

# Research Summary

**The Impact of COVID-19 on Student Experiences and Expectations: Evidence from a Survey Introduction** The COVID-19 pandemic has dramatically impacted nearly every facet of society, including higher education. Anecdotal evidence suggests significant disruptions for both students and institutions, with potential enrollment declines and financial challenges. This paper seeks to provide empirical evidence on the impact of the pandemic on college students by examining their experiences and expectations across various dimensions. Utilizing survey data from Arizona State University (ASU), a large, diverse public institution, the study explores the causal effects of COVID-19 on academic performance, graduation plans, labor market participation, and future employment prospects. The study also investigates the heterogeneous nature of these effects across different socioeconomic groups and explores the mediating role of financial and health shocks.

**Methodology** The study employed a unique survey design to gather data from approximately 1,500 undergraduate students at ASU in late April 2020, shortly after the transition to online learning. The survey was designed to elicit both current experiences/expectations and counterfactual outcomes – what students believe their situations would have been like in the absence of the pandemic. By directly asking students about their outcomes under both scenarios, the researchers were able to calculate individual-level subjective treatment effects of COVID-19. This approach, while relying on self-reported data, allows for a direct assessment of how students perceive the pandemic's impact on their lives. This methodology mirrors that used in studies analyzing the impact of college majors and health on career outcomes and retirement decisions, respectively. The validity of the approach rests on the assumptions that students possess well-formed beliefs about both actual and counterfactual outcomes and that reporting biases are minimal. The relatively short time elapsed since the pre-pandemic period strengthens the assumption of accurate counterfactual estimations.

**Results** The survey results revealed substantial negative effects of COVID-19 across multiple dimensions. Academically, 13% of students reported delaying graduation, 11% withdrew from classes, and 12% indicated a change in their major choice. Furthermore, more than half of the students reported a decline in both study hours and academic performance, with the average expected GPA decreasing by 0.17 points. The transition to online learning also led to a surprising decrease in the likelihood of students enrolling in online courses in the future, averaging a 4 percentage point decline. The impact on the labor market was equally significant. Around 40% of students reported losing a job, internship, or job offer, while 61% reported a family member experiencing income reduction. Working students experienced an average decrease of 37% in weekly work hours and 31% in weekly earnings. Looking ahead, students exhibited lowered expectations regarding their post-college labor market prospects, with a nearly 20% decrease in perceived job-finding probability and a 2.5% reduction in expected earnings at age 35. These results suggest that students anticipate long-lasting consequences of the pandemic on their career trajectories.

**Discussion** The study reveals substantial heterogeneity in the impact of COVID-19. Students from disadvantaged backgrounds, including lower-income, racial minority, and first-generation students, experienced more severe negative impacts, particularly in academic outcomes. Lower-income students, for instance, were 55% more likely to delay graduation compared to their higher-income peers and expected a larger decline in their GPA. The shift to online learning also proved more disruptive for specific groups. Men and Honors students exhibited a significantly larger decline in preference for online classes, albeit for different reasons. Honors students felt less challenged by the online format, while males reported difficulties with the online learning methods. Interestingly, despite the greater disruption to their online learning experience, Honors students demonstrated better mitigation of negative academic outcomes compared to non-Honors students.

**Implications** The study highlights the potential for COVID-19 to exacerbate existing socioeconomic disparities in higher education. The disproportionate impact on disadvantaged students aligns with similar findings for K-12 students, where learning losses have been shown to be greater for lower-performing students from poorer communities. This underscores the urgent need for targeted interventions to mitigate the pandemic's effects on vulnerable student populations. The differential impact of online learning on various demographic groups raises questions about the effectiveness and equity of online instruction. Further research is needed to understand the underlying reasons for these differences and to develop strategies for delivering equitable and effective online education.

**Conclusion** This study offers crucial insights into

the multifaceted impacts of COVID-19 on college students. The large and heterogeneous effects observed across academic, labor market, and online learning preferences necessitate a nuanced understanding of the challenges faced by students. The findings underscore the importance of addressing the economic and health disparities exacerbated by the pandemic to prevent further widening of achievement gaps in higher education. Limitations The study relies on subjective treatment effects based on self-reported data, which may be subject to reporting biases. Although the survey design aimed to minimize such biases by focusing on concrete and relevant outcomes, the potential for misreporting remains. Furthermore, the study is based on a sample from a single institution, limiting the generalizability of the findings to other contexts. While ASU is a large and diverse public university, the experiences of students at smaller institutions or those with different student demographics might vary. Future Work Future research should explore the long-term consequences of the COVID-19 pandemic on students' educational and career trajectories. Longitudinal studies tracking students' progress over time would provide valuable insights into the persistence of the observed effects. Further investigation into the mechanisms driving the heterogeneous impacts, particularly the role of specific online learning modalities and support services, could inform the development of more effective and equitable educational strategies. Comparing the findings with data from other institutions would also enhance the generalizability of the results and provide a more comprehensive understanding of the pandemic's impact on higher education. Analyzing the effectiveness of policy interventions aimed at mitigating the economic and health consequences of COVID-19 on students is crucial for minimizing long-term disparities.