

## What We're Learning: Prevalence of and Responses to Financial Stress Among Undergraduates

### *A Data Update from the Wisconsin HOPE Lab*

April 20, 2016

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Many students find it difficult to pay for college. Since 1980, the total cost of attendance increased by 162% at four-year public colleges, 168% at four-year private non-profit colleges and by 69% at community colleges. Over this same period, the median household income grew by only 12%, and for families in the bottom 40% the average household income increased by only 4% while their share of national income fell by 17%. Meanwhile, financial aid did not keep pace with price inflation: whereas in 1980 the average Pell grant covered 73% of the cost of attending a public four-year college, today it covers only 33%.<sup>1</sup>

Research suggests, not surprisingly, that this creates stress for students. In a survey of over 19,000 college students carried out by researchers at Ohio State University, 60% of respondents were concerned about having enough money to continue paying for school. In another recent study, 58% of first-year students and 55% of seniors reported worrying that they would not have enough money to continue going to college. In the same survey, 34% of first-year students and 38% of seniors reported that economic concerns interfered with their academic performance.<sup>2</sup>

<sup>1</sup> All figures are adjusted for inflation. Data drawn from US Census, the College Board's *Trends in Student Aid 2015*, and US Department of Education's *Digest of Education Statistics 2014* (Web tables).

<sup>2</sup> Office of Student Life, Ohio State University. (2013). [National Student Financial Wellness Study: Key findings report](#). Columbus, OH: Office of Student Life, College of Education and Human Ecology, Ohio State University. National Survey of Student Engagement (2015). *Engagement Insights: Survey Findings on the Quality of Undergraduate Education – Annual Results 2015*. Bloomington, IN: Indiana University Center for Postsecondary Research.

Students are right to be concerned that financial constraints will cause them to leave college. In *Paying the Price: College Costs, Financial Aid, and the Betrayal of the American Dream*, Wisconsin HOPE Lab Founding Director Sara Goldrick-Rab documents the myriad ways in which financial struggles scuttle the academic ambitions of lower-income undergraduates. For example, federally-determined expected family contributions are beyond the means of many families, often requiring students to both take out loans *and* work long hours in order to go to college. In such conditions, even dedicated students can become exhausted and fail to make the grades they need in order to keep their aid.<sup>3</sup>

How common is financial strain among undergraduates? And how do they respond to it? In this data brief, we address these questions using data from a survey of undergraduates in Wisconsin. We investigate first the prevalence of economic stress and how it varies by race, gender, and family income. Next, we examine whether students experiencing financial strain are more likely to cut back spending on school supplies, borrow money, or postpone medical or dental care. Finally, we consider whether students stressed about being able to pay for college are also anxious about their future economic prospects.

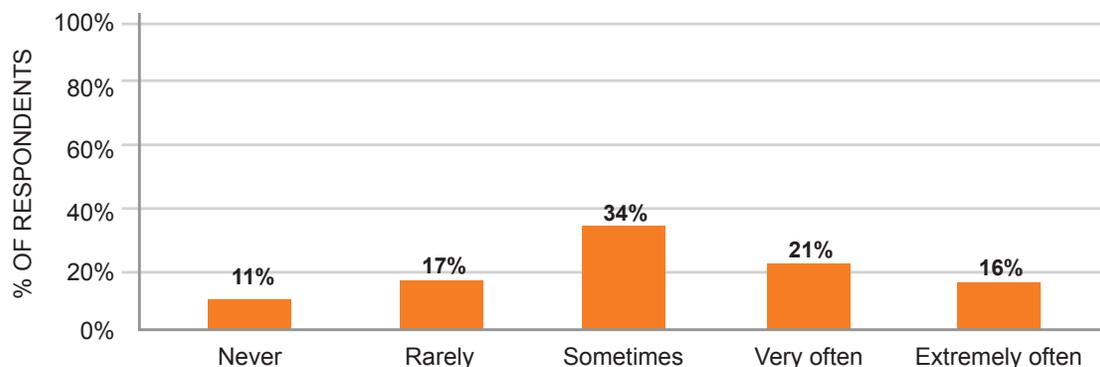
## Financial Worries among Undergraduates

In order to measure student stress regarding having enough money to continue their education, we asked students:

*During this academic year, since September 2014, how often did you worry that you may not have enough money to pay for finishing college?*

As Figure 1 illustrates, such concerns are widespread. Seventy-one percent of students are at least sometimes concerned, while 16 percent are concerned extremely often.

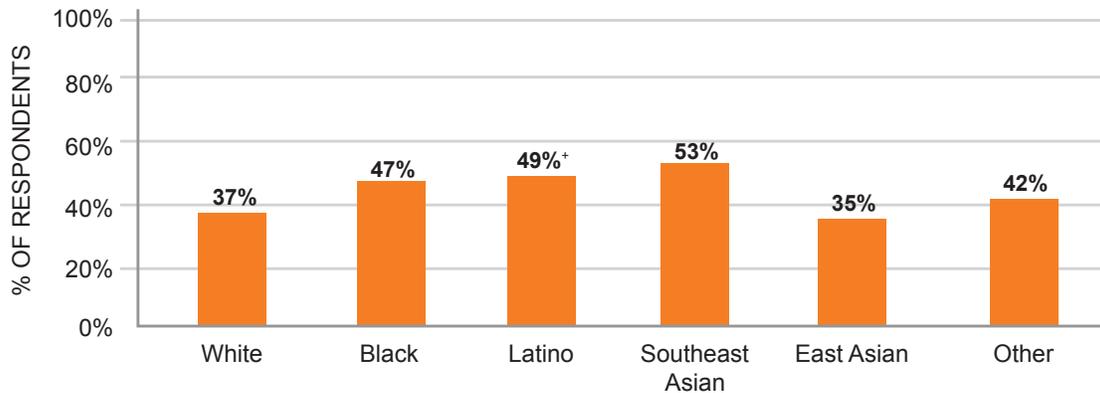
**Figure 1: How Often Students Worry about Having Enough Money to Finish College**



<sup>3</sup> Goldrick-Rab, S. (2016). *Paying the price: College costs, financial aid, and the betrayal of the American dream*. Chicago: University of Chicago Press.

Reported financial strain varies by race/ethnicity (Figure 2). For example, just 37% of white students experience financial stress “very often” or “extremely often,” compared to 47% of African-Americans, 49% of Latinos, 53% of Southeast Asians, and 35% of East Asians.

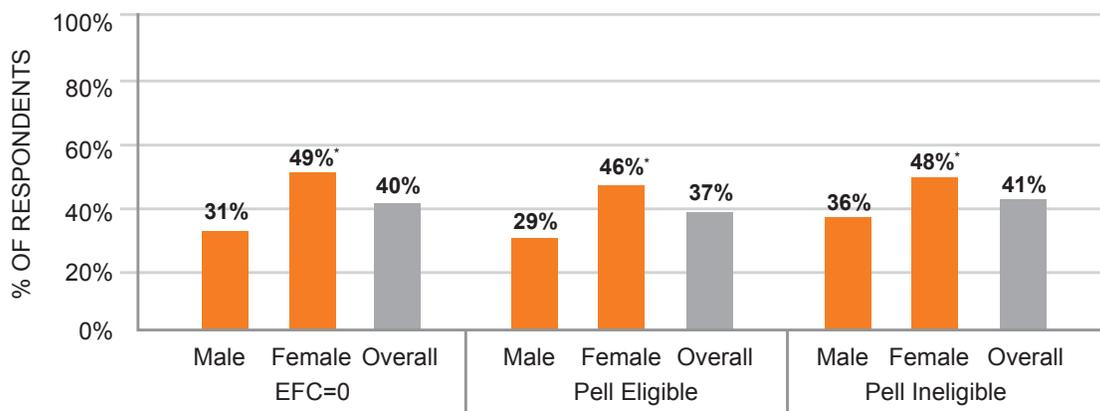
**Figure 2. Variation in Students’ Financial Stress about Paying for College: Race/Ethnicity**



Note: <sup>+</sup>Significantly different from “White” at  $p < .10$ ; permutation test with 1000 replications.

We next examine whether financial stress varies by gender and by family income as defined by Pell eligibility thresholds and expected family contribution (EFC). As Figure 3 illustrates, women report higher rates of financial stress than men, irrespective of family income. For example, among students with zero EFC (the lowest household income group) women are 18 percentage points more likely than men to report financial stress. Rates of financial stress do not vary substantially by family income among students in this sample, all of whom come from families that are working or middle-class.

**Figure 3. Variation in Students’ Financial Stress about Paying for College: Gender and Family Income**



Note: <sup>\*</sup>Significantly different from “Male” at  $p < .05$ ; permutation test with 1000 replications.

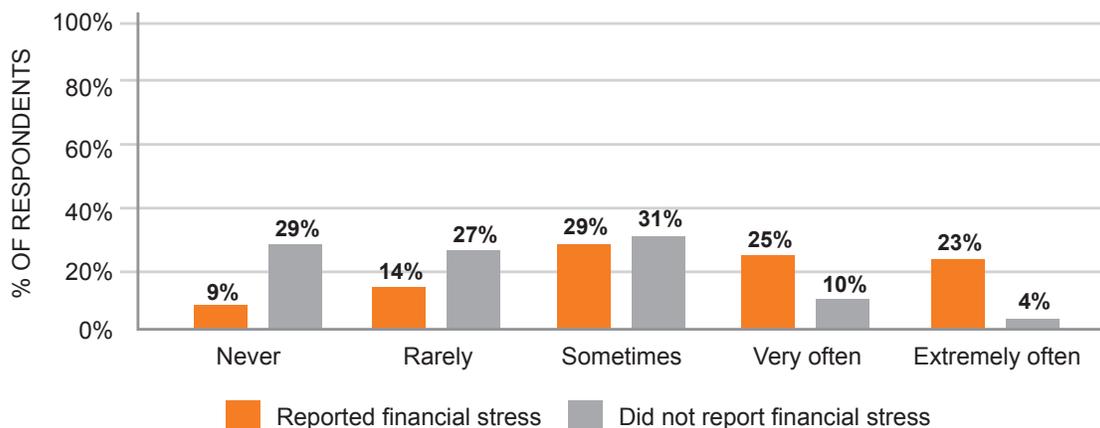
## How do Students Cope with Financial Stress?

Individuals in financial difficulty can cut spending, try to earn more, or both. Some students choose to cut back on academic expenses beyond tuition. We asked students:

*During this academic year, since September 2014, how often did you decide not to buy something that is required for school because it costs too much, for example a computer, books, or other supplies?*

Responses varied between those who did and those who did not report being stressed about finances (Figure 4). Among those who reported financial stress, one in four said that they cut back on school supplies “very often”, and 23% said that they did so “extremely often”. Comparable numbers for those who indicated little economic strain were 10% and 4%.

**Figure 4. Frequency of Cutting Back on School Supplies, By Reported Financial Stress**



Note: The difference in the frequency of cutting back on school supplies between groups defined by financial stress was significant at  $p < .001$ ; ordered logit regression, permutation test with 1000 replications.

We explore other responses to financial hardship in Figure 5. Those who indicated financial strain were more likely to have considered both transferring to a cheaper college (55% vs. 29%), as well as living at home (52% vs. 41%), to save money. These responses are understandable, but research suggests that living on-campus improves one’s odds of persisting in college. Similarly, if attending a cheaper college means attending a less selective school or a two-year college, research also suggests that these strategies may be counterproductive.<sup>4</sup>

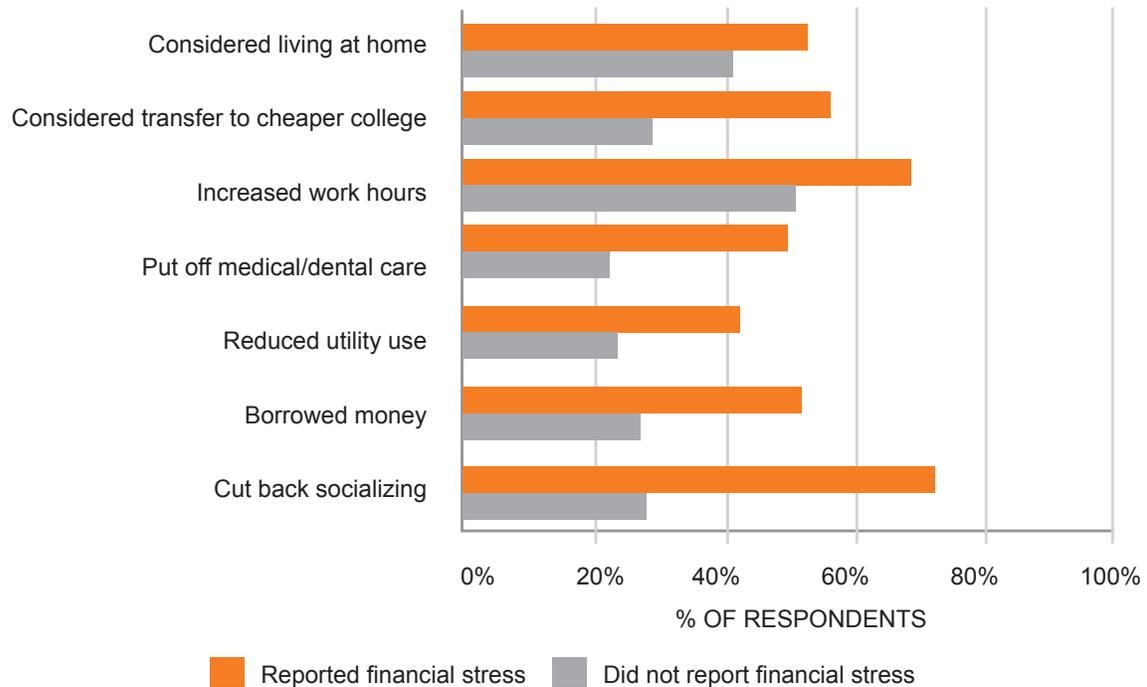
<sup>4</sup> Cohodes, S. R., & Goodman, J. S. (2014). Merit aid, college quality, and college completion: Massachusetts’ Adams scholarship as an in-kind subsidy. *American Economic Journal: Applied Economics*, 6(4), 251-285.

Monaghan, D. B., & Attewell, P. (2015). The community college route to the bachelor’s degree. *Educational Evaluation and Policy Analysis*, 37(1), 70-91.

Schudde, L. T. (2011). The causal effect of campus residency on college student retention. *The Review of Higher Education*, 34(4), 581-610.

Students who reported financial strain were also more likely than those who did not to reduce utility use (42% vs. 24%) and put off medical or dental care (49% vs. 22%). Additionally, they were also more likely to either borrow money (51% vs. 27%) or to increase their work hours (67% vs. 50%). Research has found that working part-time – particularly at on-campus jobs – is associated with better academic performance, but that full-time work tends to be harmful.<sup>5</sup>

**Figure 5: Student Income and Spending Strategies, By Reported Financial Stress**



Note: All differences between groups defined by financial stress were significant at  $p < .001$ ; permutation test with 1000 replications.

<sup>5</sup> McCormick, A., Moore, J., & Kuh, G. (2010). Working during college: Its relationship to student engagement and educational outcomes. In L. Perna (Ed.), *Understanding the Working College Student: New Research and Its Implications for Policy and Practice* (179-212). Sterling, VA: Stylus.

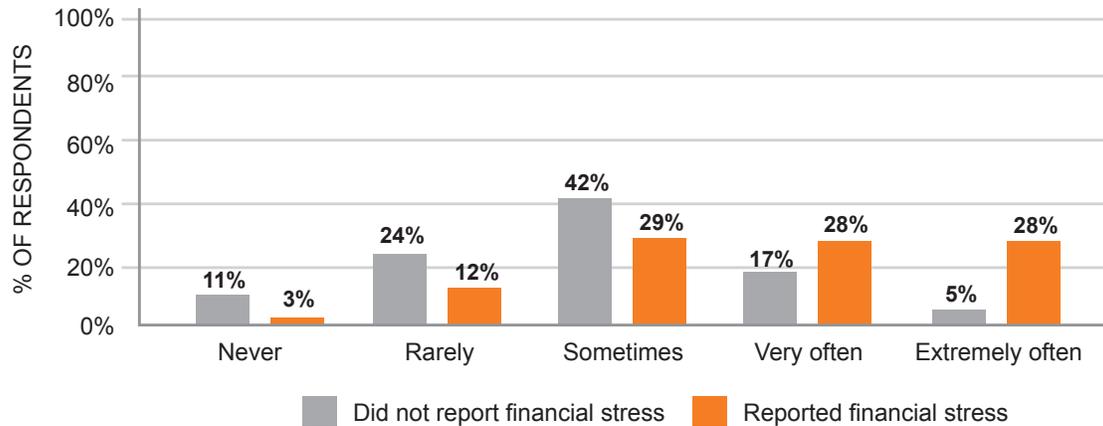
## Economic Insecurity and Worry about the Future

Finally, we consider the relationship between present-day financial strain and optimism regarding the future. We asked students:

*During this academic year, since September 2014, how often did you worry that you will not have a good job in the future?*

Among those who report financial strain, 28% report being worried about future economic prospects “very often” and 28% report having them “extremely often” (Figure 6). Comparable numbers for those not expressing financial strain are 17% and 5%. The reasons for this relationship are not certain, but research is clear that those who do earn college degrees tend to have higher incomes and are less likely to experience unemployment.

**Figure 6. Concern about Having a Good Job in the Future, By Reported Financial Stress**



Note: The difference in the frequency of concern about the future between groups defined by financial stress was significant at  $p < .001$ ; ordered logit regression, permutation test with 1000 replications.

## Conclusions

The rising price of college has left many students concerned that they might not be able afford to complete their degrees. Students are doing many things in order to stay in school – cutting back on expenses, borrowing money, and working longer hours – but research suggests that some of these strategies may undermine students’ performance and thereby lead to non-completion. More research is needed in order to shed light on these dynamics.

Data discussed in this brief were collected as part of a larger research project investigating the impact of financial aid on persistence in science, technology, engineering, and math (STEM) majors. Students were recruited in the fall of 2014 at seven campuses of the University of Wisconsin system, two public technical colleges, and one private non-profit technical college. Participants were mostly first-time entering students, and in order to be eligible they had to be Wisconsin residents, be enrolled in at least one credit, have an EFC of \$10,314 or less (200% of the Pell cut-off for the 2014-15 academic year), have at least \$1000 of unmet need, have demonstrated a modest interest in STEM fields, and have test scores indicating they would not require remediation in math. This particular data derives from responses to the second wave survey of this study, carried out in spring 2015. The sample for this wave was 1,565 students, and the response rate was 64%.