The COVID-19 pandemic and students’ mental health

Krista M. Soria1 | Bonnie Horgos2 | Brayden J. Roberts2

1 University of Idaho, Moscow, Idaho, USA
2 University of Minnesota, Minneapolis, Minnesota, USA

Correspondence
Krista M. Soria, University of Idaho, Moscow, ID, USA.
Email: ksoria@uidaho.edu

Abstract
In this article, authors outline the prevalence of mental health disorders among students during the pandemic, highlight common strategies embedded in campuses’ responses, and provide recommendations for campuses to support students’ mental health.

INTRODUCTION

An outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes coronavirus disease (COVID-19), was first reported in China in December 2019. By March 11, 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic, compelling many higher education leaders to take swift actions to promote the safety of everyone on campus. Such measures included shifting classes to remote instruction and, in some cases, closing residence halls and requiring students to relocate off campus. Students experienced sudden disruptions to educational structures, the loss of loved ones due to COVID-19, and isolation associated with social distancing. The speed at which the pandemic unfolded coupled with the uncertainty of the virus’s threat constitute, for many, collective traumatic events akin to those typically experienced during natural disasters (Copeland et al., 2021).

During the pandemic, undergraduate, graduate, and professional students have faced additional stressors and challenges associated with decreased academic motivation, financial hardships, technological limitations, obstacles to degree progress, and food and housing insecurity (Soria & Horgos, 2020; Soria, Chirikov et al., 2020; Soria, Horgos, Jones-White et al., 2020; Soria et al., 2021). Furthermore, the social networks and relationships that students form in college through face-to-face engagement in curricular and co-curricular experiences have been dismantled, leading to increased social isolation (Lederer et al., 2021).

Campus closures during the initial stages of the pandemic also meant that approximately one out of ten students relocated to environments where they encountered alcohol or drug abuse, physical violence, or emotional violence or abuse (Soria & Horgos, 2021b). Approximately one out of ten students also lived in places where their identities were not respected or where they did not feel safe or protected (Soria & Horgos, 2021b). Some students did not even have a place to relocate to when their campuses closed (Lederer et al., 2021). In all cases, those challenges have been exacerbated for students...
from underrepresented and marginalized backgrounds, including students from lower social class backgrounds, first-generation students, students with disabilities, students of color, and caregivers; transgender, nonbinary, and genderqueer students; and gay, lesbian, bisexual, pansexual, queer, or asexual students (Gonzales et al., 2020; Soria & Horgos, 2020, 2021b; Soria, Horgos, Chirikov et al., 2020a, 2020b; Soria, Horgos, Luu et al., 2020, McAndrew et al., 2020; Soria, Roberts et al., 2020).

The COVID-19 pandemic has also compounded the mental health crisis colleges and universities were already facing. Although campus leaders have developed and implemented innovative mental health programs and solutions over the last decade, the pandemic forced administrators, staff, and faculty to shift their focus to manage the immediate mental health and wellness needs of students. In this article we begin by outlining the prevalence of mental health disorders among students during the pandemic. Next, we highlight common strategies embedded in campuses’ responses to support students’ mental health and wellbeing during the pandemic. Finally, we end by providing recommendations for campuses to undertake in order to support students’ mental health. Many of the perspectives and recommendations may be better positioned at four-year colleges and universities given their staffing and resource levels.

PREVALENCE OF MENTAL HEALTH DISORDERS AMONG STUDENTS DURING THE PANDEMIC

The COVID-19 pandemic continues to upend the lives of students in higher education institutions. Students’ mental health has become a paramount concern to institutional leaders: over 90% of college presidents were concerned about students’ mental health during the pandemic (Lederman, 2020). In particular, the fallout surrounding the pandemic has had deleterious effects on students’ mental health, leading to increases in the prevalence of major depressive disorder (MDD) and generalized anxiety disorder (GAD). Recent statistics are both distressing and alarming: the rates of MDD range between 32% and 48%, and the rates of GAD range between 31% and 39% for undergraduate, graduate, and professional students during the pandemic (Chirikov et al., 2020; Healthy Minds Network and American College Health Association, 2020; Soria & Horgos, 2021a; Wang et al., 2020). Prior to the pandemic, the rates of MDD and GAD were estimated at between 15% to 25% and 26% to 28%, respectively (Chirikov et al., 2020; Healthy Minds Network, 2019).

While MDD and GAD are among the most common mental health disorders experienced by students, the pandemic has also affected students’ psychological health in other ways. For instance, Wang et al. (2020) estimated that close to one in five students had suicidal ideation and approximately three-quarters of students experienced increases in psychological stress during the pandemic. Furthermore, less than half of students (43%) indicated they were able to cope adequately with the stress related to the pandemic (Wang et al., 2020). Students have also expressed higher rates of worrying about the health of friends and family (Son et al., 2020). As of January 2021, approximately 85% of students knew someone who had tested positive for COVID-19 (Charles et al., 2021) and one-third of students knew someone with severe symptoms from COVID-19 or someone who died from COVID-19 (Odriozola-González et al., 2020). As the personal losses increase, students may likely be experiencing significant levels of trauma, bereavement, and complicated grief akin to levels normally witnessed during natural disasters (Gesi et al., 2020).

There are several pandemic-specific experiences that exacerbate students’ negative and potentially problematic mental health symptoms. For instance, social distancing has
caused many students to feel increasingly isolated and lonely: up to 90% of students were moderately to severely lonely during the pandemic (Labrague et al., 2021). The abrupt shift to remote classes has meant that students experienced academic obstacles, including the lack of technology necessary for online learning, insufficient and distracting study spaces, and decreased motivation to engage in coursework (Soria & Horgos, 2021b). Many students have also had to take on additional caregiver responsibilities, which negatively impacts their academic engagement (Lederer et al., 2021; Soria, McAndrew et al. 2020). Furthermore, during the pandemic, students have experienced lost wages, loss of income from family members, increased expenses to pay for additional living or technology expenses, and cancelled internships (Soria & Horgos, 2021b).

Other factors exacerbated by the pandemic have negatively compromised students’ mental health; for instance, between one-fifth to one-third of students experienced food insecurity during the pandemic (Owens et al., 2020; Soria, Horgos et al., 2020). Some students reported disruptions in their eating patterns, such as eating more out of boredom or eating less due to anxiety (Son et al., 2020). Many students were unable to freely explore outdoor spaces or engage in physical exercise, so they spent more time in front of screens and reading the news via social media outlets. For many students, the lack of physical engagement and focus on reading the news increased the negative psychological impacts of the pandemic (Browning et al., 2021). Students also experienced disruptions in their sleep (Marelli et al., 2020) and overall had reduced levels of wellness (Copeland et al., 2021). Students’ substance and alcohol use also increased during the pandemic (Charles et al., 2021), with some researchers estimating that 25% of students initiated or increased substance use to cope with the stressful toll of the pandemic (Czeisler et al., 2020).

Societal events have also precipitated negative psychological stressors among students; for instance, some Asian and international students experienced xenophobia (Chirikov & Soria, 2020; Molock & Parchem, 2021). Many students—but particularly students of color—struggled with the growing visibility of racism following the deaths of many people of color by police during the pandemic (Molock & Parchem, 2021). The racialized stress and psychological trauma of racism experienced by students of color is also compounded by the many ways people of color are disproportionately negatively affected by the pandemic in our society (Molock & Parchem, 2021).

CAMPUSSES’ RESPONSE TO STUDENTS’ GROWING MENTAL HEALTH NEEDS DURING THE PANDEMIC

As campuses shifted to remote instruction at the start of the pandemic, administrators and staff also recognized the need to offer mental health and wellness services remotely. Some of the smaller-scale changes to mental health and wellness services included offering online fitness classes, stress check-ins, virtual support groups, meditation or mindfulness webinars or sessions, social activities (e.g., virtual trivia, scavenger hunts, and movie screenings), and exercise challenges (American Council on Education, 2020; Browning et al., 2021). Furthermore, colleges and universities invested in online mental health wellness websites and apps, such as Therapy Assistance Online (TAO; Benton et al., 2016), Nod (Bruehlman-Senecal et al., 2020), and YOU@College (Grit Digital Health, 2021). Perhaps the most significant changes to the mental health and wellness services included shifts to telecounseling and telemental health services. Some of the initial barriers to these services included restrictions in telehealth licensure requirements that prohibited therapists from practicing across state lines, limitations in technological platforms that were not HIPPA compliant, and challenges with privacy concerns (not only from students
who lacked privacy in their homes, but also from therapists or staff who were operating out of their homes). Many states have since suspended some of the restrictions that prohibited therapists from practicing across state lines, but many students who need critical mental health services are not receiving virtual services or seeking them (Son et al., 2020). Several factors still serve as barriers to students’ use of telemental health or telecounseling services, such as students’ lack of comfort in talking about mental health concerns over the telephone or video (Son et al., 2020).

RECOMMENDATIONS

Mental health is everyone’s business: we must attend to the structural systems within higher education that may exacerbate students’ mental health concerns. Faculty, student support staff, student affairs professionals, advisors, and counselors all play a key role in student retention as well as in recognizing, supporting, and referring students for mental health concerns (Kalkbrenner et al., 2019). Below, the authors offer recommendations that those important stakeholders on campus can undertake to support students’ mental health during a crisis like a global pandemic and beyond.

Recommendations for student affairs professionals

Regardless of their position on campus, we encourage student affairs professionals to consider their role in supporting the holistic mental health and wellbeing needs of students, using trauma-informed approaches in their practice, and offering wraparound support and care to students. Even prior to the COVID-19 pandemic, students were particularly prone to high levels of stress, anxiety, and depression (Robotham & Julian, 2006). Students deserve to live, learn, and work in environments in which critical support staff recognize and validate their efforts to maintain overall mental wellbeing instead of environments where stress and anxiety are exacerbated.

To optimally center students’ mental health, campus leaders can provide mandatory training around mental health resources, prevention strategies, and support. With such training, student affairs staff might be better prepared to assist with students’ mental health concerns or crises by gaining tools that reduce the occurrence and extremity of stressful events. Mental health training could also be offered to students to develop a common campus vocabulary around mental health and create greater awareness and transparency of research-backed strategies to improve wellness and resiliency.

Beyond mental health support and crisis interventions, institutions can offer comprehensive care to students through wellness services that support their need for physical wellness, nutrition, and safe housing. To support students, student affairs professionals may consider increasing the availability of physical fitness activities, access to virtual workout classes, or transportation to nearby parks. The pandemic has impacted students’ ability to obtain basic resources, such as food, shelter, or childcare (Soria & Horgos, 2021b). Access to healthy, nutritious food is important to all students and student affairs professionals can support this need by hosting on-campus food banks or food delivery services, providing access to nutritional resources off-campus, or connecting students to emergency grant funding. Student affairs professionals can also coordinate efforts to offer support such as emergency housing, alternative or short-term housing, free transportation to local support services, and on-campus childcare. Some students may have experienced domestic violence or abuse during the pandemic (Soria & Horgos, 2021b).
and may not be able to seek help via video conference or phone call if their abusers inhabit the same residence. We encourage student affairs professionals to offer multiple avenues for students to seek help and assistance, including email, text, or chat.

In addition, students may benefit from an integration of mental health services with on-campus spiritual care, such as meditation classes or religious affinity group meetings. The discussion of faith or spirituality is a critical piece for many students’ holistic wellness (Miller & O’Reilly, 2009). As students continue to grapple with issues such as grief, loss, and isolation, spiritual care will undoubtedly continue to be a need during and after COVID-19. Furthermore, campuses may wish to revisit their bereavement leave policies to ensure that students experiencing the loss of loved ones receive the critical care and support they need, including approved time away from classes and academic responsibilities.

**Recommendations for mental health practitioners**

In terms of mental health support, counselors, staff, and practitioners can offer short-term interventions, which will not only accommodate students’ limited schedules but also ensure that more students have access to therapeutic services. Many students seek to self-manage their psychological stress during the pandemic through both negative coping strategies (e.g., drinking or smoking) and positive coping strategies (e.g., positive reframing, meditation, physical exercise, journaling, playing with pets, engaging in hobbies) (Son et al., 2020). Mental health practitioners can capitalize on students’ desire to self-manage their mental health symptoms of stress, depression, or anxiety by expanding the number and availability of “self-service” mental health or wellness resources (e.g., wellness apps) and offering multiple avenues for students to gain 24/7 access to self-guided tutorials on evidence-based strategies to improve mental health and wellness. Furthermore, practitioners can expand opportunities for students to engage in activities that lower stress, such as bringing trained therapy animals to campus, offering free access to art materials or supplies, offering free journals and writing materials, and creating scavenger hunts or other ways for students to enjoy physical activity at safe social distances.

Mental health practitioners may wish to use evidence-based interventions such as psychoeducation or solution-focused therapy, which may help students manage academic and interpersonal stress. Counseling centers may also benefit from new diagnostic tools, such as COVID-19-specific trauma or stressor-related disorder screeners (Czeisler et al., 2020). Additionally, group therapy is a proven method of providing mental health services for students while simultaneously building rapport among peers (Kincade & Kalodner, 2004). Like group therapy, peer support such as peer-led motivational interviewing can potentially boost students’ skills such as active listening and summarizing (Madson et al., 2013). All of these therapeutic approaches can be provided virtually, which not only increases students’ safety during the ongoing pandemic but can improve access to resources once the pandemic subsides. Even prior to the pandemic, telecounseling was proven effective in treating mental health concerns, improving access to care, and reducing mental health stigma on college campuses (Becker & Torous, 2019), so we recommend that campuses continue to offer telecounseling to students.

As previously discussed, the pandemic has exacerbated pre-existing disparities for students from underrepresented and marginalized backgrounds, including symptoms of mental health disorders. Mental health practitioners and wellness center staff should therefore consider developing outreach programs and specialized services to support minoritized and marginalized students, especially because those students
disproportionately face additional stressors, discrimination, and burdens during the pandemic (Soria, Roberts et al., 2020). Partnerships with cultural and identity centers, outreach to specific groups of students, and collaborations with student organizations are some ways practitioners can proactively reach students who may be struggling (American Council on Education, 2020). Additionally, given that many mental health disorders may negatively impact students’ academic progress, we encourage mental health practitioners to help students connect with disability resource centers if students qualify for accommodations to support their learning.

**Recommendations for faculty**

Faculty can proactively address students’ mental health by providing contact information for mental health resources in their syllabi, embedding mental health modules in virtual coursework, and routinely sharing specific mental health resources available on campus. Given that increased time spent on screens is associated with poorer psychological impacts on students during the pandemic (Browning et al., 2021), faculty should consider reducing the length of time they require students to spend on video platforms, such as Zoom, and to eliminate the requirement for students to be on camera given that so many students cite distracting home environments as obstacles to their academic success during the pandemic (Soria & Horgos, 2021a, 2021b).

Additionally, faculty should consider equitable grading practices and policies, such as reduced coursework, flexible deadlines, and time to take exams to prevent stress associated with fixed deadlines. Faculty can offer access to lower-cost or free course materials (e.g., via course reserves) for students. By creating more equitable access to course resources, faculty and staff can undoubtedly ease a significant financial burden that can potentially exacerbate mental health symptoms—especially since so many students experienced the loss of wages and family income during the pandemic (Soria & Horgos, 2021b). Faculty can also employ trauma-informed approaches in their pedagogical practices and attend to students’ socio-emotional needs for structure, transparency, trustworthiness, connection, validation, and support (Schlesselman et al., 2020).

**CONCLUSION**

The pandemic has had deleterious effects on students’ mental health. Through proactive measures to support students’ mental health, wraparound services to reinforce students’ holistic wellbeing, and reform in the policies and practices undertaken by key stakeholders on campus, it may be possible to reduce the negative impacts of the pandemic upon students’ mental health.

**REFERENCES**

American Council on Education. (2020). *Mental health, higher education, and COVID-19: Strategies for leaders to support campus well-being*. [Author.](https://www.acenet.edu/News-Room/Pages/New-Information-for-Leaders-Looking-to-Support-Student-Mental-Health-and-Well-Being.aspx)

Becker, T. D., & Torous, J. B. (2019). Recent developments in digital mental health interventions for college and university students. *Current Treatment Options in Psychiatry, 6*(3), 210–220. [https://doi.org/10.1007/s40501-019-00178-8](https://doi.org/10.1007/s40501-019-00178-8)

Benton, S. A., Heesacker, M., Snowden, S. J., & Lee, G. (2016). Therapist-assisted, online (TAO) intervention for anxiety in college students: TAO outperformed treatment as usual. *Professional Psychology: Research and Practice, 47*(5), 363–371. [https://psycnet.apa.org/doi/10.1037/pro0000097](https://psycnet.apa.org/doi/10.1037/pro0000097)
Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, 290, 113180. https://doi.org/10.1016/j.psychres.2020.113108

Owens, M. R., Brito-Silva, F., Kirkland, T., Moore, C. E., Davis, K. E., Patterson, M. A., Miketinas, D. C., & Tucker, W. J. (2020). Prevalence and social determinants of food insecurity among college students during the COVID-19 pandemic. *Nutrients*, 12(9), 2515. https://doi.org/10.3390/nu12092515

Robotham, D., & Julian, C. (2006). Stress and the higher education student: A critical review of the literature. *Journal of Further and Higher Education*, 30(2), 107–117. https://doi.org/10.1080/03098770600617513

Schlesselman, L. S., Cain, J., & DiVall, M. (2020). Improving and restoring the well-being and resilience of pharmacy students during a pandemic. *American Journal of Pharmaceutical Education*, 84(6), ajpe8144. https://doi.org/10.5688/ajpe8144

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students’ mental health in the United States: Interview survey study. *J Med Internet Res*, 22(9), e21279. https://doi.org/10.2196/21279

Soria, K. M., Chirikov, I., & Jones-White, D. (2020). The obstacles to remote learning for undergraduate, graduate, and professional students. SERU Consortium, University of California Berkeley and University of Minnesota. https://escholarship.org/uc/item/5624p4d7

Soria, K. M., & Horgos, B. (2020). Social class differences in students’ experiences during the COVID-19 pandemic. SERU Consortium, University of California - Berkeley and University of Minnesota. https://escholarship.org/uc/item/3hw2m00g

Soria, K. M., & Horgos, B. (2021a). Factors associated with college students’ mental health during the COVID-19 pandemic. *Journal of College Student Development*, 62(2), 236–242. https://doi.org/10.1353/csd.2021.0024

Soria, K. M., & Horgos, B. (2021b, March 23). Underrepresented and marginalized students’ experiences during the COVID-19 pandemic: Evidence from 30,000+ undergraduates [Conference presentation]. NASPA Conference, Virtual.

Soria, K. M., Horgos, B., Chirikov, I., & Jones-White, D. (2020a). First-generation students’ experiences during the COVID-19 pandemic. SERU Consortium, University of California - Berkeley and University of Minnesota. https://hdl.handle.net/11299/214934

Soria, K. M., Horgos, B., Chirikov, I., & Jones-White, D. (2020b). 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. https://hdl.handle.net/11299/216715

Soria, K. M., Horgos, B., Jones-White, D., & Chirikov, I. (2020). Undergraduate and graduate students’ food insecurity during the COVID-19 pandemic. SERU Consortium, University of California - Berkeley and University of Minnesota. https://hdl.handle.net/11299/215270

Soria, K. M., Horgos, B., & Luu, K. (2020). Undergraduates’ mental health during the pandemic: New insights into links with financial hardships, academic obstacles, and support. SERU Consortium, University of California - Berkeley and University of Minnesota. https://hdl.handle.net/11299/218338

Soria, K. M., Horgos, B., & McAndrew, M. (2021). Obstacles resulting in delayed degrees for graduate and professional students during the COVID-19 pandemic. SERU Consortium, University of California - Berkeley and University of Minnesota. https://escholarship.org/uc/item/8d46b49s

Soria, K. M., McAndrew, M., Horgos, B., Chirikov, I., & Jones-White, D. (2020). Undergraduate student caregivers’ experiences during the COVID-19 pandemic: Financial hardships, food and housing insecurity, mental health, and academic obstacles. SERU Consortium, University of California - Berkeley and University of Minnesota. https://escholarship.org/uc/item/7h06eq80

Soria, K. M., Roberts, B. J., Horgos, B., & Hallahan, K. (2020). The experiences of undergraduate students during the COVID-19 pandemic: Disparities by race and ethnicity. SERU Consortium, University of California - Berkeley and University of Minnesota. https://hdl.handle.net/11299/218339

Wang, X., Hegde, S., Son, C., Keller, B., Smith, A., & Sasangohar, F. (2020). Investigating the mental health of U.S. college students during the COVID-19 pandemic: Cross-sectional survey study. *Journal of Medical Internet Research*, 22(9), e22817. https://doi.org/10.2196/22817

**AUTHOR BIOGRAPHIES**

**Krista M. Soria** is an Assistant Professor in leadership and counseling at the University of Idaho.
Bonnie Horgos, MSW, LGSW, is a Graduate Research Assistant for the Student Experience in the Research University (SERU) Consortium and doctoral student in social work at the University of Minnesota.

Brayden J. Roberts is an Undergraduate Research Assistant who recently completed a bachelor’s degree in sociology at the University of Minnesota.

How to cite this article: Soria, K. M., Horgos, B., & Roberts, B. J. (2021). The COVID-19 pandemic and students’ mental health. New Directions for Student Services, 2021, 37–45. https://doi.org/10.1002/ss.20404