

**A Cautionary Tale about Emergency Financial Assistance without Services:
Evidence from a Randomized Controlled Trial Evaluation at a Community College**

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Abstract

Community college completion rates are extremely low, especially among low-income students. One potential explanation is that low-income students have limited capacity to overcome financial shocks, such as large medical, legal, or car repair bills. Some programs offer “emergency financial assistance” (EFA), to prevent these events from curtailing educational progress. We test the efficacy of EFA within the context of a broader randomized controlled trial at a community college in Texas. We find no evidence that access to EFA alone leads to improved outcomes. We speculate that EFA will only be effective if it is paired with additional case management services.

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I. INTRODUCTION

Community colleges enroll over 5 million students annually¹ and are a relatively inexpensive way of accessing higher education and advanced training. Studies find employment and earnings benefits associated with community college degree completion and credits earned (Kane and Rouse, 1995; Marcotte et al., 2005; Jepsen, Troske, and Coomes, 2014; Stevens et al., 2018; Marcotte, 2016). Despite their benefits, degree completion rates are quite low among community college students. Among students who first enrolled full-time at a two-year public institution in the fall of 2011, just over 47 percent had not received any degree or were no longer enrolled in school six-years later (Shapiro et al., 2018). It is of policy and academic interest to better understand how to increase completion rates in this population.

This paper reports on a randomized controlled trial (RCT) evaluation of *Stay the Course Fund*, a program that offered emergency financial assistance (EFA) to low-income community college students. Students in the program are eligible to apply for EFA for non-academic expenses or income shortfalls that could negatively impact their persistence in college. The motivation for the program is that for many low-income community college students, small negative shocks like a family emergency, higher than expected child-care costs, a necessary vehicle repair, or not having a security deposit for a new apartment, can sometimes have lasting impacts on academic outcomes. It is widely recognized in other contexts that many low-income families live perpetually on the brink of crisis and deep hardship (Barr and Blank, 2009; Shipler, 2008). Bertrand, Mullainathan, and Shafir (2004) describe this aspect of poverty in terms of some families having “narrow margins for error.” EFA is designed to reduce the vulnerability to negative shocks that many low-income families experience.

Financial assistance programs similar to *Stay the Course Fund* have become more widespread—three-quarters of post-secondary schools provide some kind of EFA (Kruger et al., 2016). Scholarship America, which runs the *Dreamkeepers* program, reports that “Nationally, more than half of all students

¹ <https://nscresearchcenter.org/wp-content/uploads/CurrentTermEnrollmentReport-Fall-2018-3.pdf>.

who drop out of college do so for financial reasons — and many times students are forced to drop out due to unforeseen costs of a few hundred dollars or less.”² A descriptive review of the *Dreamkeepers* EFA program found that fund recipients have “disproportionate need” and were “more academically challenged” than the average student, but their reenrollment rates were roughly comparable to other students (Geckeler et al., 2008). Though the findings of that report are consistent with the notion that access to EFA can promote persistence, the study was not an RCT and as such, is not necessarily indicative of a causal effect of the program. To the best of our knowledge, our study is the first RCT analysis of a program offering access to EFA to low-income college students.

The results of our analysis show no evidence of a positive effect of access to EFA on students’ persistence or degree completion through six-semester of follow up. In contrast, in a companion paper (Evans et al., 2018), we find sizable, positive effects for female students of a comprehensive case management program that offers referrals, coaching, mentoring, and access to EFA. We speculate that for our population of interest, EFA is only effective if it is also paired with services that help students overcome a wider range of barriers than a straightforward need for cash in any given semester.

II. THE EMERGENCY FINANCIAL ASSISTANCE (EFA) INTERVENTION

The evaluation of *Stay the Course Fund* is part of a broader RCT designed by the implementing agency, Catholic Charities Fort Worth, and the research team (consisting of the authors of this paper). The experiment took place at the Trinity River campus of Tarrant County College (TCC), a large community college in Fort Worth, Texas. TCC students typically come from disadvantaged backgrounds and have very high dropout rates.³ This campus enrolls about 9,000 students each year and it primarily offers Associate’s degrees requiring 60 credit hours to complete.

Eligibility for the study was limited to students who: 1) were enrolled in at least nine credit hours at TCC Trinity River; 2) were degree seeking; 3) were aged 18 years or older; 4) satisfied at least one Texas Success Initiative (TSI) standard;⁴ 5) were newly enrolled or have earned a Cumulative GPA of at least 2.0 at TCC to date; 6) had accumulated less than 30 credit hours at TCC to date; and 7) were

² See <https://scholarshipamerica.org/dreamkeepers/>, last accessed 12/31/18.

³ TCC Trinity River students are demographically similar to community college students around the nation, with the exception of TCC Trinity River enrolling considerably more Hispanic and part-time students. Among first-time, degree-seeking students who entered in fall 2011, only 14.8 percent earned a degree in four years and only 2.6 percent in two years.

⁴ TCC students are given placement exams (TSIs) in three subjects: math, reading and writing. Failure to pass the TSI in a subject means that a student starts their community college career in a remedial version of that subject.

Pell eligible or fell below 200 percent of the poverty line based on reported income on the FASFA. Eligibility criteria (1) through (5) target students who may feasibly complete a degree in three years. Eligibility criteria (6) eliminates students that are on a path to graduation. The final eligibility rule targets the intervention to low-income students. These criteria generated a study sample of 1,168 students from a total enrollment of 8,849 in the fall semester of 2013.

The research team randomly assigned eligible students into one of three groups: 430 students were assigned to the comprehensive case management program called *Stay the Course*; 299 students were assigned to the EFA-only program called *Stay the Course Fund*; and 439 students were assigned to a control group. Students in this final group received no additional services, but still had full access to any existing college or community services, just as they would in the absence of this intervention.⁵

After the randomization procedure was conducted, the college sent emails and hard copy letters, both signed by the president of the college, to each student selected for the two different treatment groups. These communications introduced the program, explained that the student had been randomly selected to participate, and directed students to a web page to electronically sign a consent form for services and enroll in the program. Take-up rates in the *Stay the Course Fund* and the *Stay the Course* treatment arms were 42 and 22 percent, respectively.

To receive EFA, students must successfully demonstrate both that they have an imminent financial need and that not meeting this need would be detrimental to their academic progress. Additional factors that determine whether the event would qualify for assistance include the extent to which the event is foreseeable, controllable, and temporary. Examples of qualified costs include a car repair, rent and utilities, a bus pass, or emergency medical care. Eligibility for EFA is restricted to those students with a cumulative GPA of 2.0 or higher at TCC (unless they are in their first semester) and

⁵ Unfortunately, the RCT design does not allow for a comparison of case management with EFA included to case management without EFA. Thus, while this paper reports on the impact of EFA only and the companion paper reports on the impact of comprehensive case management, neither this paper nor the companion paper speaks to the question of whether EFA is a productive or necessary component of case management.

those enrolled in at least 9 credits the semester in which they apply. An individual student could apply to receive up to \$500 per semester, capped at \$1,500 total over a three-year period. A program Funds Coordinator makes determinations for all EFA applications, subject to a supervisor's review.

Based on Funds Coordinator records, over a three-year period, students enrolled into the *Stay the Course Funds* treatment group (N = 126) submitted 74 requests for EFA, of which about three-quarters were approved, with an average payout of \$300. The leading reasons for EFA claims included housing costs (36 percent), utilities bills (25 percent), and transportation costs (24 percent); 15 percent of requests were for other claims, including school supplies, child care, etc. 105 of the students in the program never applied for any funds, and fewer than 7 percent of students collected more than \$1,000 over the three-year period. After six semesters, only 3 students had collected the max amount of \$1,500.

Total costs for the three year implementation of the *Stay the Course Fund* program amounted to \$79,000, or \$264 per student assigned to the *Stay the Course Fund* treatment group. These costs include \$20,800 in annual salary for a part-time Funds Coordinator that oversaw both *Stay the Course* and *Stay the Course Fund* EFA claims and \$16,600 for awards paid: \$13,000 in the first year, \$3,200 in the second year, and \$400 in the third.

III. DATA AND METHODS

We use data from TCC administrative records as well as linked data from the National Student Clearinghouse (NSC) to track outcomes for study participants. . The NSC data allow us to observe whether a student transferred to a two- or four-year college and/or completed a degree at another

institution.⁶ We focus on results six semesters after enrollment in the study, which represents 150 percent of the time typically required to complete an associate's degree.⁷

Our main outcomes include the following dummy variables, measured from the NSC: *Enrolled in College*, *Earned any Degree*, or *Earned an Associate's Degree*. We also measure the following continuous variables using TCC and NSC data: *Total Credits Earned* (the cumulative number of college credits that a student has earned by the end of the relevant semester),⁸ and the *Cumulative GPA* (at TCC).

We estimate the differences in outcomes between the treatment and control groups using a standard intent-to-treat (ITT) model which is calculated by regressing outcomes in an OLS model on a dummy for assignment to treatment and a vector of personal-level characteristics measured at the time of randomization.⁹ The estimation sample includes the *Stay the Course Fund* treatment group and the control group; it excludes students in the case management treatment group. We also estimate the effect of the intervention for those who participate, or the treatment-on-the-treated (TOT), by using the assignment-to-treatment dummy as an instrument for program participation in a 2SLS model. Program participation is defined as completing an intake form.

IV. RESULTS

Table 1 reports the six-semester results associated with the *Stay the Course Fund* intervention. We report results for the full sample, as well as separately by gender. For each outcome, we report both ITT and TOT effects. As a benchmark for the magnitude of these effects, we report the mean of each outcome for the control group in the ITT columns and the control complier mean (CCM) in the TOT

⁶ The National Student Clearinghouse is a nonprofit organization that works with more than 3,600 post-secondary institutions to provide data on student enrollment and degree completion. The NSC participating colleges enroll 98% of all post-secondary students in the U.S. (<http://www.studentclearinghouse.org/about/>).

⁷ Many community colleges emphasize graduation rates after 150 percent of the standard time to completion, as this is the rate that schools must disclose under the Student Right-to-Know Act.

⁸ Because we only observe credits earned for students while they are enrolled at TCC, we impute credits for students who are enrolled elsewhere using the average credits earned by students in the study who are still enrolled at TCC in the current semester.

⁹ The vector includes the following variables: age, age squared, gender, whether a student is Black, Asian or a different race, whether the student is Hispanic, the number of basics skills assessments the student has passed at entry, family income, and family income squared from the student's FASFA form.

columns. The CCM is calculated as the mean of the outcome for the compliers (those who take-up the treatment) in the treatment group less the 2SLS estimate.¹⁰

Table 1: The ITT and TOT Effects of Access to Emergency Financial Assistance after Six Semesters

	<u>Full Sample</u>		<u>Females</u>		<u>Males</u>	
	<u>ITT</u>	<u>TOT</u>	<u>ITT</u>	<u>TOT</u>	<u>ITT</u>	<u>TOT</u>
Enrolled in College	0.015 (0.037) [0.440]	0.036 (0.088) {0.456}	0.010 (0.046) [0.425]	0.024 (0.104) {0.505}	0.027 (0.065) [0.471]	0.073 (0.168) {0.342}
Total Credits Earned	-0.443 (1.448) [26.829]	-1.080 (3.509) {29.756}	-1.068 (1.761) [26.414]	-2.508 (4.110) {31.548}	0.706 (2.615) [27.725]	1.883 (6.803) {26.057}
Cumulative GPA	-0.108 (0.079) [2.495]	-0.259 (0.190) {2.784}	-0.089 (0.097) [2.490]	-0.206 (0.223) {2.825}	-0.131 (0.139) [2.504]	-0.348 (0.363) {2.678}
Earned any Degree	-0.014 (0.029) [0.182]	-0.034 (0.068) {0.248}	-0.032 (0.035) [0.187]	-0.073 (0.080) {0.285}	0.017 (0.050) [0.171]	0.045 (0.130) {0.175}
Earned an Associate's Degree	-0.012 (0.027) [0.159]	-0.028 (0.065) {0.218}	-0.014 (0.033) [0.157]	-0.032 (0.076) {0.208}	-0.007 (0.048) [0.164]	-0.018 (0.126) {0.238}
<i>Sample size</i>	738	738	491	491	247	247

Notes: Sample includes students assigned to the EFA only treatment and those assigned to the control group. Statistics reported under point estimate: (Standard error) [Mean outcome in control group] {CCM}. *Significant at the 10% level, **significant at the 5% level.

After six semesters, those who had access to emergency financial assistance earned degrees and remained enrolled in classes at remarkably similar rates to the control group. We find no statistically significant differences in these outcomes in the overall sample or for the male and female subsamples. We also find no evidence of treatment and control group differences for the outcomes of credits earned, GPA, and degrees earned. In nearly all cases, the point estimates are small, and in many cases they are negative. However, given the standard errors we are unable to reject the hypothesis of small positive effects. These results differ from those for the full case management intervention that indicate

¹⁰ For binary outcomes, sampling variation can produce negative estimates of the CCM. For these cases we report the CCM as zero, following (Kling, Liebman, and Katz, 2007). Students who take up the program tend to be slightly older, but overall the mean characteristics of compliers and non-compliers are very similar. We observe that those who take up the program have a slightly lower propensity score of earning a degree *ex ante*, though the difference is not statistically significant.

positive and marginally significant effects on enrollment for the full sample, and large positive and statistically significant effects on both enrollment and obtaining an associate's degree for the female sample (Evans et al. 2018). The 95% confidence interval for the effect of *Stay the Course Fund* on "earned an associate's degree" for females does not include the point estimate found for the full case management intervention.

We also observe outcomes after two and four semesters. Many community college students drop out after just one or two semesters, so an intervention like *Stay the Course Fund* has the potential to affect outcomes nearly immediately. Perhaps access to EFA is not sufficient to keep a financially vulnerable student enrolled for six semesters, but it might help them complete an additional semester or two. In results not reported here, there were no statistically significant ITT results for any of the subgroups for these earlier results.

V. DISCUSSION

The finding of no discernible benefit associated with access to EFA without associated case management raises the possibility that such an intervention is only effective if it is offered in conjunction with additional services. These results suggest that giving very low income students access to cash aid without the requirement or benefit of having a case manager to help address the causes of the underlying financial distress is not sufficient. Perhaps with a less disadvantaged population, a one-time infusion of cash could help, but for students in our low-income sample, we found no evidence that having access to up to \$1,500 to cover non-tuition financial shocks increased either enrollment persistence or degree attainment. We should note, however, that our estimates are not very precise, so we cannot rule out the possibility that EFA had some small positive effect on college success. We also stress that our study is not able to shed light on whether EFA is a critical aspect of case management. There might be important interactions between the coaching and mentoring aspects of STC and the ability of case managers to offer limited financial help. This is something future work should investigate.

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