

# The Role of Simplification and Information in College Decisions:

## Results from the H&R Block FAFSA Experiment

### *Addendum on College Completion*

October 22, 2018

Over the last few years, we have had many requests to examine the long-run impacts on degree completion of the H&R Block FAFSA Experiment. In 2017, the Institute of Educational Sciences graciously allowed us to use a grant (R305A120280) to conduct a match to the National Student Clearinghouse (NSC) records with the purpose of tracking degree completion.

Typically, we would have written a follow-up paper that elaborated on the additional findings; however, as we show below, the results are not definitive. While the point estimates are positive and the experiment was sufficiently powered to identify the impacts of the intervention on initial attendance and early persistence, the sample size is not large enough to detect completion effects due to college dropout rates similar to those of the control group. It is therefore not surprising we estimate confidence intervals that are too wide to rule out both large, null, or even small negative effects. Nonetheless, this document describes our analysis and findings to help address the questions we have received and add to the research literature on this topic.

#### *Data and Empirical Strategy*

We refer the interested reader to our *Quarterly Journal of Economics* publication to understand the details of the experiment. In short, individuals came to H&R Block to complete

their taxes. We used software to identify individuals who were college-age and likely would qualify for federal financial aid. We randomly assigned these individuals to one of three conditions – information only, information and assistance on financial aid forms, and a control condition. We found that the information and personal assistance condition improved students' college attendance and access to financial aid. Moreover, we investigated the impact on attendance after three years and found that students' continued to persist at higher rates in college.

To learn about the impact of the interventions on longer-term outcomes, in October 2017, we matched the H&R Block data to the NSC. The NSC data included information on degree completion among students up to nine years after college entry. This is the primary outcome we investigate in this document. We measure it as any two- or four-year degree. Our results do not change if we focus on two-year or four-year degrees individually.

Given the randomization, simple comparisons of treatment and control identify the impacts of the program. We use the following regression specification to identify the impacts:

$$Y_i = a + b * T1_i + c * T2_i + d * X_i + \varepsilon_i \quad (1)$$

where  $Y_i$  represents the outcome of interest,  $T1_i$  denotes whether the individual was in the information and assistance treatment, and  $T2_i$  denotes whether the individual was in the information only treatment. While we do not need to include covariates, we do throughout the paper. When noted throughout the paper, we include controls for the student's race, gender, parental education level and household income. In the empirical results, we do not focus on the impact of the information only treatment. In our initial work, we fail to find any statistically significant impact of the information only treatment on attendance; hence, we did not expect to

find impacts on degree completion. As expected, the information only treatment shows no impact on college completion.

### *Results*

Table 1 shows the results of this empirical exercise. In Panels A and B we show the impacts for the degree completion outcome and for the degree completion or current enrollment outcome, respectively. The columns show the control group mean and the estimated impact of the information and assistance treatment both with and without controls.

Table 1. Impacts of Information and Assistance on Degree Completion by October 2017

Sample	Control Group Mean	Effect of Full Assistance No Controls	Effects of Full Assistance with Controls
<i>A. Any Degree Completion</i>			
Dependent Students (n=868)	.189	.027 (.028)	.022 (.028)
Independent Students with No Prior College Experience (n=9221)	.054	.001 (.005)	.001 (.005)
Independent Students with Prior College Experience (n=6632)	.228	.0000 (.011)	.0002 (.011)
<i>B. Any Degree Completion or Currently Enrolled</i>			
Dependent Students	.209	.037 (.028)	.030 (.029)
Independent Students with No Prior College Experience	.079	-.0002 (.006)	.0001 (.006)
Independent Students with Prior College Experience	.241	-.004 (.011)	-.003 (.011)

Among those in the dependent Control Group, only 19 percent of students completed any college degree as measured until October 2017 (up to nine years after college entry), compared to 34.2 percent and 48.5 percent that entered college within the first and first three years of the experiment respectively (Tables III and VI in our QJE article). Thus, approximately 45 to 60 percent of dependents in our control group that began college in 2008-2011 had not completed a college degree by October 2017.

The most interesting result is the estimated impact on dependent students. Our point estimate suggests that the intervention increased the rates of degree completion by 2.7 percentage points. The estimated impact of the treatment declines to 2.2 percentage points when we include covariates. The 95 percent confidence interval of the true effect at 5 percent statistical significance includes zero but also includes completion effects of 7.6 percentage points, similar to what we estimated for enrollment effects. When we examine degree completion combined with current enrollment, the control group mean rises to 21 percent. The estimated impacts also rise to 3.7 percentage points and 3.0 percentage points when we estimate the impacts without and with covariates, respectively. Again, the standard error is 2.8 percentage points, leading to a wide confidence interval that includes both the same effect we found for enrollment and no effect.

The impacts on independent students with and without prior college experience are close to zero. For the sample with prior experience, that result is perhaps to be expected, since the estimated impact for them on enrollment was also zero. For the independent sample with no prior college experience, the 95 percent confidence interval is smaller than that for the dependent sample, but also includes effects that are close to that estimated for enrollment (1.5 percentage points). Only 7.9 percent of the independent sample with no prior college experience completed

college by 2017, compared to 9.5 percent and 19.8 percent that entered college within the first and first three years of the experiment respectively. Thus the completion rate among the independents in our sample also appears low, making it further difficult to detect small effects.

### *Discussion and Conclusion*

Almost half of the control group independent students navigated themselves into college three years after the intervention. About 19 percent of them completed any degree. Conditional on enrolling, the implied completion rate in the control group was 39 percent. In the full treatment group, the completion rate, condition on enrollment, was 42 percent. The low completion rate is consistent with the impacted students being marginal relative to the typical student entering college in the control group. Additionally, the change in the coefficients from initial enrollment effect over the first three years (about 5 percentage points) to degree completion (about 2 percentage points) corresponds to a very similar completion rate among the impacted students of 40 percent.

The impact of the FAFSA intervention on degree completion therefore remains ambiguous. The point estimates for the dependent student sample—the sample for which we had the largest impact in our prior work—are significant in magnitude; however, given the lack of statistical precision, these point estimates are not statistically significant. It is important to recognize the limits of the sample size of the H&R Block FAFSA Intervention: it was well-powered to detect impacts on enrollment, but it was not designed to examine longer-term degree completion, and there is not sufficient sample to detect any likely effects on graduation.

This addendum also draws attention to low college completion rates among our disadvantaged sample, both for our dependent sample around the age of exiting high school, and our independent sample. Our data suggest that fewer than half of students that began college finished their program, a reminder of the concerning trend in American higher education. While behavioral insights continues to hold promise for suggesting low-cost approaches for encouraging greater education attainment, researchers should also explore other, possibly more intensive methods, for addressing college preparedness and completion.