

Increasing Degree Attainment of Low-Income Community College Students: Evidence from a Randomized Controlled Trial

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Background: Community colleges have the potential to be powerful vehicles for social mobility in the U.S. They enroll nearly half of all post-secondary students in the U.S., a significant number of whom are first-generation or low-income, and the benefits incurred by their graduates are well-documented (Carnevale et al., 2014; The White House, 2015). However, the vast majority of these students (75 percent) do not graduate three years later (Kraemer, 2013). The troubling discrepancy between the large number of students enrolling in community college and the much smaller number that graduate three years later is not necessarily illustrative of student inability. Rather, this gap exists for disadvantaged students for many of the same reasons that a post-secondary degree could be so significant: a lack of economic, social, and cultural capital (Scrivener et al., 2014; Johnson et al., 2015).

Purpose: A better understanding of how to close the completion gap is desperately needed to inform policy. One Million Degrees (OMD), a Chicago nonprofit that supports low-income community college students, may provide key insights into a workable solution. Not only are graduation rates of its participants three times the state average, but its wraparound approach is consistent with the limited studies of successful interventions (Scrivener et al., 2014). OMD's oversubscription of applicants, coupled with its plans to expand its program, presents a rare opportunity to conduct a randomized controlled trial of the program. We examine effects on educational outcomes to answer an essential question: How successful are wraparound student support programs in closing the community college completion gap?

Intervention: One Million Degrees (OMD) implements the only Chicago-area program that uses a comprehensive approach to serve community college students. Its program supports students financially, academically, personally, and professionally through last-dollar scholarships, skill-building workshops, advising, and coaching. OMD students meet monthly with Program Coordinators, who work with scholars to encourage academic and personal progress. Students also attend monthly workshops that include meeting with a volunteer coach and activities designed to build professional skills. Program Coordinators are embedded on the college campus, allowing students to meet with them on campus and enhancing Program Coordinators' ability to connect students to additional resources and services through the college.

Setting and Population: Prospective students apply to the OMD program at the City Colleges of Chicago (CCC) or Harper College (a community college in Chicago's Northwest suburbs) through an online application process, supplying transcripts, financial information, and personal essays. OMD staff determine eligibility for the program based on each student's application packet, and determine the number of available slots at each campus based on staff capacity and feedback from CCC and Harper College.

Research Design: OMD has developed a consistently large and growing applicant pool over time, with each year's pool exceeding the number of slots available by roughly threefold. This oversubscription provides a perfect opportunity to evaluate the efficacy of the program through a

randomized controlled trial. The study utilizes a block-randomization design, where randomization is grouped within each of the seven CCC campuses and Harper College and within two age cohorts (graduating high school students and returning community college students). Applicants were randomly assigned to the OMD program, a control group of no support, or a waitlist. Students in the waitlist were randomly drawn into treatment to account for program attrition. Those on the waitlist who were not eventually approached about the program were put in the control group.

Data Collection and Analysis: After one year in the program, we draw on administrative data to examine program effectiveness on:

- Use of college services, as measured by survey data, CCC and Harper College data;
- Rate of enrollment in a post-secondary institution, as measured by National Student Clearinghouse (NSC) data;
- Enrollment status (e.g., part-time, full-time, quarter-time), as measured by NSC data;
- Rate of persistence from first semester to second semester for each year enrolled in college, as measured by NSC data;
- Credit accumulation, measured by CCC and Harper College data; and
- GPA by semester, as measured by CCC and Harper College data

In addition, we administered a student survey in the spring of 2017 to measure the treatment/control service contrast as well as differences in perceived economic, human, social, and cultural capital between these two groups.

We estimate both the intent to treat (ITT) effect and the effects of treatment on the treated (TOT), using assignment to treatment as an instrument for actual program participation; see Bloom (1984) and Angrist, Imbens and Rubin (1996). Once applicants are accepted to OMD's program, they are required to meet a series of provisional requirements, including submitting a FAFSA. Thus the ITT analyses will include all students who were originally accepted to the program, and the TOT analyses will account for students who did not end up participating in the program due to failure to meet the provisional acceptance requirements prior to the start of the academic year. As these students may be considered partial completers, our ITT analysis is our primary analysis, with our TOT analysis as secondary.

Findings: Initial analyses of data from the NSC suggest that the program has a positive and statistically significant impact on full time enrollment as well as persistence to the second term. We expect to receive administrative data from CCC and Harper the first week in November and these analyses will be presented at SREE along with analyses of the student survey data.

Conclusions: Currently, half of all post-secondary students are enrolling in community colleges, many of which have no systemic programs or policies in place to mitigate the barriers many students will face to earning degrees. Literature on successful interventions is limited, leaving policymakers and community colleges without adequate guidelines as they work to address the completion gap. The high graduation rates of OMD scholars and past research on comprehensive

support programs signal that a rigorous evaluation of OMD could lend key insights into a workable solution.

References

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