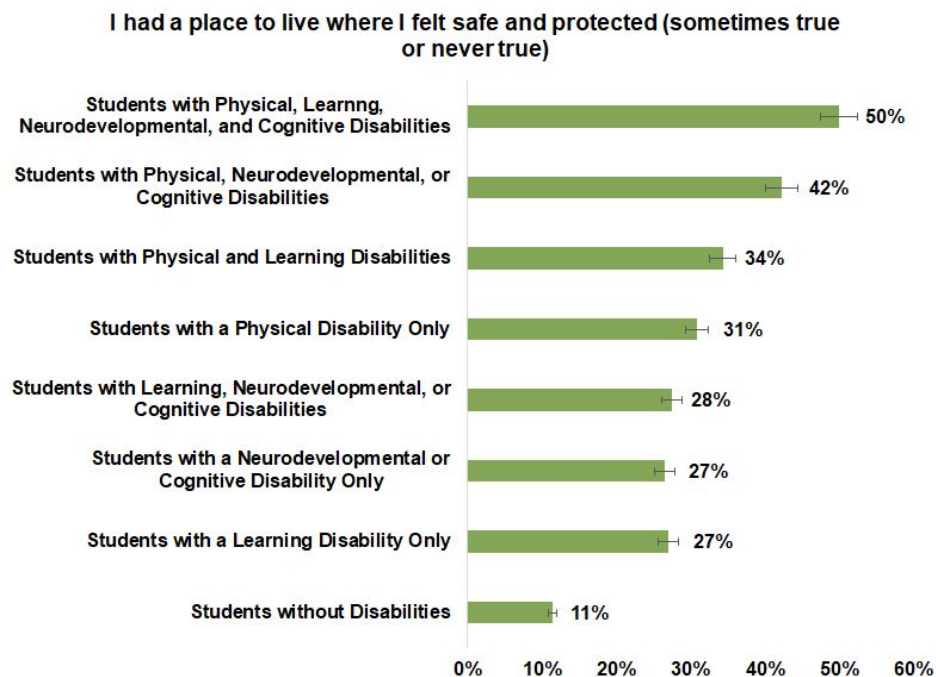
**Figure 9**

***Undergraduates' Safety During the Pandemic, by Disability***



**Figure 10**

***Undergraduates' Safety During the Pandemic, by Disability***



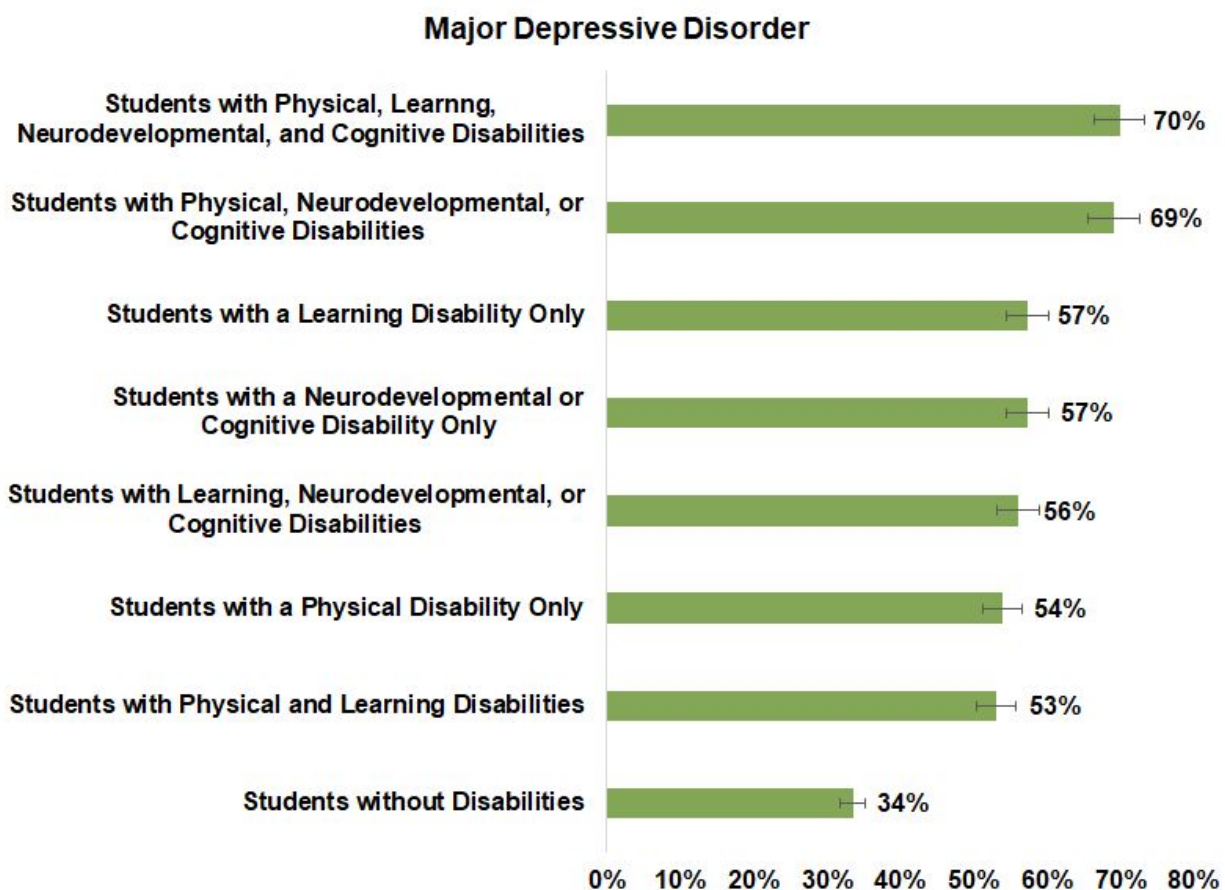
## Mental Health

We used the Patient Health Questionnaire-2 ([PHQ-2](#)) two-item scale to screen for major depressive disorder symptoms (Kroenke et al., 2003) and Generalized Anxiety Disorder-2 ([GAD-2](#)) two-item scale to screen students for generalized anxiety disorder symptoms (Kroenke et al., 2007). The PHQ-2 asks two questions about the frequency of depressed mood and anhedonia (lost interest in activities or lack of pleasure) over the past two weeks while the GAD-2 asks two questions about the frequency of anxiety over the past two weeks. Each question is scaled from 0 (not at all) to 3 (nearly every day). The responses to two questions in each scale are summed and, if the score for PHQ-2  $\geq 3$  (out of 6), major depressive disorder is likely. If the score for GAD-2 is  $\geq 3$  (out of 6), generalized anxiety disorder is likely.

The results in Figure 11 suggest that students with disabilities have higher rates of major depressive disorder (between 53% to 70%) compared to students without disabilities (34%). In particular, students with physical, neurodevelopmental, or cognitive disabilities and students with all disabilities (physical, learning, neurodevelopmental, or cognitive) are over twice as likely as students without disabilities to experience major depressive disorder.

**Figure 11**

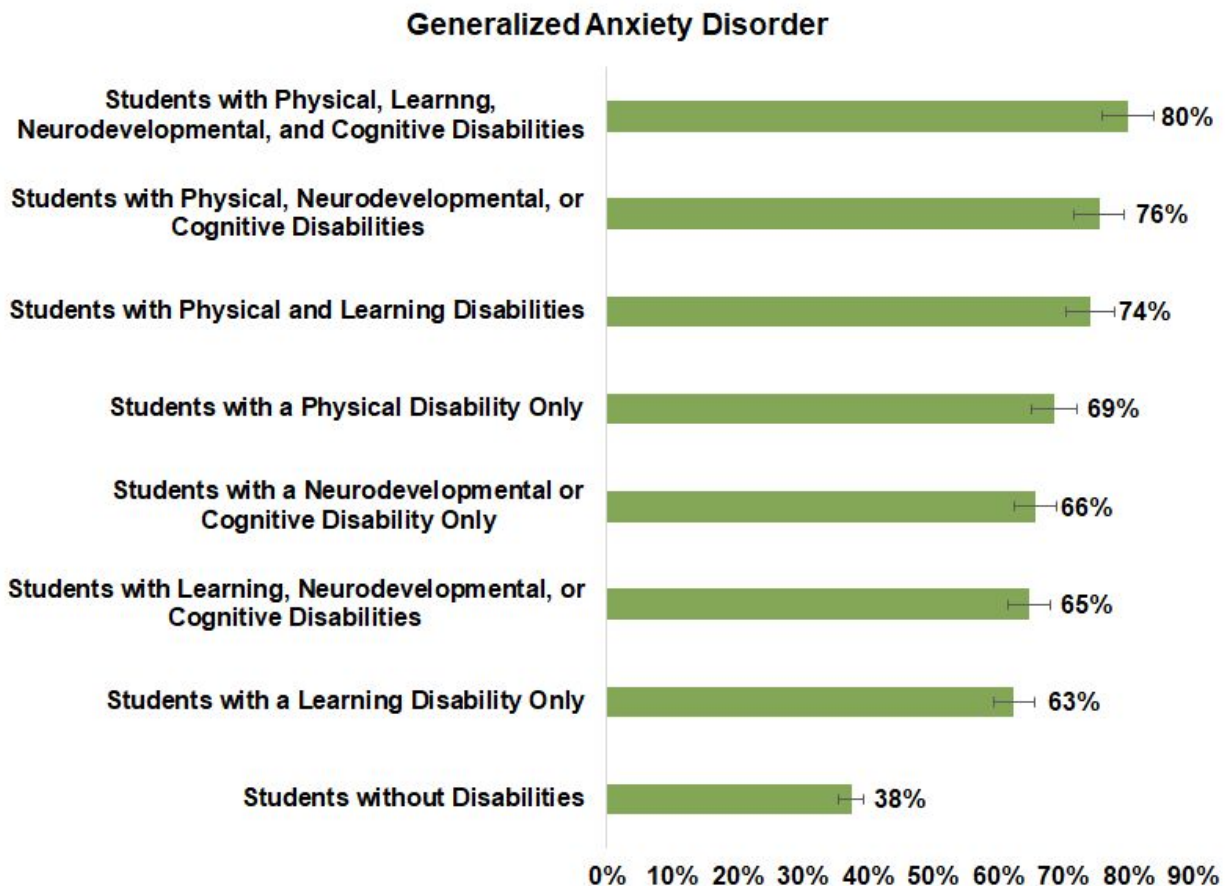
***Undergraduates Who Screened Positive for Major Depressive Disorder, by Disability***



The results in Figure 12 suggest that students with disabilities have higher rates of generalized anxiety disorder (between 63% to 80%) compared to students without disabilities (38%). In particular, students with physical, neurodevelopmental, or cognitive disabilities and students with all disabilities (physical, learning, neurodevelopmental, or cognitive) are over twice as likely as students without disabilities to experience generalized anxiety disorder.

**Figure 12**

***Undergraduates Who Screened Positive for Generalized Anxiety Disorder, by Disability***



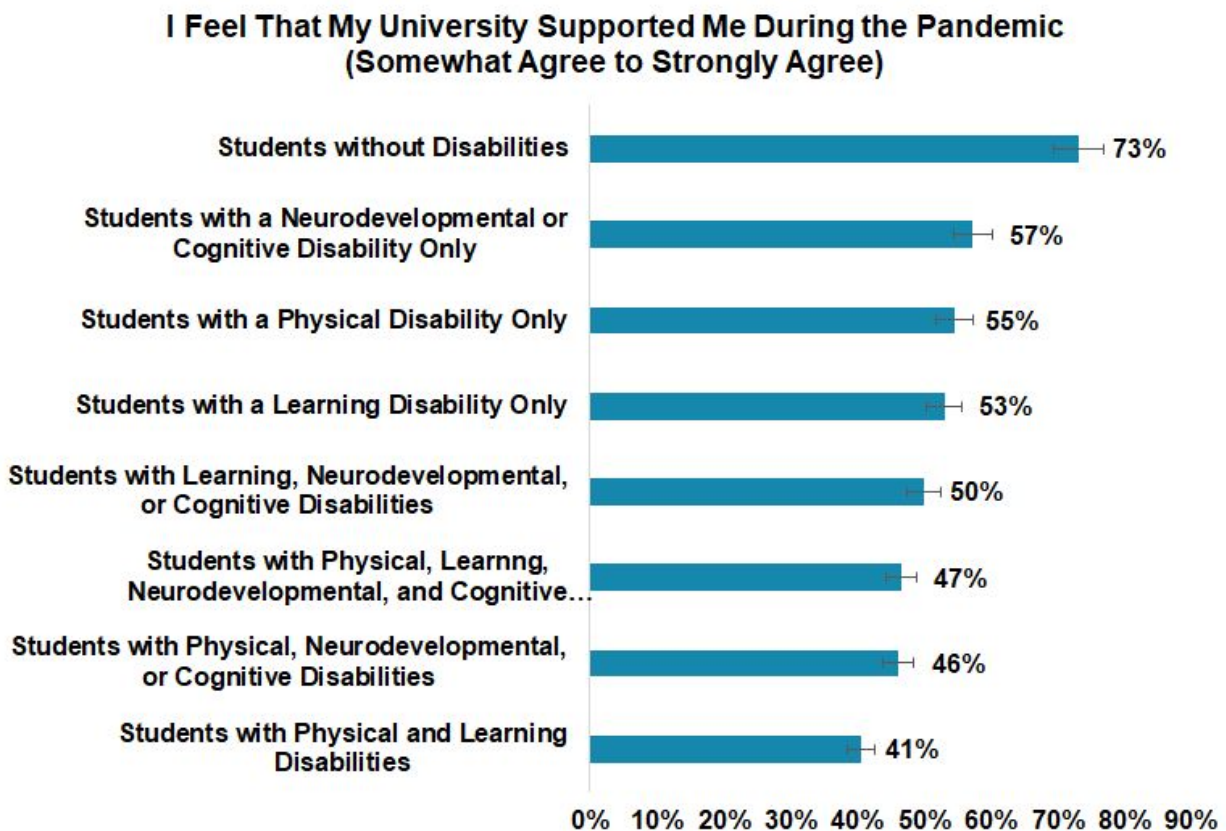
## Support and Belonging

We asked students if they felt as though their institutions supported them during the pandemic (1 = strongly disagree to 6 = strongly agree). Students with disabilities were significantly ( $p < .05$ ) less likely than students without disabilities to somewhat-to-strongly agree that their universities supported them during the COVID-19 pandemic (Figure 13).

Notably, while close to three-quarters of students without disabilities felt supported by their universities during the pandemic, less than two-thirds (and, in some cases, less than half) of students with disabilities felt supported by their institutions during the pandemic.

**Figure 13**

***Undergraduates' Feelings of University Support During the COVID-19 Pandemic, by Disability***

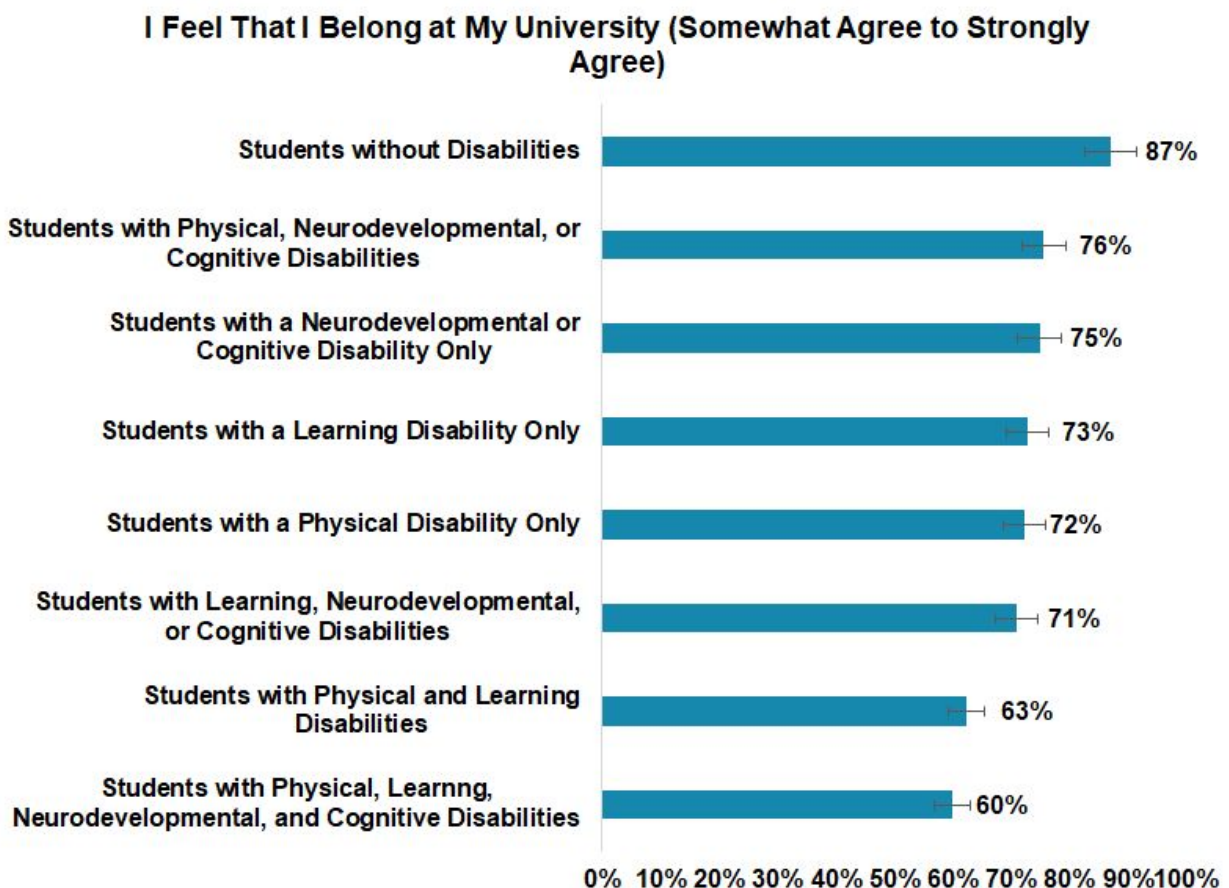


We also asked students if they felt as though they belong at their universities (1 = strongly disagree to 6 = strongly agree). Students with disabilities were significantly ( $p < .05$ ) less likely than students without disabilities to somewhat-to-strongly agree that they feel like they belong on their campuses (Figure 14).

Notably, while 87% of students without disabilities feel as though they belong on campus, less than two-thirds of students with physical and learning disabilities and students with all disabilities (physical, learning, neurodevelopmental, or cognitive) feel as though they belong on campus (63% and 60%, respectively).

**Figure 14**

***Undergraduates' Feelings of Belonging During the COVID-19 Pandemic, by Disability***





## Conclusions and Recommendations

The results of our study suggest students with physical, learning, neurodevelopmental, or cognitive disabilities reported experiencing significantly more challenges and hardships during the COVID-19 pandemic than students without disabilities. Specifically, students with disabilities experienced more financial hardships, food insecurity, housing insecurity, and symptoms of anxiety and depression. Students with disabilities were also less likely to live in safe environments. Below, we offer some recommendations for institutions.

### ***Reduce Financial Barriers for Students with Disabilities***

Some of the financial hardships experienced by students with disabilities included unexpected increases in their living expenses or expenses associated with technology, loss or reduction of income from family members, and loss of wages from off-campus employment—over one-third to two-fifths of students with disabilities experienced those hardships.

To counter some of those financial challenges experienced by students with disabilities, we recommend that institutions provide more opportunities for students with disabilities to be employed on campus with wages that compare to off-campus employment positions. Additionally, we recommend that career development offices work more concertedly to assist students with disabilities in locating alternative internship or employment positions, especially if they lost those expected positions because of the economic fallout associated with the pandemic. We also recommend that career development staff expand their services and offer them for free to students' parents or family members, who may also be struggling with the loss of income during the pandemic. Career development offices can offer free career assessments, access to employment boards, or resources that can be accessed online (e.g., “how to create a LinkedIn profile” or “how to format a resume” guides).

While little might be accomplished so late in the pandemic to help students recoup the costs of the unexpected increases in living expenses, there are steps that universities can take to help students prepare for additional unexpected increases in living expenses due to COVID-19. For instance, we encourage institutions to offer free storage spaces for students who need to store their belongings while moving to alternate locations, help students to negotiate cheaper travel arrangements or offer funding for students who need to make emergency travel arrangements.

Some of the biggest financial disparities between students with disabilities and students without disabilities was the unexpected increase in spending for technology. We recommend that campus administrators proactively reach out to students with disabilities to inform them about existing financial discounts and contracts they have established with vendors or the types of technology that are already free for students to download from their institutions (e.g., Microsoft products). Institutions could also offer short-term rentals of laptops, computers, webcams, or microphones. Furthermore, we recommend that institutions fund students' technological expenses, especially if they are related to students' academic disability accommodations, or consider diverting emergency federal funding to those efforts.

### ***Expand Mental Health Services***

Colleges and universities should work to provide accessible mental health resources to students with disabilities. As our results suggest, students with disabilities were more likely to experience symptoms of depression and anxiety during the pandemic than students without disabilities. Our research suggests that colleges and universities should actively work to eliminate some of the barriers to students' ability to seek mental health resources. For instance, administrators could invest in developing more targeted outreach efforts, partnering with programs such as disability support services, and working with key faculty members to promote existing resources.

Colleges and universities should plan to allocate more resources for an increase in students' requests for mental health services, including counseling or therapeutic services during the pandemic. While most colleges and universities transitioned to offering telemental health services in the spring 2020 semester, including telecounseling and teletherapy, they may need to expand current offerings to provide more appointment times, increase their counseling staff, or network with third-party vendors to expand available mental health services to students.

Furthermore, colleges and universities should work proactively to publicize these resources through sending widespread communications to students, encouraging staff and faculty to disseminate information, or creating moderated peer support groups. Given that many students may not be as physically present on campuses in fall 2020, it is especially important to send those communications via a variety of platforms (e.g., course management systems, newsletters, in virtual class lectures, emails, text messages, or physical mail).

Colleges and universities should actively work to eliminate some of the other barriers to students' ability to seek mental health resources; for instance, students who need but do not use mental health services report barriers related to the availability, location, or timing of appointments (Stebbleton et al., 2014). Furthermore, students also report that they do not understand the types of services that are offered, they have never heard of the services, or they do not have time to access or use services (Stebbleton et al., 2014). In addition to increased promotion of services, we recommend that administrators work to reduce barriers by offering appointments at various times of the day and increasing counseling staff to reduce waitlists.

### ***Reduce Food and Housing Insecurity***

We recommend that campuses expand the availability and locations of food pantries or nutritional support services to help students combat food insecurity and have more regular access to free nutritious food. We recommend that campuses strategically place food pantries in areas that may be more frequently accessed by students with disabilities (e.g., disability resource centers). We also encourage colleges and universities to offer alternative "no-touch" food pick-up options and free food delivery to students who live on campus or near campus. Such services may be critical for students with disabilities who also experience mobility challenges as well.

To help students who may be living far from campus, we encourage campuses to partner with national grocery store chains or restaurants to offer discounted items or meals to students. Campus staff can also connect qualifying students to resources in their local communities or provide assistance with completing state or federal applications for assistance (such as the federal Supplemental Nutrition Assistance Program).

To combat challenges associated with housing insecurity, we recommend that campuses readily communicate additional housing-related resources to assist students with disabilities. For instance, some counties have offered residents rental assistance funding during the pandemic or have worked with landlords to prevent sudden evictions. Many colleges and universities have off-campus student liaison services or student legal services offices that can help students to negotiate with difficult landlords or learn more about their rights as tenants. We also encourage campuses to consider reducing their rates for on-campus housing during the pandemic to make it easier for students to afford to live on campus, even during short-term or emergency situations.

### ***Improve Students' Safety***

It is alarming how many students with disabilities reported that they do not live in safe environments that are free from physical or emotional violence or abuse and alcohol and/or drug abuse. Furthermore, students with disabilities had high rates of living in places where their identity was not respected or where they did not feel safe and protected.

We recommend that housing administrators on college campuses set aside emergency housing locations to assist students with disabilities who may be living in unsafe environments and provide pathways to help students transition to safe, stable housing when needed. Some campuses, such as the University of Minnesota, have partnership agreements with local hotels to offer students' emergency housing alternatives. We recommend that those partnerships be expanded and that employees in critical care positions (e.g., mental health counselors) or faculty who have more daily contact with students receive information about how to direct students to emergency housing services.

## About the SERU COVID-19 Survey

The Student Experience in the Research University (SERU) Consortium administered a special survey on the impact of COVID-19 on student experience at U.S. public research universities. The SERU COVID-19 Survey assesses five areas to better understand undergraduates, graduates, and professional students' experiences during the global pandemic: 1) students' transition to remote instruction, 2) the financial impact of COVID-19 on students, 3) students' health and wellbeing during the pandemic, 4) students' belonging and engagement, and 5) students' future plans. You can access the full survey instrument [here](#).

## Sample

The survey was a census survey administered from May 18 to July 2020 to undergraduate students at nine large, public research universities. The report uses data from 28,311 undergraduate students. The response rate was 14-31% at the respective institutions. More information about the demographic composition of the samples is available [here](#).

## Methodology

All of the items we report in this research brief are categorical; therefore, we utilized Pearson's chi-square test to determine whether there is a statistically significant difference between the expected and observed frequencies of students' responses. We utilized the common probability level of  $p < .05$ , which serves as an a priori statement of the probability of an event occurring as extreme or more extreme than the one observed if the null hypothesis is true.

## About the SERU Consortium

The Student Experience in the Research University (SERU) Consortium is an academic and policy research collaboration based at Center for Studies in Higher Education at the University of California – Berkeley (CSHE) working in partnership with the University of Minnesota and partner institutions. More information is available at <https://cshe.berkeley.edu/seru>.

## Contact Information

Krista M. Soria, PhD, Assistant Director for Research and Strategic Partnerships, SERU Consortium, and Director for Student Affairs Assessment, University of Minnesota.  
[ksoria@umn.edu](mailto:ksoria@umn.edu)

## References

Hager, E. R., Quigg, A. M., Black, M. M., Coleman, S. M., Heeren, R., Rose-Jacobs, R., Cook, J. T., Ettinger de Cuba, S. A., Casey, P. H., Chilton, M., Cutts, D. B., Meyers, A. F., & Frank, D. A. (2010). Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, 126, e26-e32.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care*, 41, 1284-1292.

Kroenke, K., Spitzer, R. L., Williams, J. B., Monahan, P. O., & Löwe, B. (2007). Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146, 317-325.

## Suggested APA Citation

Soria, K. M., Horgos, B., Chirikov, I., & Jones-White, D. (2020). *The experiences of undergraduate students with physical, learning, neurodevelopmental, and cognitive disabilities during the COVID-19 pandemic*. SERU Consortium, University of California - Berkeley and University of Minnesota.