

Do additional dollars buy engagement?

Effects of monetary incentives on attending financial aid counseling for at-risk students

Summary

Many university students struggle financially to remain enrolled in school. This is particularly true for those from less wealthy families. Given the importance of college degrees for later life earnings, this holds significance for intergenerational poverty.¹ In particular, research suggests that access to student aid, including both grants and loans, can play a role in college attendance and completion.² Importantly, research also shows access to financial aid alone is likely not sufficient. Financial literacy, student supports, advising and aid design also can play equal if not outsized roles.³

At Georgia State University (GSU), over 4,000 students per term are identified as at-risk of being withdrawn from classes due to inability to pay. During the COVID-19 pandemic, GSU made use of federal funding available through Federal Higher Education Emergency Relief Funds (HEERF) to provide no-strings-attached financial aid to these students with the express purpose of keeping them enrolled in school. As these funds were set to expire, many GSU students identified as financially at risk of dropout were slated to lose what may have been a lifeline of support. In the following, we discuss an experimental intervention designed to increase uptake of counseling services intended to keep these students engaged and enrolled.

James C. Cox
Georgia State
University

Daniel Kreisman
Georgia State
University

Stephen Shore
Georgia State
University

1 See Barrow and Malamud (2015) for a summary.

2 See Barr et al., 2021; Bettinger et al., 2019; Card and Solis, 2022; Carlson et al., 2022; Denning, 2019; Denning, Marx, and Turner, 2019; Stinebrickner and Stinebrickner, 2008.

3 See Marx and Turner, 2018; Cox, et al., 2020; Abraham et al., 2020.

To assist students in navigating the complex world of student financial aid, including grants and loans, the Office of Student Financial Services (SFS) at Georgia State University (GSU) has a Student Financial Management Center that provides proactive advising. Yet, despite the availability of these services, many students—even those in dire need of financial assistance and despite proactive outreach from the Center—never come for counseling. Our experiment is designed to test whether financial incentives can improve uptake of counseling, and whether counseling improves student outcomes.

To ask these questions we embedded an experiment within SFS's ongoing activities. As HEERF funding neared its end, SFS was slated to send emails notifying students who received this funding that it was coming to an end, further encouraging them to come in for financial counseling. During these advising sessions, students would be offered:

- Guidance on completing the financial aid process
- Advice on financial aid options available to them
- Loan and debt counseling including repayment options to improve affordability
- Student success advising to ensure financial aid is not lost due to poor academic performance
- Basic financial literacy training

Because students were already receiving funding from SFS, the emails came from a trusted source with which they were familiar. We used this existing framework to ask:

1. Can modest financial incentives increase uptake of financial aid counseling?
2. Can that counseling reduce student dropout, ease financial burdens, or improve student performance and graduation rates?
3. Is counseling more (or less) effective for hard-to-reach populations (who require larger incentives) to participate?

Our results can be summarized briefly:

1. Very few students who weren't offered a financial incentive attended an appointment—only 1.3%.
2. Financial incentives did buy engagement. Every \$10 in incentives increased the likelihood students scheduled an appointment by nearly one additional percentage point.
3. Yet, students who attended because of the incentives did not have different outcomes from those who attended without a financial incentive, regardless of how much was paid to induce them to attend.

Details

For the experiment, we randomized among students who had received funding and thus were already slated to receive emails from SFS. Some students simply received emails inviting them to counseling—these students comprised our control group. The remaining students were additionally offered between \$10 and \$100 if they took either a virtual or in-person counseling appointment.

Our experiment began the third week of April 2023 and ended in the second week of May. The emails were sent out in six batches. In each batch, 20% of email addresses were randomized to receive the control email with an offer of counseling but no payment. The remaining 80% received one of the treatment emails. Among those receiving the treatment emails, an equal share was randomized to each treatment amount. Thus, in each wave, 8% of email addresses were assigned to each treatment value—which ranged from \$10 to \$100 in \$10 increments—with the remaining 20% receiving the control email.

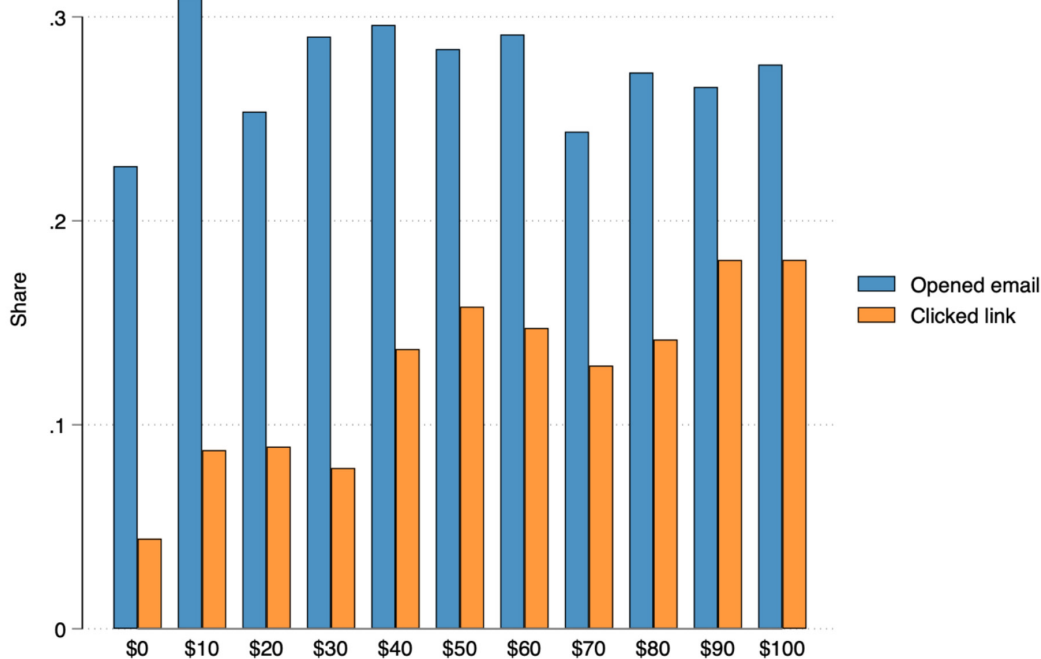
Initially, 3,952 emails were sent during this period. Due to an internal error in inviting students, 235 students received more than one email, with some receiving both treatment and control emails. We dropped these students from the analysis, resulting in an analysis sample of 3,481 students who received an email invitation. Our results are not sensitive to this deletion.

What we found

1. Engagement is low, but money buys clicks.

We began evaluating effects of the experiment by observing differences in responses to email invitations by treatment status. Figure 1 shows little relationship between the funding amount and opening rates. This was anticipated because the amount was not in the email subject. We do find a strongly positive relationship between the amount offered and the click-through rate. Fewer than 5% of the control group clicked on the email link, while more than 13% of the treatment group did. Simply offering \$10 doubled the click-through rate, while offering \$100 increased the likelihood of clicking by 410%.

FIGURE 1. OPEN AND CLICK-THROUGH RATES BY TREATMENT

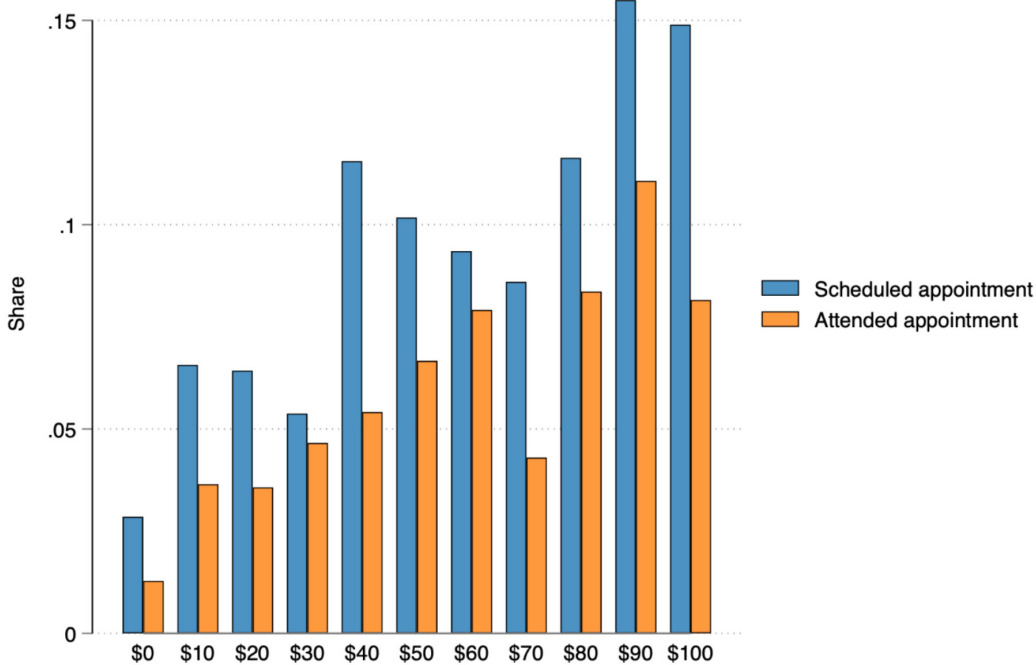


Notes: Figure plots email open and click-through rates by treatment status. Not all email openings are recorded.

Figure 2 shows similar statistics for scheduling and attending an appointment. Naturally, many students who schedule an appointment fail to attend. Yet again, we show a strong and positive relationship between the amount offered and scheduling and attending. Only 2.5% of the control group scheduled an appointment, and only 1.3% attended. Yet, offering only \$10 increased the scheduling rate by 130%. Increasing the payment to \$100 increased the schedule likelihood by 420%. A similar pattern emerges for our primary outcome: attendance. Offering a payment of \$10 increased the attendance rate from 1.3% to 3.7%, an increase of approximately 185%. Increasing the payment to \$90 or \$100, averaged, increased the attendance rate by 630%, from 1.3% to around 9.5%.

These results yield three initial conclusions. First, the baseline attendance rate is exceedingly low. Only 1.3% of students who are not offered a monetary incentive attend. This is particularly concerning given that these students were identified as being at high risk of dropping out for academic or financial reasons (or both), they were already receiving funding from the university that was set to end, and the email was coming from a trusted source. Second, we find that incentives can increase both engagement and attendance quite meaningfully. Simply offering \$10 doubles the click rate and increases the attendance rate by 185%. Third, the *marginal* value of each dollar offered *above* \$10 in terms of engaging students is flat.

FIGURE 2. APPOINTMENT SCHEDULING AND ATTENDANCE RATES BY TREATMENT



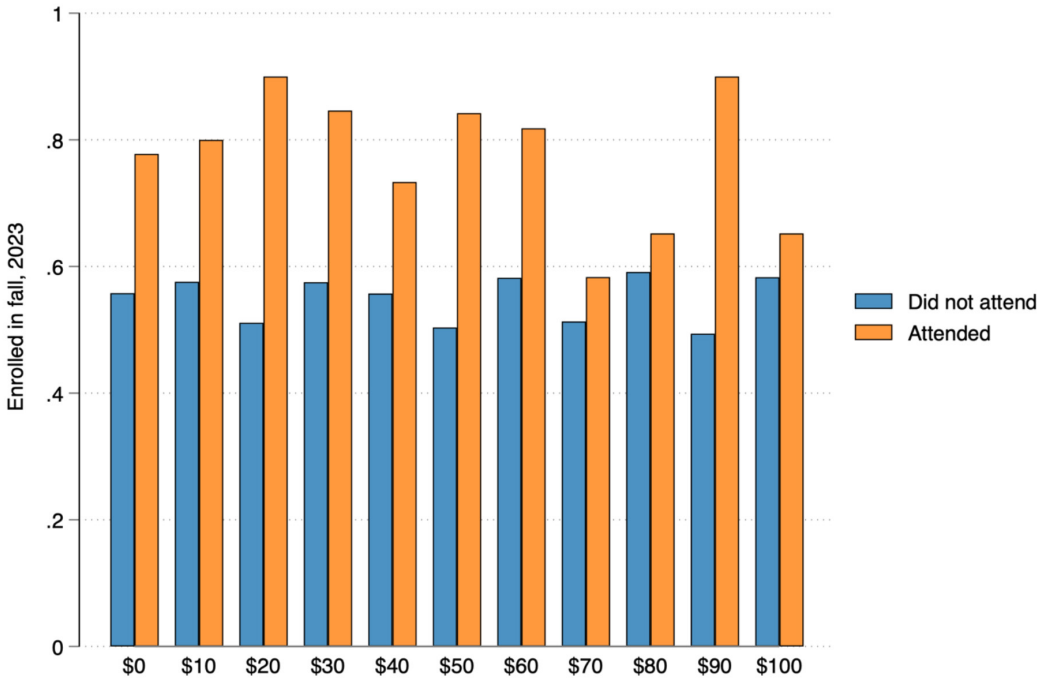
Notes: Figure plots mean appointment scheduling and attendance rates by treatment status.

2. Counseling had little impact on subsequent enrollment.

Finally, we test for differences in effects on enrollment in the subsequent term (fall 2023). To do so, we first compare differences in subsequent enrollment for *all* those who attended counseling compared with all those who did not. We call this our “naïve” estimate, since even when accounting for observable student characteristics, it can’t account for those that are unobserved, such as student motivation, among others. We then reestimate these differences using only variation in attendance due to financial incentives. Since the incentives were randomized, we can estimate the average effect of attendance on enrollment for those who were persuaded to attend only due to being assigned to the treatment group.

As a baseline, approximately 55% of those who did not attend enrolled in the following semester. From our “naïve” estimate, we find that those who attended counseling were 14 percentage points (25%) more likely to reenroll the following academic year. Yet, that difference is unrelated to whether they received the incentive. This is the difference between the average of the orange and blue bars in Figure 3 below—those who attended were more likely to reenroll. Yet, focusing on the orange bars (those who attended) only, we find no difference in attendance rates either between those in the control group (\$0) and the treatment groups, nor across the amount offered. This suggests that those induced into counseling only due to the funding did not see differential outcomes. In other words, the impact of counseling on later enrollment is entirely driven by selection.

FIGURE 3. SUBSEQUENT ENROLLMENT, INCENTIVES, AND COUNSELING



Notes: Figure plots reenrollment rates by treatment (financial incentive amount) and whether students attended (orange) or did not attend (blue) counseling.

Conclusions

Is it cost-effective to offer to pay students to attend financial aid counseling? Our experiment provides data that yields insight into this question—or, rather, two distinct but related more specific questions. In our experiment, offering to pay

students to attend counseling did increase attendance. However, the increased attendance in counseling induced by the payments did not increase reenrollment in the semester immediately following the payments.

References

- Abraham, K. G., Filiz-Ozbay, E., Ozbay, E. Y., & Turner, L. J. (2020). Framing Effects, Earnings Expectations, and the Design of Student Loan Repayment Schemes. *Journal of Public Economics*, 183.
- Barr, A. C., Bird, K., & Castleman, B. L. (2021). The Effect of Reduced Student Loan Borrowing on Academic Performance and Default: Evidence from a Loan Counseling Experiment. *Journal of Public Economics*, 202.
- Barrow, L., & Malamud, O. (2015). Is College a Worthwhile Investment? *Annual Review of Economics*, 7, 519–555.
- Bettinger, E., Gurantz, O., Kawano, L., Sacerdote, B., & Stevens, M. (2019). The Long-Run Impacts of Financial Aid: Evidence from California's Cal Grant. *American Economic Journal: Economic Policy*, 11(1), 64–94.
- Card, D., & Solis, A. (2022). Measuring the Effect of Student Loans on College Persistence. *Education Finance and Policy*, 17(2), 335–366.
- Carlson, D., Schmidt, A., Souders, S., & Wolfe, B. (2022). The Effects of Need-Based Financial Aid on Employment and Earnings: Experimental Evidence from the Fund for Wisconsin Scholars. NBER Working Papers 27125, National Bureau of Economic Research.
- Cox, J. C., Kreisman, D., & Dynarski, S. (2020). Designed to Fail: Effects of the Default Option and Information Complexity on Student Loan Repayment. *Journal of Public Economics*; 192(1).
- Denning, J. T. (2019). Born Under a Lucky Star: Financial Aid, College Completion, Labor Supply, and Credit Constraints. *Journal of Human Resources*, 54(3), 760–784.
- Denning, J. T., Marx, B. M., and Turner, L. J. 2019. ProPelled: The Effects of Grants on Graduation, Earnings, and Welfare. *American Economic Journal: Applied Economics*, 11(3), 193–224.
- Marx, B. M., & Turner, L. J. (2018). Borrowing Trouble? Human Capital Investment with Opt-In Costs and Implications for the Effectiveness of Grant Aid. *American Economic Journal: Applied Economics*, 10(2), 163–201.
- Stinebrickner, R., & Stinebrickner, T. (2008). The Effect of Credit Constraints on the College Drop-out Decision: A Direct Approach Using a New Panel Study. *American Economic Review* 98(5), 2163–84.

About the authors

James Cox is the Noah Langdale Jr. Chair in Economics; Georgia Research Alliance Eminent Scholar; director, Experimental Economics Center, Department of Economics, Georgia State University.

Cox has conducted research on integration of portfolio choice and consumer demand theories, public expenditure theory, credit rationing, energy policy, economics and political economics of minimum wage legislation, auction markets, job search models, and decentralized mechanisms for control of monopoly. Additional research topics include the utility hypothesis, the preference reversal phenomenon, procurement contracting, topics in social epistemology and legal theory, group vs. individual behavior in strategic market games and fairness games, and e-commerce with combinatorial demands. His research encompasses behavioral experiments and theoretical modeling of trust, reciprocity and altruism; trust and trustworthiness of immigrants and native-born Americans; calibration paradoxes for small- and large-stakes risk aversion; incentive compatibility of payoff mechanisms for choice under risk; public goods and common pool resources; and isomorphic centipede games and Dutch auctions.

He has a PhD from Harvard University.

Daniel Kreisman is an Associate Professor of Economics at Georgia State University in Atlanta. His research focuses on education and the workforce. He is a founding director of CTE_x—a consortium of researchers and state partners working to inform the future of Career and Technical Education policy in the US. He also studies education finance and other topics at the intersection of labor and public economics.

Dan has a PhD in Public Policy from the University of Chicago, and was a postdoc at the University of Michigan's Ford School before joining Georgia State.

Stephen Shore is the R. Means Davis Professor of Risk Management and Insurance in the Robinson College of Business at Georgia State University.

He is also the executive director the S.S. Huebner Foundation for Insurance Education. His current research interests are the determinants of mortgage and credit card default, income dynamics, income risk, and intra-household risk-sharing.

Dr. Shore received his undergraduate degree from Princeton University and graduate degrees from Harvard University. He spent four years on the faculty of the Wharton School of the University of Pennsylvania and four years on the faculty of the Johns Hopkins University economics department. He has served as a Deputy Assistant Secretary of the Treasury in the Office of Economic Policy.

About the TIAA Institute

The TIAA Institute helps advance the ways individuals and institutions plan for financial security and organizational effectiveness. The Institute conducts in-depth research, provides access to a network of thought leaders, and enables those it serves to anticipate trends, plan future strategies, and maximize opportunities for success.

To learn more, visit tiaainstitute.org.



**Join the conversation online:
@TIAAInstitute**

Corresponding author: dkreisman@gsu.edu. All authors thank TIAA/UPenn for financial support, CEAR at Georgia State University for pilot funding, and the Georgia State University Office of Student Financial Services for generous assistance. In particular we thank James Blackburn, Alyssa Taylor, Tara Roberson, Ben Brandon and Aria Simmons.

TIAA Institute is a division of Teachers Insurance and Annuity Association of America (TIAA), New York, NY.
©2024 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund, New York, NY
GRE-3499492PR-00424WX