

Social Programs That Work Review

Evidence Summary for Bottom Line

HIGHLIGHTS:

- **PROGRAM:** A comprehensive program that provides one-on-one advising to help students from low-income backgrounds get into and graduate from college.
- **EVALUATION METHODS:** A well-conducted randomized controlled trial (RCT) with a sample of 2,422 low-income students across three sites (Boston, MA, Worcester, MA, and New York City, NY).
- **KEY FINDINGS:** A statistically-significant, 8 percentage point increase in likelihood of earning a bachelor's degree. Six years after random assignment (i.e., five years after expected high school graduation), 55% of Bottom Line students had graduated with a bachelor's degree versus 47% of control group students.

[Disclosure: Arnold Ventures provided [funding](#) for the randomized controlled trial of Bottom Line.¹]

I. Evidence rating: **TOP TIER**

The standard for Top Tier is:

Programs shown in well-conducted RCTs, carried out in typical community settings, to produce sizable, sustained effects on important outcomes. Top Tier evidence includes a requirement for replication – specifically, the demonstration of such effects in two or more RCTs conducted in different implementation sites, or, alternatively, in one large multi-site RCT. Such evidence provides confidence that the program would produce important effects if implemented faithfully in settings and populations similar to those in the original studies.

II. Description of the Program:

Bottom Line is a program designed to help high school students from low-income backgrounds get into and graduate from college. Students are eligible for the program if they have a high school grade point

¹ Additional support for the study came from the Coalition for Evidence-Based Policy and the Michael & Susan Dell Foundation.

average of 2.5 or greater and come from families that make less than 200% of the federal poverty guidelines.

Bottom Line serves such students through two linked programs: Access and Success. In the Access program, students meet one-on-one with full-time, trained advisors every 3-4 weeks throughout their senior year of high school to: (i) identify colleges where they are likely to be successful; (ii) apply to those schools; (iii) complete financial aid and scholarship applications; and (iv) select a college or university that best meets their needs.

If students choose to attend one of Bottom Line’s “target institutions,” they are invited to join the Success program, which begins the summer between high school and college.² Through the Success program, campus-based advisors provide students enrolled in target institutions with continued individualized support for up to six years following high school in several areas including course selection, adjusting to college social life, and managing financial aid. Success program advisors meet with students an average of 3-4 times per semester during their first year of college and approximately twice per semester thereafter.

The estimated per-student cost of Bottom Line is approximately \$4,000.

[Click here for the Bottom Line website.](#)

III. Evidence of Effectiveness:

Overview of the Study Design:

Bottom Line was evaluated in a multi-site RCT, which randomly assigned 2,422 eligible high school students to a group that received an offer to participate in Bottom Line or to a control group that was not offered the program. Two cohorts of students were recruited from three sites in Boston, MA, Worcester, MA and New York City in the summers of 2014 and 2015 when students were entering their senior year of high school. Approximately 70% of students in the sample were female and 64% were Black or Hispanic. At the start of the study, 81% of the sample were children of parents who did not attend college, and the average household income for students in the sample was approximately \$23,000.

Key Findings:

- The study found Bottom Line produced an 8 percentage point increase in the likelihood of earning a bachelor’s degree within six years after random assignment (i.e. five years after expected high school graduation). Specifically, 55% of the Bottom Line group had received a

² Approximately 50% of students in the Access program go on to enroll in a target institution and enter the Success program. Bottom Line currently works with 52 target institutions, which were selected by the program based on a combination of their quality and affordability. The number of targeted institutions was retrieved from Bottom Line’s [website](#) in October 2021.

bachelor's degree vs. 47% of the control group.³ This effect was statistically significant in the full sample ($p < 0.01$) and consistent across the study's three implementation sites.⁴

- Bottom Line also produced a 5 percentage point increase in any college enrollment and a 9 percentage point increase in enrollment in a 4-year college. Specifically, in the six years after random assignment, 87% of the Bottom Line group had enrolled in any college vs. 82% of the control group and 79% of the Bottom Line group had enrolled in a 4-year college vs. 70% of the control group. Both effects were statistically significant ($p < 0.01$).
- Bottom Line *decreased* associate's degree receipt by 3 percentage points. Specifically, six years after random assignment, 10% of the Bottom Line group had received an associate's degree vs. 13% of the control group. This effect was statistically significant ($p < 0.05$).⁵

Discussion of Study Quality:

- At the start of the study, members of the Bottom Line and control groups were highly similar in their observable characteristics (e.g., demographics, educational background).
- All study participants were appropriately analyzed within the group to which they were originally assigned (consistent with an "intention-to-treat" approach), and the analysis appropriately adjusted for different random assignment ratios across cohort and sites.
- Outcomes were measured for all sample members (i.e., there was no sample attrition) using administrative data from the National Student Clearinghouse.⁶
- We believe that a longer-term follow-up of this study would be desirable to determine whether the program's impact on graduation rates leads to gains in participants' workforce earnings post-graduation.

IV. References:

Barr, A. & Castleman, B. (2021). *The Bottom Line on College Advising: Large Increases in Degree Attainment*. EdWorkingPaper 21-481. Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/xdsa-5e22>.

³ For those students for whom an additional year of data is available (i.e. those who enrolled in the study in 2014), Bottom Line produced a 10 percentage point increase in bachelor's degree receipt seven years after random assignment. Specifically, 63% of the Bottom Line group had received a bachelor's degree vs. 53% of the control group. This effect was statistically significant ($p < 0.01$).

⁴ The effects were between 7 and 8 percentage points at each site and statistically significant ($p < 0.05$) at two of the three sites (Boston and New York). The effect at the third site (Worcester) did not reach statistical significance, because it had a smaller sample of youth than the other sites. These site-specific impacts were requested directly from the study authors.

⁵ Bottom Line also reduced the likelihood that students had ever enrolled in a 2-year degree program (9% of Bottom Line students had done so during the six-year follow-up vs. 13% of control group students). This effect was statistically significant ($p < 0.01$).

⁶ The National Student Clearinghouse includes data on 97% of all U.S. college enrollments and 94% of degrees received, per the [NSC Fact Sheet](#) retrieved October 2021.

Barr, A., & Castleman, B. (2017). *The Bottom Line on College Counseling*. Boston, MA: Bottom Line. Bottom Line. Retrieved from: http://people.tamu.edu/~abarr/BL_shell_10_17_2017.pdf

Barr, A., & Castleman, B. (2016). *Advising Students to and through College: Experimental Evidence from the Bottom Line Advising Program*. Boston, MA: Bottom Line. Retrieved from https://www.bottomline.org/sites/default/files/Advising%20Students%20To%20and%20Through%20College_web.pdf

Email correspondence with [Andrew Barr](#) and [Ben Castleman](#).

Other Studies:

Castleman, B., & Goodman, J. (2018). *Intensive College Counseling and the Enrollment and Persistence of Low Income Students*. *Education Finance and Policy*, vol. 13, no. 1, pp. 19-41.