Trellis Mental Health Study:  
Abbreviated Bibliography

Over the Past Decade, More College Students are Reporting Mental Health Challenges.


This article leverages data from Healthy Mind study to describes the national landscape of student mental health. Findings show that 11% of students are now reporting past-year suicidal ideation, as compared to 6 to 8% in the earlier years of our survey (2005–2013). Similarly, 21% are now reporting non-suicidal self-injury, compared to 14 to 17% during that earlier period. A total of 36% report being diagnosed with a mental illness at least once during their life time, with the most common being depression and other mood disorders (23%) and anxiety disorders (25%). These numbers are also higher than what was observed in earlier years of data collected by the Healthy Minds survey.


This study estimated the prevalence of self-reported mental health problems and treatment utilization in a U.S. national sample of community college students. It also compared community college student estimates with those from a sample of students at 4-year educational institutions. Using data gathered from the Healthy Minds Study, the authors found that prevalence of self-reported mental health problems was significantly higher for community college students ages 18-22 years, relative to their same-age peers at 4-year institutions. Community college students, particularly those from traditionally marginalized backgrounds, were significantly less likely to have used services, compared with their 4-year peers. Financial stress was a strong predictor of mental health outcomes, and cost was the most salient treatment barrier in the community college sample.

Students of Color, Low-Income Students, and Other Traditionally Underserved Students are More Likely to Report Mental Health Challenges.


This study captures the state of mental health among students of color, including the prevalence of mental health problems and treatment utilization. Drawing on a sample of 43,375 undergraduate and graduate students at 60 institutions who participated in the Healthy Minds Study from 2012 to 2015, the authors find that students of color are more likely to report mental health challenges relative to White students. However, students of color are significantly less
likely to utilize mental health services relative to White students, even after controlling for a number of factors (e.g. age, gender, parental education, financial background, current financial situation, and citizenship). Asian/Asian American students have the lowest prevalence of treatment, at only 20% among those with apparent mental health conditions. Attitudes related to mental health treatment also vary significantly and help to explain the primary findings. The authors conclude that college students of color, in general, experience greater levels of unmet mental health needs relative to white students.


This systematic review analyzed the prevalence of, and the risk factors associated with mental health problems in undergraduate college students. Based on sixty-six studies, the authors found that among undergraduates, 25% experience depression and 14% experience suicide. The authors also find that negative rumination, parent separation, experiences of sexual harassment and parental depression significantly predict depression outcomes. Childhood adversity, baseline mental health problems and financial difficulties significantly predict suicide-related outcomes (i.e., suicidal ideation, both one-time and persistent, suicidal thoughts and behaviors, completed suicides). Academic pressures, financial stress and experiences of sexual harassment while at university may trigger or exacerbate a range of mental health difficulties, suggesting that student life in itself can be a causal factor.

Mental Health Challenges Negatively Impact Academic Success in College.


Mental health problems represent a potentially important but relatively unexplored factor in explaining human capital accumulation during college. The authors find that depression is a significant predictor of lower GPA and higher probability of dropping out, particularly among students who also have a positive screen for an anxiety disorder. In addition, they find that co-occurring depression and anxiety and symptoms of eating disorders are associated with lower GPA. This descriptive study suggests potentially large economic returns from programs to prevent and treat mental health problems among college students and highlights the policy relevance of evaluating the impact of such programs on academic outcomes using randomized trials.


This National Academies of Science, Engineering, and Medicine (NASEM) report reviews evidence on the state of mental health in higher education and lays out an array of recommendations to address the increasing number of college students reporting mental health
challenges. The report finds that students with a diagnosed mental health problem drop out from college at rates that range from 43 percent to as high as 86 percent, suggesting that suffering from psychological distress can derail college completion.

**More Research is Needed to Deepen Our Understanding of the Interventions That Community Colleges are Implementing to Address the Student Mental Health Crisis.**


A rich and growing body of research documents the scope of the mental health in higher education and potential interventions to address it, but this literature is scattered across a variety of academic fields. There is a need for more intersectional research examining variations in symptoms and help-seeking, especially for students who hold multiple minoritized identities (e.g., first-generation, students of color). This chapter brings coherence to this large volume of information through a detailed review of programs, services, practices, and policies that influence student mental health, and highlight gaps in current research.

**Emerging Body of Research Suggests That Mental Health Interventions May Have a Positive Effect on Postsecondary Academic Outcomes.**


A small but emerging body of research suggests that universal mental health prevention programs may have a positive effect on postsecondary academic outcomes. In a meta-analysis examining 103 controlled published and unpublished interventions involving college, graduate, or professional students, the researchers find that universal mental health prevention programs that focus on teaching students skills like coping, how to effectively communicate, and resolve conflict improved student academic behaviors and performance (e.g. test scores, GPA, class attendance).
Part-time Students Complete College at Lower Rates Than Full-Time Students


This National Student Clearinghouse Signature Report examines the rate of completion of postsecondary certificates and degrees by first-time-in-college degree-seeking students who initially enrolled in two- and four-year colleges and universities (public, private nonprofit, or private for-profit) nationwide in fall 2011. The authors tracked student enrollment behaviors and outcomes for six years, through spring 2017, and disaggregated findings by the student’s enrollment intensity (e.g. exclusively full-time enrollment, exclusively part-time enrollment, and mixed full-time and part-time enrollment). The overall national six-year completion rate for the fall 2011 cohort was 56.9 percent, an increase of 2.1 percentage points from the fall 2010 cohort. Findings restricted to two-year institutions revealed that almost half of the fall 2011 cohort completed a college credential within six years relative to 17% of students who enrolled exclusively part time, and 21% who enrolled full-time and part-time in college.

Encouraging Full-Time Enrollment is the Primary Policy Response to Increase Collegiate Success Among Part-Time Students, Yet It’s an Insufficient One


Jenkins and Bailey (2017) propose three measures of “early momentum” in community college: credit momentum, gateway momentum, and program momentum. Emerging research shows that “early momentum” metrics predict long-term student success, suggesting that colleges need to invest in efforts that increase credit momentum to boost college completion.


This EAB report shows that part-time student success in community colleges is key to increasing college completion rates among students of color. The report highlights that community college Black and Hispanic students are more likely than white students to attend part-time, and consequently are more likely to face challenges graduating from college. This is because part-time students of color are more likely to spend less time on campus, face institutional barriers (e.g. confusing online information, unexplained enrollment delays), and have competing priorities that preclude them from enrolling full time. EAB recommends that community colleges invest resources to provide student experiences in non-traditional formats for part-time students (e.g. proactive advising, nudging) and also adapt academic planning tools for these students (e.g. guided pathways, online advising appointments).

Federal forecasts show part-time enrollment outpacing full-time enrollment through at least 2027. However, few community colleges have developed programs designed to exclusively support the success of part-time students. While an increasing number of higher education institutions are extending support services and financial aid opportunities to part-time students, they continue to exclude part-time students from their efforts to increase student success. For example, part-time students are ineligible to participate in many state-implemented “free college” plans to control costs or to intentionally encourage full-time enrollment. Limiting access to critical student supports can jeopardize the extent to which part-time students benefit from higher education.

Community College Students Enroll at Various Levels of Intensity, and Often Stopout as They Pursue a College Credential


This study examines the relationship between community college enrollment patterns and student outcomes (e.g. credential completion, upward transfer). Using data on cohorts of first-time community college students at five colleges in a single state, the study finds astounding variation in student enrollment patterns within this student population. Crosta finds more than 4,000 unique enrollment patterns across an 18-semester period among community college students, showing that these students vacillated from enrolling full-time to part-time to not enrolling at all. Clustering these patterns reveals two relationships: the first is a positive association between enrollment continuity and earning a community college credential, and the second is a positive association between enrollment intensity and likelihood of transfer. Findings from this study highlight the variability of enrollment intensity and attachment among the community college students; it also suggests that unanticipated hardships may contribute to this variability.
Community Colleges have Experienced Sharp Enrollment Declines because of COVID


Estimates released by the National Student Clearinghouse (NSC) Research Center in November 2020 show that relative to Fall 2019, community colleges experienced the greatest loss in undergraduate enrollment of all higher education sectors (-9.5%). Overall undergraduate enrollment in postsecondary education nationwide decreased by 4.4%; and public four-year institutions suffered but at a significantly lower rate (-1.9%). In community colleges, African Americans, Latinos, and Native Americans experienced the largest declines (29.3%, 28.4%, and 27.5% respectively), while freshmen enrollment plunged nearly 20%.

COVID-19 Forced Most Higher Education Institutions to Shift to Online or Hybrid Education, and Assess the Viability of These Formats in an Era of Declining Revenue


This article outlines some of the challenges and policy issues faced by education institutions and legislators. COVID-19 caused major disruption to colleges and universities across the country. More than 1,300 colleges and universities in all 50 states canceled in-person classes or shifted to online-only instruction. Around 44% of institutions developed fully or primarily online instruction, 21% used a hybrid model and 27% offered fully or primarily in-person instruction. The move to online-only classes for instruction forced college administrators to assess their institution’s capacity to deliver high quality virtual instruction. This meant training faculty to deliver online instruction and reckon with evidence showing that some students did not have access to computers and high-speed internet. This article articulates the challenges faced by higher education institutions in delivering high quality education in an online environment when revenue generated by enrollment declined significantly during the pandemic.

Online Education May Not Be an Effective Mode of Instruction, Particularly for Academically Underprepared Students and Students with Fewer Resources.


This article reviews existing research on the effectiveness of online education across different levels of education from middle-school to postsecondary education, finding that the existing evidence base does not fully examine the differential impacts of online course. In her review of
causal research, she finds variation in the overall impact of online learning on student outcomes. For example, students with lower levels of academic preparation are less likely to benefit from online courses relative to peers who are more academically prepared. Based on this evidence, Dynarski concludes by suggesting that online coursework should be focused on expanding course options or providing acceleration for students who are academically prepared, rather than shoring up the performance of those who are lagging.

Loeb, S. (March, 2020). How effective is online learning? What the research does and doesn’t tell us. Bethesda, Maryland: Education Week. Retrieved from https://www.brookings.edu/research/who-should-take-online-courses/

This article reviews existing research examining the effectiveness of online learning as a substitute for face-to-face instruction. Loeb finds that, in general, students in online education do worse than students in face-to-face instruction, and draws on evidence showing that students with fewer resources at home learn less when they are enrolled in an online environment. Loeb concludes that online teachers need to consider how they engage students, particularly disadvantaged students.


This report uses data from a for-profit university to show the effect of online course taking on grades. In their analysis, the authors find that students taking courses in-person at the for-profit university earned roughly a B- grade (2.8) on average while if they had taken it online, they would have earned a C (2.4). Additionally, taking a course online reduces a student’s GPA the following term by 0.15 points. The authors recommend continued improvement of online curricula and instruction to strengthen the quality of these courses and hence the educational opportunities for the most in-need populations.

Online Instruction Needs to Be Accompanied by a Robust Student Support System


As part of this report, the authors review studies that examine the quality of online education. From that review, they identify several strategies to improve the quality of online courses in light of evidence showing that students with limited time on campus are more likely to enroll in these courses. These strategies include: 1) targeting online education for students with higher levels of self-directed learning skills, 2) provide robust and accessible support services (e.g. online tutoring), 3) create opportunities for students to engage in face-to-face interactions with faculty and peers, and 4) identify students who exhibit behaviors that put them at risk of failing the course, and 5) training faculty to help students build self-directed learning and time management
In addition, the authors summarize existing experimental and quasi-experimental studies on semester-length college courses, the authors that online students are on average between 3 percent and 15 percent more likely to withdraw, compared to similar students in face-to-face classes at community colleges.