

White Paper:

Textbook Affordability and Student Success for Historically Underserved Populations at CSUCI



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Executive Summary

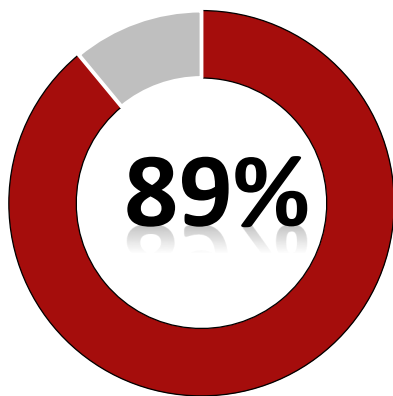
The soaring cost of college textbooks has been well documented.¹ The negative effects of these rising costs have also been well established: from decreased access to higher education to increased time-to-graduation rates.² As an alternative to traditional course materials, open education resources (OERs) are shown to be equivalent in academic quality, student satisfaction, and student learning outcomes.³ Despite OERs' potential to offset the negative effects of rising textbook costs, no research to date has focused on OERs among historically underserved student populations.⁴ For each of these reasons, CSU Channel Islands' *openCI* initiative recently completed a campus-wide study of over 700 undergraduate students. Statistical analysis revealed textbook prices to be a significant educational barrier for all CSUCI students, with a disproportionately negative effect among racial/ethnic minorities, low-income students, and first-generation college students. These results suggest a potential lack of *navigational capital*⁵ among CSUCI's historically underserved students, while also challenging each of us in higher education to remove unnecessary financial barriers to our student body's academic success.

Major Results

Table 1. Results from All 705 Student Surveys

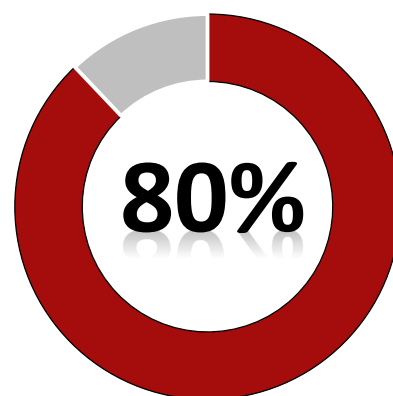
Experienced increased stress due to textbook costs	89%
Ratings of stress level caused by textbook costs, on a Likert-type scale of 1-10	7.0
Did not have a textbook on the 1 st day of class due to cost	80%
Did not buy a textbook at all due to cost	65%
Did not buy a textbook due to cost and later felt it limited learning	56%
Did not buy a textbook due to cost knowing beforehand it would limit learning	44%
Avoided taking a class due to textbook costs	27%
Dropped a class due to textbook costs	12%
Failed a class due to textbook costs	9%

Student Stress

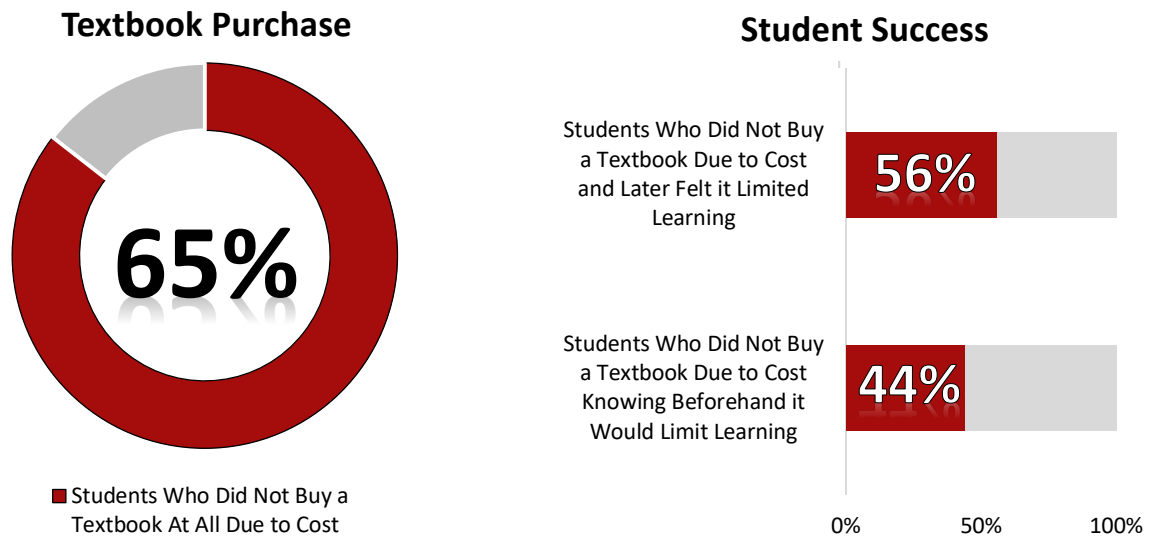


■ Students Who Experienced Increased Stress Levels Due to Textbook Costs

1st-Day Access



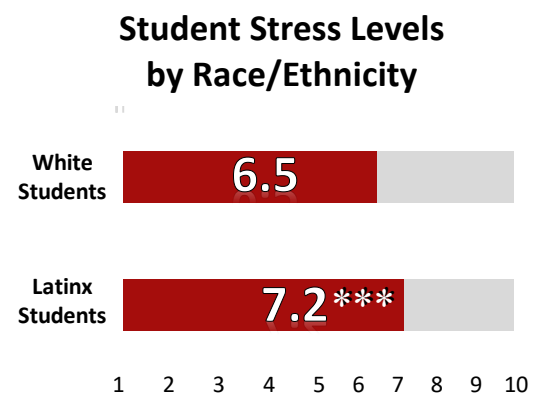
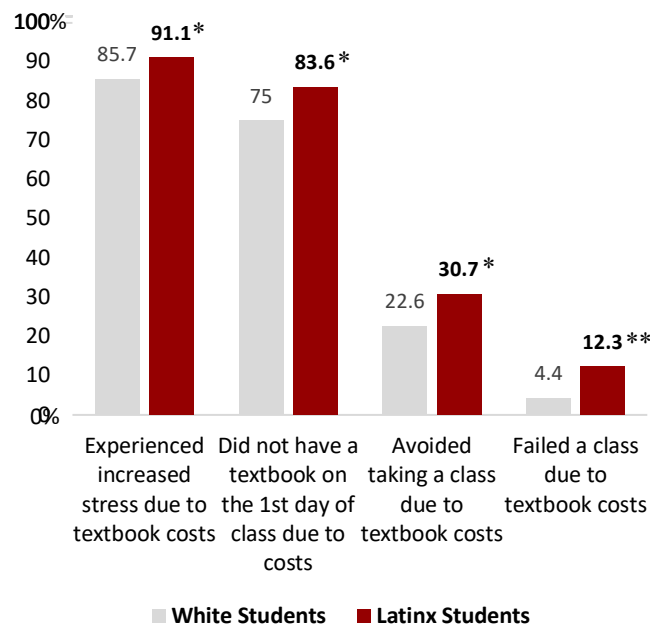
■ Students Who Did Not Have a Textbook on the 1st Day of Class Due to Cost

**Table 2a. Statistically Significant Results for White and Latinx Students**

	<u>White:</u>	<u>Latinx:</u>
Experienced increased stress due to textbook costs	85.7%	91.1%*
Ratings of stress level on a Likert-type scale of 1-10	6.5	7.2***
Did not have a textbook on the 1 st day of class due to cost	75.0%	83.6%*
Avoided taking a class due to textbook costs	22.6%	30.7%*
Failed a class due to textbook costs	4.4%	12.3%**

Table 2b. Comparative Results for White and Latinx Students (Reference Group = White)

	<u>Bivariate:</u>	<u>Multivariate:</u>
Experienced increased stress due to textbook costs	1.71*	1.40
Did not have a textbook on the 1 st day of class due to cost	1.69*	1.46
Avoided taking a class due to textbook costs	1.50*	1.65*
Failed a class due to textbook costs	3.06**	3.26**



*p<.05, **p<.01, ***p<.001.

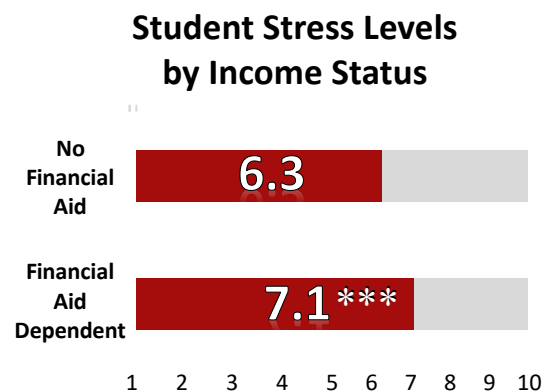
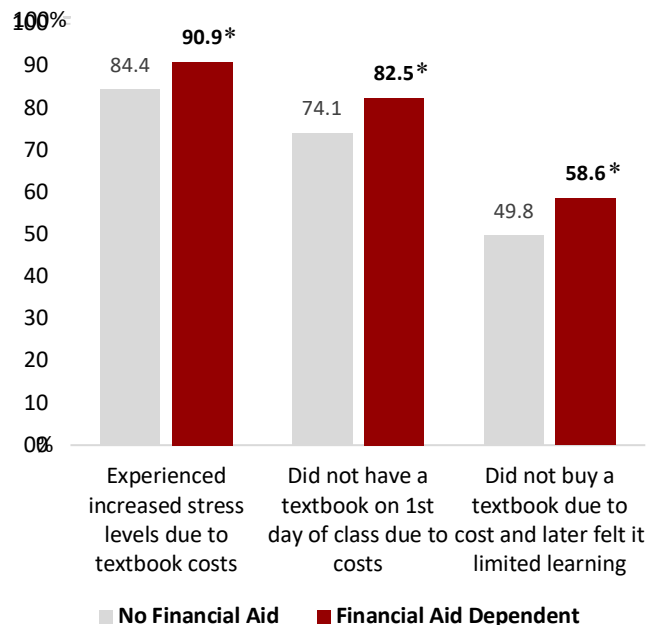
Asterisks indicate statistically significant findings. One asterisk (*) indicates less than a 5% chance of error due to sampling error, two asterisks (**) indicate less than 1% chance of error, and three asterisks (***) indicate less than .1% chance of error.

Table 3a. Statistically Significant Results for Low-Income Students

	No Financial Aid:	Financial Aid Dependent:
Experienced increased stress levels due to textbook costs	84.4%	90.9%*
Ratings of stress level on a Likert-type scale of 1-10	6.3	7.1***
Did not have a textbook on the 1 st day of class due to cost	74.1%	82.5%*
Did not buy a textbook due to cost and later felt it limited learning	49.8%	58.6%*

Table 3b. Bivariate and Multivariate Results for Low-Income Students

	Bivariate:	Multivariate:
Did not have a textbook on the 1 st day of class due to cost	1.75*	1.59*
Did not buy a textbook due to cost and later felt it limited learning	1.56*	1.53*

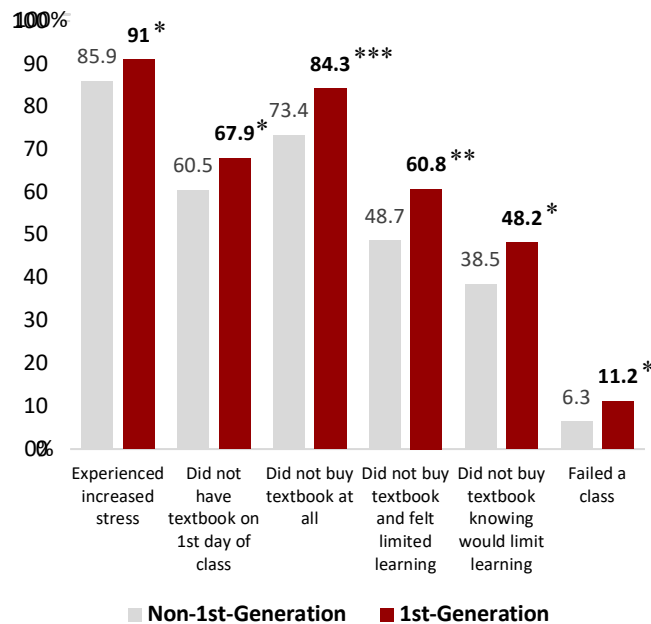


*p<.05, **p<.01, ***p<.001.

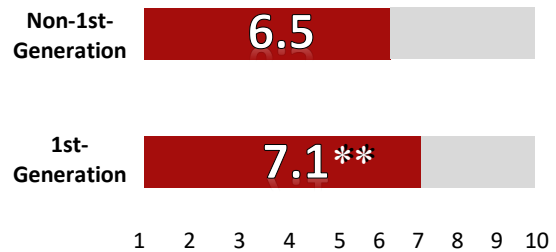
Asterisks indicate statistically significant findings. One asterisk (*) indicates less than a 5% chance of error due to sampling error, two asterisks (**) indicate less than 1% chance of error, and three asterisks (***) indicate less than .1% chance of error.

Table 4. Statistically Significant Results for First-Generation College Students

	Non-First-Generation	First-Generation
Experienced increased stress due to textbook costs	85.9%	91.0%*
Ratings of stress level on a Likert-type scale of 1-10	6.5	7.1**
Did not have a textbook on the 1 st day of class due to cost	60.5%	67.9%*
Did not buy a textbook at all due to cost	73.4%	84.3%***
Did not buy a textbook due to cost and later felt it limited learning	48.7%	60.8%**
Did not buy a textbook due to cost knowing it would limit learning	38.5%	48.2%*
Failed a class due to textbook costs	6.3%	11.2%*



Student Stress Levels by 1st-Generation Status



* $p < .05$, ** $p < .01$, *** $p < .001$.

Asterisks indicate statistically significant findings. One asterisk (*) indicates less than a 5% chance of error due to sampling error, two asterisks (**) indicate less than 1% chance of error, and three asterisks (***) indicate less than .1% chance of error.

Key Takeaways

- Textbook prices are a significant educational barrier for all CSUCI students
- Textbook prices are an even greater barrier for historically underserved students
- A potential lack of *navigational capital* exists among historically underserved students
- More qualitative data is needed to reveal reasons why these disparities exist/persist
- Staff, faculty, and administrators are challenged to remove unnecessary financial barriers

The results from over 700 survey responses revealed textbook costs to be a significant educational barrier for all CSU Channel Islands' students. Those barriers are even more significant, however, for racial/ethnic minorities, low-income students, and first-generation college students.

These results suggest a theoretical extension to Tara Yosso's (2005) *navigational capital*.⁵ In addition to the findings outlined above, for example, student responses also revealed a significant correlation between first-generation status and the number of textbooks required for purchase each semester. One possible explanation for this finding is that first-generation college students have fewer educational mentors or mental models at their disposal for navigating the intricate social institution of higher education (i.e., navigational capital). Additional assumptions can be about why this and other disparities exist – and persist – on CI's campus and beyond. Yet more qualitative data is eventually needed to reach empirically-based conclusions. To this end, openCI is currently collaborating with CI's Basic Needs Initiative to further explore this issue via semi-structured interviews with historically underserved students at CI.

Finally, this study serves as a challenge for every staff, faculty, and administrative member in higher education. Results clearly reveal the disproportionately negative effect of textbook costs on historically underserved populations, confirming this concern to be a social justice issue. Thus, it is our responsibility to remove any unnecessary financial barriers to academic success, and to ensure that our students' learning potential is never limited by their purchasing power.

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- ² Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Education Technology Research Development*, 64, 573-590.
- ³ Fischer, L., Hilton, J., Robinson, T. J., & Wiley, D. A. (2015). A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students. *Journal of Computers in Higher Education*, 27, 159-172.
- ⁴ Ekowo, M. (2017). OER researchers don't disaggregate data on diverse students: Here's why they should. *EdSurge*. Retrieved from <https://www.edsurge.com/news/2017-06-09-oer-researchers-don-t-disaggregate-data-on-diverse-students-here-s-why-they-should>
- ⁵ Yosso, T.J. (2005). Whose culture has capital? *Race, Ethnicity and Education*, 8(1), pp. 69–91.