NBER WORKING PAPER SERIES

THE ROLE OF SIMPLIFICATION AND INFORMATION IN COLLEGE DECISIONS:
RESULTS FROM THE H&R BLOCK FAFSA EXPERIMENT

Eric P. Bettinger
Bridget Terry Long
Philip Oreopoulos
Lisa Sanbonmatsu

The Role of Simplification and Information in College Decisions: Results from the H&R Block
FAFSA Experiment
Eric P. Bettinger, Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu
NBER Working Paper No. 15361
September 2009, Revised June 2010
JEL No. H2,I2,J24

ABSTRACT

Growing concerns about low awareness and take-up rates for government support programs like college
financial aid have spurred calls to simplify the application process and enhance visibility. This project
examines the effects of two experimental treatments designed to test of the importance of simplification
and information using a random assignment research design. H&R Block tax professionals helped
low- to moderate-income families complete the FAFSA, the federal application for financial aid. Families
were then given an estimate of their eligibility for government aid as well as information about local
postsecondary options. A second randomly-chosen group of individuals received only personalized
aid eligibility information but did not receive help completing the FAFSA. Comparing the outcomes
of participants in the treatment groups to a control group using multiple sources of administrative data,
the analysis suggests that individuals who received assistance with the FAFSA and information about
aid were substantially more likely to submit the aid application, enroll in college the following fall,
and receive more financial aid. These results suggest that simplification and providing information
could be effective ways to improve college access. However, only providing aid eligibility information
without also giving assistance with the form had no significant effect on FAFSA submission rates.

Eric P. Bettinger
Stanford School of Education
CERAS 522, 520 Galvez Mall
Stanford, CA 94305
and NBER
ebettinger@stanford.edu

Bridget Terry Long
Harvard University
Graduate School of Education
Gutman Library 465
6 Appian Way
Cambridge, MA 02138
and NBER
longbr@gse.harvard.edu

Philip Oreopoulos
Department of Economics
University of Toronto
150 St. George Street
Toronto, Ontario M5S 3G7
CANADA
and NBER
philip.oreopoulos@utoronto.ca

Lisa Sanbonmatsu
NBER
1050 Massachusetts Avenue, 3rd Floor
Cambridge, MA 02138
lsanbonm@nber.org

I.   INTRODUCTION

Higher education can help individuals attain social and economic success; however, decades of federal and state financial aid policies have not closed the substantial gap between high- and low-income students' college attendance rates. As studies of other benefit programs have demonstrated, the mere existence of a program does not ensure take-up for everyone eligible and interested (Currie 2004). Recent research in economics and psychology demonstrates how seemingly small differences in sign-up procedures and marketing can lead to large differences in program participation. For example, corporate savings plans that make participation the default while requiring employees to take action to opt-out have dramatically higher participation rates than plans that require employees to opt-in (Beshears *et. al.* 2006a).[1] In another example, making the sign-up process easier and more appealing (e.g. less time consuming and more convenient) has been found to increase the likelihood individuals open a bank account (Bertrand *et al.* 2006). Consolidating and simplifying information can also have large effects on take up rates. This has been found among parents deciding whether to transfer their children to better ranked schools (Hastings and Weinstein 2008) and in terms of the labor supply decisions of Earned Income Tax Credit (EITC) recipients unclear about where they stand on the EITC schedule (Chetty and Saez, 2009).

This paper focuses on the importance of the take-up process for college financial aid. While issues around affordability and academic preparedness are often cited to explain gaps in college attendance rates, recent research has questioned whether the financial aid application *process* itself deters students and contributes to the gap between high- and low-income students (Dynarski and Scott-Clayton 2006). The application process is not the only potential impediment. High school students, particularly from low-income backgrounds, often overestimate actual college tuition levels and underestimate financial aid opportunities (Ikenberry and Hartle 1998; Horn, Chen, and Chapman, 2003; Kane and Avery 2004). Given these facts, many have suggested that the complexity and

---

[1] Similarly, reducing the number of necessary decisions to enroll in employee savings programs also increases participation (Beshears *et. al.* 2006b).

inconvenience of the Free Application for Federal Student Aid (FAFSA) deters many students (ACSFA 2001, 2005).[2] King (2004) estimates that 850,000 college students who were eligible for federal grant aid in 2000 did not complete the FAFSA, and based on this and other research, in 2006, the Federal Commission on the Future of Higher Education concluded that many students "don't enter college because of inadequate information and rising costs, combined with a confusing financial aid system" (p. vii).

Concerns about the low visibility of aid programs and the complexity of the aid process have spurred calls to provide more assistance in filling out the form and to enhance the visibility of programs by educating students about the availability of financial aid.[3] However, there is little rigorous research on how to implement these efforts in a practical manner and whether such efforts would truly improve college outcomes and aid receipt.

Our paper attempts to quantify the effects of simplification, assistance, and information by examining a randomized field experiment conducted in partnership with H&R Block, an accounting firm that provides tax preparation assistance to over 20 million households a year. The experiment focused on low- and moderate-income families where at least one member was between the ages of 17 and 30 and did not have an undergraduate degree. After families completed their tax returns and consented to participate, we randomly assigned them to one of three groups. The first group received help completing the FAFSA using a streamlined process that entailed using the family's tax return to pre-populate the FAFSA and then completing the rest of the form using a brief interview protocol. As Dynarski and Scott-Clayton (2006) note, "the [basic tax return] already collects most of the key pieces of data that determine aid eligibility" (p. 4). This first group was also offered to have the

---

[2] The FAFSA also serves as the basis to award most state and institutional need-based aid, and so it is a critical gatekeeper to most college financial aid.

[3] Previous efforts to simplify and improve aid information include the creation of the FAFSA-EZ and the FAFSA-4caster. However, in order to determine whether one can use the FAFSA-EZ, families must first answer a series of complex questions of the sort that make the regular FAFSA challenging. Moreover, the FAFSA-4caster requires a great deal of information before giving an estimate. In June 2009, the Department of Education (DOE) announced a plan to use skip logic in the online version of the FAFSA to eliminate questions that do not apply to some students as well as give students instant estimates of the Pell Grant and student loan eligibility. The DOE is also exploring ways to transfer information directly from the IRS to the online FAFSA (U.S. DOE 2009). These efforts still require families to be aware of the FAFSA and able to complete it online, preferably with high-speed internet.

FAFSA submitted and was provided immediate personalized aid estimates along with net tuition cost information for four nearby public colleges. The second randomly-selected group received only personalized aid eligibility estimates based on data from their tax return as well as information on the tuition costs of nearby colleges, but they did not receive help completing the FAFSA. The final set of individuals are those who were randomly assigned into a control group, which only received a brochure on the importance of higher education and general information on college costs and financial aid.

Our experiment serves as a test of the importance of simplifying the process of getting financial aid and providing clear information about eligibility. The interventions also address several major barriers in the current financial aid system, including lack of awareness about aid programs, misinformation about college costs, and missed aid application deadlines. For example, the interventions gave students accurate information about local tuition costs and individual eligibility for financial aid. Additionally, many students miss deadlines for state and institutional aid programs, which also rely on the FAFSA to award aid. King (2004), for example, found that more than half of students who filed FAFSA's in 1999-2000 missed the April 1st deadline to be eligible for additional state and institutional aid programs. Most of our sample received their treatment in February or March, long before this deadline. Finally, as found in research concerning the enrollment process into retirement plans, the complex process of the FAFSA may provoke some families to procrastinate. Minimizing the time and effort necessary to complete the FAFSA may therefore make individuals more likely to spare the time.

To study the effects of these interventions, we track the submission of aid applications, college enrollment, and financial aid awards of participants using data made available through collaborative partnerships with the U.S. Department of Education (DOE) and the National Student Clearinghouse (NSC). The analysis suggests that individuals who received assistance with the FAFSA and information about aid were substantially more likely to submit the aid application. High school seniors and recent high school graduates among this group were also 25-30 percent more

likely to enroll in college. Similarly, the program increased college enrollment among low-income adults with no prior college experience. The program also increased grant receipt for all participants in our treatment groups, including those who had previously enrolled in college. These results suggest that direct help with the application process and providing better information could be effective ways to improve college access. However, only providing aid information without assistance with the form had no significant effect on aid application rates or college enrollment.

II.   LITERATURE REVIEW AND BACKGROUND ON THE EXPERIMENT

Prior Literature

There is a long literature examining the effects of financial aid and price on attendance (e.g., Kane 2003, Seftor and Turner 2002, Dynarski 2000 and 2003, Manski and Wise 1983), college choice (e.g., Long 2004; Avery and Hoxby 2004, Van der Klauuw 2002), and persistence (e.g., Bettinger 2004). While price and financial aid influence decisions about college, many remain puzzled as to why some aid programs have not been more effective in spurring increased enrollment among targeted groups.[4] Some theorize this is due to low visibility and the complexity of the aid process, and in recent years there has been increasing interest in understanding the role of the application process on socioeconomic outcomes. For example, at the direction of Congress, the Advisory Committee on Student Financial Assistance (ACSFA) examined the federal aid system and concluded:

> "Millions of students and adult learners who aspire to college are overwhelmed by the complexity of student aid. Uncertainty and confusion rob them of its significant benefits. Rather than promote access, student aid often creates a series of barriers – a gauntlet that the poorest students must run to get to college" (ACSFA, 2005, p. i).

---

[4] For example, researchers have not found large enrollment responses after the introduction of some financial aid programs, such as the Pell Grant in 1972 (Manski and Wise 1983, Hansen 1983, Kane 1996). See also GAO (2005).

The FAFSA application is at the center of policy discussions about reducing the complexity of the application process. The 2008 FAFSA was eight pages long and contained over 100 questions. To answer three of these questions, applicants had to complete three additional worksheets with nearly 40 additional questions. As shown by Dynarski and Scott-Clayton (2006), the FAFSA is four times longer than the simplest tax return (i.e., IRS Form 1040EZ) and longer than IRS Form 1040. Even the lowest-income individuals, who have already established their eligibility for other federal means-tested programs, must complete this long application to receive aid for which they are almost certainly eligible.[5] In addition, the timing of the application process is troublesome. Individuals cannot submit the FAFSA until the January of the year of college entry. Therefore, they often must apply to college before even knowing with certainty whether they can afford it. Even after completing a FAFSA, applicants learn only what the government expects their family can pay (i.e. the Expected Family Contribution or EFC), and applicants hence cannot predict the exact amount of their potential aid package.

The complexity of the current federal financial aid system is even more apparent when comparing the existing application process to the processes of other financial aid programs shown to be effective. For example, the Social Security Student Benefit (SSSB) Program used a very simple application process in providing college financial aid to the children of dead, disabled, or retired Social Security beneficiaries.[6] Dynarski (2003) finds that the elimination of the program led to large reductions in college enrollment and eventual educational attainment. Similarly, the Georgia Hope Scholarship, which provides aid to students with at least a B-average, was heavily advertised and the application process was simplified. Researchers have found that Georgia's program had a surprisingly large impact on college attendances rates (Dynarski, 2000; Cornwell, Mustard, and Sridhar, 2006).

---

[5] Students who are already in college must also redo the FAFSA in a timely fashion each year to renew their aid, which may cause some students to lose their aid.
[6] The program did not require students to seek out the aid themselves nor was the application process complicated. The government notified eligible students that they could receive the aid, and students only needed to return a short form to get the benefit.

Complexity is not the only problem with the process. Lack of information appears to be another significant barrier. Potential students must first know about the existence of aid in order to access it, yet youth and their parents are generally unaware of aid opportunities. For instance, a 2002 Harris Poll found that nearly two-thirds of all parents and young adults planning to go to college did not name grants as a possible source of funds when asked about types of financial aid. Low-income families often have less information than other families about how to pay for college (Sallie Mae Fund, 2003). Given these patterns, it is not surprising that many students eligible for aid do not apply for it. King (2004) estimates that over 10 percent of all college students in 2000 did not complete financial aid forms even though they would have been eligible for a Pell Grant had they done so. The same patterns can be found with state aid programs that also use the FAFSA. In California, as many as 19,000 students who would have qualified for a Cal Grant, a need-based aid program, failed to apply (Sturrock, 2002).

Lack of information about the true costs of college may pose an additional barrier to enrollment. ACSFA (2005) notes that students and families, as well as adult learners, are often intimidated by news reports about record increases in the college costs of the most selective universities and other impressions that college is unaffordable. These stories may contribute to the fact that individuals, particularly low-income individuals, often greatly overestimate the cost of higher education (Horn, Chen, and Chapman 2003). Among individuals participating in our study, we asked a subsample to report on the average costs of college and found that participants overestimated the costs by over 300 percent.[7] Oreopoulos and Dunn (2009) find high school students are more likely to aspire going to college three weeks after being provided accurate information about costs and benefits.

Policymakers and researchers are increasingly aware that the design of a program can affect its take-up and effectiveness. As mentioned above, researchers have shown for other programs that

---

[7] The average annual tuition at a two-year, public college in Ohio was $3,099. In contrast, the median estimate among our participants was $9,999. Dependents guessed $8,500 at the median, and independents guessed $10,000.

making sign-up automatic, simplifying the information distributed, or reducing the number of choices individuals need to make to sign-up can have large effects on participation. The extent to which these types of changes would affect college aid applications and enrollment, however, is unknown. Our project is designed to address this hole in the literature.

The FAFSA Experiment

We developed this experiment in collaboration with H&R Block. On January 2, 2008, the program was implemented in most of Ohio and the Charlotte, North Carolina area (a total of 156 tax preparation offices).[8] After a person completed their taxes in an H&R Block office, they were instantly screened for eligibility. Software we developed for the project identified families with incomes less than $45,000, as measured by the adjusted gross income reported on the tax return, who also had a family member between the ages of 15 and 30 who did not already have a bachelor's degree. These criteria map onto two samples of interest. The first is high school seniors and recent graduates who are typically dependent upon their parents financially.[9] The second group is independent adults (often referred to as non-traditional students). In cases where there was more than one eligible member in the household, we picked the independent adult in the office closest to age 18. After identifying an eligible participant, the H&R Block tax professional introduced the project explaining that we hoped "to learn how people make decisions about college and how to pay for it, as well as find out how H&R Block can best help its families navigate college finances." The participant was also offered $20 for their time. If interested, the tax professional then asked the

---

[8] H&R Block invited proposals of interventions that would benefit low- and moderate-income families, have national scalability, and inform important and timely policy debates. After being selected through a competitive, peer-reviewed process, the team worked from spring 2006 to winter 2007 to develop the necessary procedures and software. Based on feedback from focus groups and analysis of the operational data from the pilot conducted January to April 2007, we finalized the procedures for the 2008 implementation.

[9] In practice, most of our sample of younger students was age 17 at the time of the tax interview. This is because the FAFSA typically considers students under the age of 24 as dependent on their parents unless they are married, have a child, or are veterans. In these cases (in which the student is defined as a "dependent"), parental income is required for the FAFSA, and so we focused on cases where a parent was completing taxes and the student was declared a dependent on the tax forms. Individuals age 24 or older are automatically considered "independent" by FAFSA standards, and parental information is not needed for the FAFSA.

individual to complete a statement of informed consent. Once individuals consented, we asked study

participants general questions about their backgrounds and higher education perceptions. Then, we

randomly assigned individuals to one of three groups:

1. *FAFSA Simplification and Assistance with Aid Eligibility Information (i.e., the FAFSA Treatment)*

> For the main treatment group, we helped individuals complete the FAFSA. Our software
> first used individuals' tax returns to pre-populate about two-thirds of the questions on the
> FAFSA. Then, it led the H&R Block tax professional through an interview protocol to gather
> answers to the remaining questions, which took less than 10 minutes. These questions mostly
> concerned relatively straightforward information such as parental education, educational
> goals, and the number of children in the household currently attending college. After the
> interview protocol, the software computed the amount of financial aid the client was eligible
> to receive from the federal and state governments and provided a written explanation of these
> numbers (a sample award letter appears in the appendix).[10] The aid amounts reported to
> participants focused on need-based aid (e.g., the Pell Grant and the Ohio College Opportunity
> Grant) as well as federal loans. In reporting potential aid packages, we also presented the
> tuition prices of four nearby public four- and two-year colleges.[11] If all of the information
> necessary to complete the FAFSA was obtained by the tax professional during this initial
> visit, we then offered to have H&R Block submit the FAFSA electronically to the DOE free
> of charge; otherwise, families were sent the completed paper FAFSA by mail to submit
> themselves. If we still needed to collect additional information, an external call center

---

[10] If we could not collect all the information needed for the office during the initial office visit, we still tried to compute the amount of aid students were eligible to receive. Typically we were only missing data that is irrelevant to the aid calculation (e.g. driver's license number). In other cases, we were missing information on specific income sources not listed on the tax return but needed for the FAFSA (e.g. SSI benefits).

[11] For each region, we chose four plausible colleges based on enrollment patterns for that region. The schools were a mix of open admissions and large, slightly selective institutions.

contacted the family to ask the remaining questions and offered to submit the form.[12] We completed the FAFSA for nearly seven out of ten in either the office or using the call center staff.[13]

2. *Aid Eligibility Information only (i.e., the Information-Only Treatment)*

For this group, we calculated individualized aid eligibility estimates using information from the tax return that the participant had just completed at the H&R Block office. We also gave individuals a written description of their aid eligibility and a list of the tuitions of four nearby colleges. To receive the aid amounts, the tax professional then encouraged individuals in this group to complete the FAFSA on their own (no help was given on the form as the emphasis for this group was only on providing information).

3. *Control Group* (no intervention)

For this group, we only provided a brochure with basic information about the importance of going to college and general information on costs and financial aid. We constructed the brochure using information readily accessible online and elsewhere with the goal that this information would not likely affect a participant's behavior.   As such, this group is our key comparison group for determining the effects of the other interventions. The brochure was also given to the treatment groups.

To summarize, the interventions were designed to test a program aimed at increasing college information and to simplify the financial aid application process. The key outcome upon which we focus is college enrollment and aid receipt. For students already attending college, the intervention aimed to help them get additional financial aid support, which could impact the likelihood of college persistence.

---

[12] Most often FAFSAs were not completed in the office because the family needed to supply additional information such as other sources of income like veteran's benefits or the child's driver's license number.

[13] Completion rates differed slightly by type of participant. Among independent students with no prior college experience, 54 percent completed their FAFSAs in the office and another 24 percent were completed with the help of the Call Center (for a total completion rate of 78 percent). Among dependent students, 11 percent completed the FAFSA by the end of the Call Center outreach process and another 66 percent nearly completed the form (having at least 91 of the 103 FAFSA items). FAFSAs with missing fields may still have been deemed complete enough to submit.

Table 1 outlines our recruitment process including the consent rates for our respective treatment and control groups.[14] During the tax season, H&R Block met with 236,483 clients in the targeted offices. Of this group, 69,031 clients met the study's initial criteria (having an AGI less than $45,000 and a family member age 15 to 30), 35,793 expressed interest in learning more about college (52 percent of clients meeting the study's criteria), and 26,401 qualified for the study after answering in the affirmative that the target participant did not already have a bachelor's degree (74 percent of those expressing interest).[15] Nearly all of the individuals expressing interest verbally consented to participate in the project (26,168 individuals). Participants did not formally sign the consent form until the end of the interview, and a small number left before doing so. For the sample of dependent students, we find no statistically significant difference in the written consent rates across our treatment groups. For independent adults, the differences in consent rates are marginally significant at the 10 percent level. This is more likely due to the large sample (55,083) than because of real differences, especially given that randomization had not yet occurred. The "Sample with Complete Data" column in Table 1 reports the percentage of each group for whom we received a paper copy of the consent form. Some tax professionals mistakenly sent the signed copies of the consent forms home with the study participants, and we are prohibited from matching outcomes without proof of a signed consent form. As a result, we had to exclude some individuals who initially consented to participate. Importantly, however, the reasons tax professionals and district managers gave for not submitting paper consent forms were unrelated to treatment status.[16] The last column of Table 1

---

[14] The dependent sample figures include both high school seniors and recent graduates, who are examined in this paper, as well as participants who were high school sophomores and juniors, who will be examined in future, separate work.

[15] The primary reasons why some individuals did not qualify for the study was that they already had college degrees, or were not considered independent by federal aid standards and so would need information from other family members not present in the office in order to complete the FAFSA. Among those who qualified, tax professionals during focus groups suggested that about half of those that expressed interest were initially attracted to the $20 discount, and the other half were interested because they wanted more information about college.

[16] In focus groups with tax professionals, they identified two main reasons why H&R Block central processing unit did not receive a written copy of the consent form. First, many tax professionals accidentally sent all of the written copies of the consent form home with the client. Second, many tax professionals filed the consent form with the tax documentation rather than submitting the form to H&R Block's central processing center. In both cases, we had

shows how important subsamples upon which we focus vary across the treatment groups. The first

panel shows the fraction of initially-screened dependents who were high school seniors for whom we

have written informed consent for and were eligible to apply for the FAFSA (a total 866 individuals).

The bottom panel shows the fraction of initially-screened independents who had no prior college

experience for whom we have written consent (a total of 9,237 individuals). We also analyze the

sample of independent students with college experience for whom we have consent (6,637 total

individuals). The sample size for dependent students is much smaller than that for independent

adults due to the fact that H&R Block served a limited number of families with a student under the

age of 18 who was a high school senior or a recent high school graduate.[17]

During the experiment, we had several ways of assuring faithful implementation. First, the

software had a number of internal checks. It not only tracked completion of each question, but it also

prompted and reminded the tax professional what questions they should ask at each point of the

interview and tracked the time taken for each question. H&R Block also monitored treatment fidelity

through field visits. H&R Block received no reports of any serious deviation from the script from the

field offices. If a problem arose, we immediately integrated new procedures and training modules to

accommodate special circumstances.

Across all of the subgroups we analyze, we randomly assigned participants who consented to

the respective groups as follows: 7,864 to the FAFSA assistance and aid interpretation group; 1,319

to the Information-only group; and 7,557 to the Control group. The information-only is noticeably

smaller as its only purpose was to detect differences in FAFSA submission rates compared to the

Control and FAFSA assistance groups, not to detect small differences in college enrollment.[18] For the

---

[17] Also, the informed consent process was a limiting factor. Parents could consent that their dependent child could participate if their dependent was under the age of 18 at the time of the interview. If a student was 18 or older, we needed both the parent's and child's consent to enroll them in the study. Most of these students do not accompany their parents to H&R Block, and in our 2007 pilot, we were unable to achieve a high consent rate with this group. Hence, we focus on the 17-year old high school seniors.

[18] With a control mean of 0.2, the sample size gives us about 80 percent statistical power to detect a 3 percentage point difference in FAFSA submission rates at the 5 percent significance level.

FAFSA Treatment group, we collected a sample size large enough to study the impact of the intervention on both FAFSA submission and college attendance. Because college enrollment is a lower probability event, we needed a much larger sample size. To study the effects of these interventions, we track the submission of applications for financial aid, college enrollment patterns, and the financial aid awards of participants using data made available through collaborative partnerships with the DOE and NSC. Each linked the participant information made available by H&R Block to their databases. Several pieces of information are available. First, from the NSC, we observe the institution attended and full and part-time enrollment status.[19] Second, from the DOE, we observe whether the individual ever submitted a FAFSA. Third, we observe the amount of financial aid paid out by the federal government for each student. Using these data, we are able to demonstrate the effects of the intervention on the likelihood of submitting an aid application, college attendance, and financial aid receipt.

III. EMPIRICAL FRAMEWORK

Data – Descriptive Statistics

In Table 2, we report basic descriptive statistics for three key groups: dependent students (i.e., high school seniors), independent adults who have not previously attended college, and independent adults with some previous college experience. For each group, we report the means for the control group and the differences (and their standard errors) with the treatment groups. Random assignment should assure that our treatment and control groups are balanced and comparable. Our algorithm for randomizing clients depended completely on the last two digits of the taxpayer's social

---

[19] The NSC is a non-profit organization that provides national student degree and enrollment verification for schools, colleges, and employers. Founded in 1993, it currently serves as a central repository for the institutions of 92 percent of college students.

security number, and the software automatically made the treatment assignment.[20] While one might expect some small discrepancies, we should largely observe that there are no significant differences between the control and treatment groups. As shown in Table 2, this is the case.

Among the sample of dependent participants, over 56 percent of the sample is female. The racial distributions are also similar across treatment groups with comparable proportions of white, black, and Hispanic participants. In the control group, 55 percent of participants were white and about 38 percent of participants were black. Among the information-only treatment group, the proportion of white participants was higher while the proportion of black participants was lower, but these differences are not statistically significant. The average age of the dependent sample was about 17.7 at the time of the interview across all three groups.[21]

Across the groups about 85-88 percent of the samples were high school seniors according to the parents. The others had either graduated from high school or had left high school and completed a GRE. While most parents identified their children as being high school seniors, we searched the NSC records to see if any of these participants had a history of previously taking a college course. In our control and FAFSA treatment groups, nearly 6 percent of participants reported that they had previously enrolled in college. These enrollments could represent a single course at a campus or being in a dual enrollment program. The percentage was higher for the information-only treatment group had previous enrollment. About 40 percent of parents reported that their children would be targeting a bachelor's degree while 22 percent of parents reported their children's target degree would be an associate's degree. The remaining parents indicated their child would be targeting a

---

[20] Tax professionals could not override the screen prompts that were dependent on treatment status, and did not know the nature of the treatment assignment algorithm. In focus groups, the tax professionals, confirmed that they did not know which group individuals had been assigned to until the software made the assignment, which occurred after the informed consent process.

[21] In prior versions of the paper, we also included comparisons of parental education levels. For the dependent participant sample, about 58- 63 percent of participants in the respective treatment groups had fathers and/or mothers with a high school level of education. For mothers, 26-30 percent had completed some college while 16-19 percent of fathers had completed some college. The rest of the parents' education levels were either unknown or junior high. There were no significant differences in parental education levels across treatment groups.

professional certificate or indicated that they did not know. Family's average incomes were about $23,000 while their taxable incomes were near $6,000.

For the dependent participant sample, we find no statistically significant differences between the control group and the FAFSA treatment group or between the control group and the information-only treatment group. Because of our sample sizes, we have sufficient power to identify even small differences in the groups. Hence our failure to find differences is an affirmation of our randomization.

The rest of Table 2 shows the results for the independent adults, with separate columns for those with and without prior college experience. We partitioned the sample into those with and without prior college experience based on college enrollment records from NSC. We distinguish between these groups because participants who had previously attended college would have already navigated the college application and enrollment process at least once, and we wanted to examine whether the effects of the interventions would differ for this group (some of this group was still currently in college). Comparing the control and treatment groups, there are very few differences. As is evident from the control group means, larger differences exist across the independent participants with and without college experience. Among the sample of independent adults, about 64 percent of participants with prior college experience were female while about 57 percent of participants without prior college experience were female. Slightly more than 71 percent of independents without prior college experience were white, but for those with previous college experience the proportion was about 64 percent. Participants were 26 years old on average across groups of independent participants and across treatments.

The proportions of independent adults focusing on bachelors and associates degrees were similar within the various treatment groups but very different across independent participants with and without previous college experience. Participants who had previously attended college were more likely to pursue a bachelors or associates degree. Income levels were similar across treatment groups but different according to whether or not participants had previous college experience. Those

with previous college experience had incomes that were about $1500 to $2000 more than those with no previous college experience.

For the sample of participants without prior college experience, we find no significant differences between the FAFSA treatment and control groups, and we find only two significant differences between the information-only treatment and control groups. Participants in the information-only treatment group were slightly younger and had less income. These two differences are significant at the 10 percent level. For the sample of participants with prior college experience, we also find no differences between our FAFSA treatment group and the control group. We find, however, a few differences with the information-only treatment group in terms of gender, marital status, the likelihood of being a current college student, and in target degree being a bachelor's degree.

The differences found should not cause major concern as one would have expected some false positives. Additionally, we have a smaller sample for the information-only treatment, so there may be some possibility that the sample is not balanced in some characteristics. However, when we formally test whether the coefficients across all characteristics in Table 2 are jointly different from zero for any of our subsamples, we fail to reject that the observed differences are collectively zero. In the analysis, we control for covariates to account for any imbalance that may exist between the information-only treatment and our control group.

Empirical Strategy

Because the proposed treatment was administered using randomization, simple comparisons of participants in the various treatments can identify the relative effects of the interventions. Our control group (i.e. those receiving only a brochure of basic information) is compared to our treatment groups. We estimate both the effects of offering the service (intent-to-treat effects) and the effects of using the service among individuals for which a FAFSA is filed (treatment–on-the-treated effects). The "intent-to-treat" (ITT) effect can be estimated with the following regression:

(1) $$y_i = \delta_0 + \delta_1 * FAFSA_i + \delta_2 * INFO_i + bX_i + \varepsilon_i$$

where *y* is an outcome for individual *i*, *FAFSA* represents whether H&R Block offered individual *i* the first treatment – assistance with completing the FAFSA and a personalized aid estimate, and *INFO* represents whether H&R Block offered individual *i* the second treatment – an estimate of the amount of financial aid he or she is eligible for at area colleges but no help with the FAFSA. Additional controls, *X*, include variables such as age, gender, race, and family income. The outcomes of interest whether a FAFSA was filed, whether the participant enrolled in college the following school year, whether they enrolled full- or part-time, and whether they received financial aid.

IV.   RESULTS

Program Effects on FAFSA Submission

Table 3 reports estimated treatment effects on the likelihood of submitting a FAFSA to the DOE for the school term immediately following the intervention. Filing status is regressed on indicators for whether the participant was exposed to simplification and information (the FAFSA treatment) or the information-only treatment using robust standard errors with and without background controls.[22] Among dependent students, 40.2 percent of the control group went on to file a FAFSA. In contrast, those who were offered help completing the form through our study were 15.7 percentage points more likely to file (column 1), which corresponds to a 40 percent increase (p-value<.01). The FAFSA treatment effect is similar with and without including controls for gender, race, age, previous college experience, and parental education and income.

The information-only treatment did not have a substantial effect on aid application submission. Participants who received only information about their likely grant and loan eligibility relative to college costs were no more likely to file a FAFSA than the control group, though the small

---

[22] Our results are robust if we cluster our standard errors at the level of the tax professional or tax office.

sample size of dependent children in this treatment group makes it difficult to rule out a possible effect for this group. However, we can rule out at the 5 percent significance level that the FAFSA assistance and information-only treatment effects are the same. There was a clear, large effect for those who received the FAFSA treatment.

Columns 3 and 4 focus on the sample of independent adult participants with no prior college experience. The fraction who filed a FAFSA among independent adults out of school is, not surprisingly, smaller than that among dependents about to graduate from high school or with recent high school degrees. 13.8 percent of the control group of independents without prior college experience filed the aid application. The FAFSA treatment effect on filing, however, is very large: a near tripling of the FAFSA submission rate to the DOE, from 13.8 percent to 39.5 percent. Meanwhile, the information-only treatment had essentially no impact on filing.

Columns 5 and 6 show results for the independent sample who had previously attended college. These individuals were either still in college, had taken college courses in high school, or had stopped out of college before graduating. The FAFSA filing rate for the control group was 35.3 percent. This rate rose by 20.4 percentage points for the FAFSA treatment group, to 55.7 percent. As with the other samples, however, the information-only treatment appears to have had no effect on filing status.

Program Effects on College Enrollment

Table 4 shows the estimated Intent-to-Treat (ITT) effects on college enrollment during the fall immediately after participation in the program using data from the NSC. Column 1 reports a remarkable increase in college enrollment for dependent participants in the FAFSA treatment group. Enrollment rates increased from 26.8 percent among the control group to 34.5 percent, or a relative increase of about 29 percent. Adding demographics and family background controls to the estimates in Column 2 generally does not change the results. They do show, however, that females are much more likely to enroll. A mother with a college degree and taking a previous college course are also

strong predictors for a child going to college regardless of treatment status. The overall estimated results are fairly similar across both the Ohio and North Carolina.[23]

Columns 3 and 4 show estimated effects for the larger independent sample with no prior college enrollment. The absolute difference in enrollment rates between the FAFSA treatment and control groups is small (0.6 percentage points), but because the control group mean is small as well (2.9 percent), this translates into a relative increase of 20.6 percent (3.5 percent compared to 2.9 percent). The difference is almost statistically significant with a p-value of 0.14. The 2.9 percent attendance rate for the control group and the observed treatment effect of 0.006 are likely underestimates of the true rates in this population. As we later show in Table 5 using data from the DOE, 9.6 percent of the control group for the participants with no prior college experience received some type of financial aid. The difference between the 9.6 percent and the 2.9 percent rates for the control group is made up of students who attended colleges which do not participate in the NSC. Using data from other sources, we show below that the estimates are at least as large as observed in Table 4 and may even be much larger than what is observed in that table. We elaborate on this below during our discussion of Table 5.

For independents who had previous college experience, the mean enrollment rate was much higher than that for other independents, but we find no significant differences between treatment and control groups: 23.7 percent of the control group is enrolled compared to 24.3 percent of the FAFSA treatment group (p-value=.59). In the sample of independents with prior college experience, we are less concerned that our estimates may be downward biased. We defined prior college enrollment using the NSC data, so these students have already attended or were attending an NSC school. These students were likely to stay in these institutions where we have excellent coverage from the NSC.

---

[23] About 88 percent of our analysis sample is from Ohio, so we do not have, particularly in the case of dependent students, significant power to discern between the effects in the two states. When we look at the point estimates, the point estimates are larger in North Carolina than in Ohio for the dependent students and vice-versa for the independent students.

For all samples, our estimated effects for the information-only treatment group are insignificant. The point estimates are always small, but given our small sample size, the estimated standard error bands remain generous. As noted above, the principal goal of including this treatment group was to test the effect of information alone on FAFSA filing behavior. Given we failed to find an effect of the information-only treatment on FAFSA submission rates in Table 3, we interpret the lack of finding an enrollment effect in Table 4 as not surprising.

Program Effects on Financial Aid Receipt

In Table 5, we extend the analysis by examining the effects of the treatments on the receipt of financial aid. According to data from the DOE, about 29.8 percent of dependent participants in our control group received a Pell Grant, the primary need-based federal award. The FAFSA treatment substantially increased this rate by 9.8 percentage points, or about a relative 33 percent increase. For independent participants with no prior college experience, our estimated treatment effect is 2 percentage points, or about 20 percent. For independent participants who had previously attended college, the FAFSA treatment effect was about 3 percentage points, or 13 percent.

In Table 5, we observe that individuals with prior college experience in our treatment group were 3 percentage points more likely to receive grant aid. However, we find no enrollment effect in Table 4 and in our effort to account for potential biases in the NSC measure of attendance. Together these findings confirm prior research suggesting that some eligible college enrollees do not apply for aid. Additionally, although it is somewhat hard to interpret given that the treatment had effects on aid receipt, we find that the size of financial aid awards was larger for students in the FAFSA treatment. Moreover, there was a 2 percentage point increase in student loan receipt among these students. Therefore, while the FAFSA experiment did not necessarily increase enrollment rates among this group, it did increase access to financial aid. Much like our results on FAFSA submission rates, we detect no statistically significant effects of the information-only treatment on aid receipt or financial aid award sizes.

In the bottom half of Table 5, we explore whether the treatments had an effect on FAFSA filing *conditional* on enrollment. Our results on grant aid receipt suggest that some independent participants with prior college experience would have received financial aid had they completed the FAFSA. If this is true, we should also find a treatment effect on the FAFSA filing behavior of students who attended college after the intervention. For our control group, 84.1 percent of independents who had prior college experience and attended college after the experiment filed a FAFSA. Corresponding independents in the FAFSA treatment group were 4.0 percentage points more likely to file. This reinforces that while we can rule out large impacts on enrollment for independents who had college experience prior to the study, providing information and assistance did increase the fraction of those filing while in college and as we showed above it increased access to grant and loan aid as well. We find no effects on filing behavior among those in the information-only treatment.

For many states and institutions, there are binding deadlines for applying for financial aid.[24] In Table 5, we also compare the timing of FAFSA applications among filers. Given that there was a treatment effect on FAFSA filing, it is somewhat difficult to interpret these results. The estimated difference in the time to file is a weighted average of the effect of the program on filing timing for participants who would have filed *regardless* of the experiment and the timing of participants who were newly *induced* to file because of the program and would not have filed otherwise. If the timing of new-filers is slower than the average participant, then the comparisons would be biased downward. However, the timing results reinforce the idea that the FAFSA intervention accelerated the aid application submission process. Among dependent students in the control group, the average filing date was around May 11th. Participants in the FAFSA treatment filed their FAFSA's almost one month (32.6 days) earlier. For independent participants without prior college experience, those treated filed FAFSA's almost 4 months earlier than the control group, and the treatment effect among

---

[24] The earliest deadline among states is March 1st. Arizona, Idaho, Maryland, Michigan, Montana, Rhode Island, Tennessee, and West Virginia all share this deadline.

independent students with prior college experience was a little over 2 months. There was no treatment effect on the likelihood that dependent students filed before March 1st; however, for independent students, there were large treatment effects for all independent students. Among those without prior college experience, treated students were 55 percentage points more likely to file by March 1st and among those with prior college experience, treated participants were 29 percentage points more likely to file by March 1st. It is also worth noting that independent adults without prior college experience who had the information-only treatment were also more likely to file earlier.

As noted above, a comparison of Tables 4 and 5 shows a major difference between the control group's mean attendance rates (Table 4) and the rates at which participants received grant aid (Table 5). In the dependent sample, 30 percent of participants in the control group received aid yet our attendance measure in Table 4 shows that 27 percent attended college. Similarly, 2.9 percent of independent participants attended college according to the NSC data while 9.6 percent received grant aid according to the DOE data. These discrepancies arise because of the lack of coverage of the NSC data. The NSC data allow us to track college enrollments at about 92 percent of colleges and universities nationwide.[25] If NSC captures enrollment, it does so regardless of whether or not students applied for financial aid. The DOE data, by contrast, covers all campuses that distribute federal financial aid but only tracks students if they applied for the aid. Seven percent of dependent study participants and 16 percent of independent study participants attended college without filing a FAFSA.

To try to improve the NSC measures of college attendance, we acquired additional data from the Ohio Board of Regents (OBR). OBR tracks enrollments at all 52 public two- and four-year colleges in Ohio. Their data allow us to track individuals who attended public colleges in Ohio. They also allow us to check whether the measurement error in the NSC outcome measure is symmetric across treatment status. These results appear in Table 6. Column 1 reproduces the key

---

[25] Students also have the option to request that their data not be matched to NSC. Students exercise this option through their respective campus. We cannot observe these students.

enrollment results from Table 4. Since we have data for only Ohio, Column 2 estimates the effects of the program on enrollment for the Ohio students but using the NSC measure. In the case of the independent adults with no prior college experience, the resulting estimates are positive and statistically significant. The point estimates for the effects on the dependent sample from Ohio is still large in magnitude (4.7 percentage points), but with the reduced sample size, the estimates are no longer significant. In Column 3, we estimate the effects of the program on enrollment using the OBR measure. For the sample of independent students without prior college experience, the effects go up and remain significant. The results, by contrast, for the dependent students fall and become insignificant suggesting the dependent effects are from enrollment increases in North Carolina and at private Ohio schools.

In the next columns, we try some refinements on our attendance measure. We first combine the OBR and NSC measures. We code students as attending college if either the OBR or the NSC identifies them as attending college. We focus only on both Ohio and North Carolina students in the remaining tables. The mean attendance rates in the control group go up by 3-4 percentage points in all of our samples, and the results are quite similar to our results in Table 4. Enrollment effects are significant for the sample of dependent students but not for independent students.

While the OBR data improve our data coverage, it still does not perfect our estimates. We are still missing four groups of students: 1) students in Ohio who attend private colleges which do not report to NSC; 2) students from Ohio who attend schools which do not report to NSC and which are located out of state; 3) students from North Carolina who attend colleges who do not report to the NSC; and 4) students who asked NSC not to share their data. To further understand the measurement error, we turned to data from the Department of Education.

The DOE data identifies who among participants received the Pell Grant. Given that awards are conditional on attendance, another strategy would be to correct the NSC measure if students received Pell grants to attend school. In Column 5, we report the results for the Pell grant receipt that were previously reported in Table 5. In Column 6, we report the attendance measure where we mark

a student as attending college if they appear in the NSC data or if they received a Pell grant. In Column 7, we report the results when we combine NSC, OBR, and DOE measures of attendance. In this case, all of the treatment effects are larger and more statistically significant. The key issue here is that the FAFSA intervention may have increased students' likelihood of Pell receipt conditional on attendance as we showed in Table 5. Hence, the DOE correction mixes both attendance and Pell receipt. However, since the program likely did not have a negative effect on Pell receipt, the estimates with the DOE correction are likely an upper bound on the overall true effects.

An alternative strategy would be to identify how FAFSA applications varied by treatment status. In the FAFSA applications, we can identify all of the students who sent FAFSA data to colleges not covered by NSC.[26] Among our samples, 9.8 percent of dependent participants in the control group listed at least one school on the FAFSA that was not covered by NSC. Similarly in our other samples' control groups, 9.4 percent of independents without prior college experience and 12.9 percent of independents with prior college experience listed at least one school not covered by NSC. However, the likelihood of sending FAFSA data to a school not covered by NSC was larger among independent participants without prior college experience who were in the FAFSA treatment group; they were 2 percentage points more likely to send their FAFSA to a school not in the NSC database. There are no statistically significant differences for our other samples. This reinforces our previous statement that the error rate in the NSC measure is likely either balanced or perhaps even negatively biasing the treatment effects.

Heterogeneous Enrollment Effects

In Table 7 and 8, we explore whether the program had heterogeneous effects among participants. Table 6 focuses on college enrollment outcomes to examine whether the program treatments increased particular types of attendance. The FAFSA treatment effect on enrollment

---

[26] At the end of the FAFSA, individuals can designate up to four colleges or universities to have their FAFSA information sent.

occurred mostly from increases in public college enrollment. Public college enrollment rose 5.0 percentage points (p-value=.059) for the dependent sample, compared to 1.8 percentage points at private colleges (p-value=.233). For the dependent students, we also find a doubling in the rate of attendance at selective colleges for those who received the FAFSA treatment. Many selective colleges require applications prior to the start of college; however, the particular selective colleges which explain much of the treatment effect (e.g. Ohio University) had more deadlines in the middle of tax season during 2008. Table 7 also shows that most of the increase in attendance rates came from full-time attendance as the estimate of the effect on part- and full-time enrollment is not much different than the estimate on full-time enrollment alone.

Among independents without prior college experience, public college enrollment immediately following treatment rose slightly by 0.6 percentage points to 2.8 percent (p-value=.060). Basically none of these independent adults enrolled in private colleges (the fractions are 0.1 percent for the treated and controls).[27] Most participants attended non-selective, public colleges if they chose to attend college. Among independents with no prior college experience, we detect no difference in part-time enrollment by treatment assignment, but we do find full-time enrollment rises .7 percentage points (p-value 0.016). For both of our independent participant samples, we find no effect of the treatment on the selectivity of the college attended.

Overall, the enrollment effects we find among independents are small, but nevertheless important given the low cost of the FAFSA treatment and the small numbers of adults not in school that actually go back. To get a better idea of whether these effects are concentrated among particular subgroups, we estimated the FAFSA treatment impact for this sample by household income. We interacted enrollment patterns with quartic polynomials for household adjusted gross income (AGI), separately for the control group and treated. Figure 1 shows clearly that the FAFSA treatment affected mostly low-income households (those with an adjusted gross income less than $22,000).

---

[27] We include proprietary schools in our listing of private schools. Our results do not change if we break the private results down by whether or not the private school is a proprietary school.

Among this group, college enrollment is 4.0 percent for the FAFSA treatment compared to 2.9 percent for the control group (p-value for the difference is 0.017). Interestingly, the DOE's Estimated Family Contribution (EFC), which is the amount the federal government calculates a family should be able to give something towards college expenses, begins to rise for households with incomes around $22,000. In essence, the results suggest that independent participants in the treatment group who were told that their family was not expected to contribute towards college expenses were the one who were the most influenced to go to college by the FAFSA intervention. Conversely, individuals told that the government would only cover part of the costs of college were less likely to attend.

Subdividing the data by whether the EFC estimate sent to participants is estimated to be zero or positive leads to generally larger and significant effects for the former group, and insignificant effects for the latter. Table 8 displays treatment effect estimates for the independent sample without prior college, split by whether EFC was estimated based on FAFSA information to be zero or positive. The FAFSA treatment effect for the EFC=0 sample is 1.2 percentage points. The effect when EFC>0 is -0.8 percentage points, but not statistically significant, and the Information-only treatment effect point estimates are close to zero. Subdividing further by background characteristics and survey responses, we find larger FAFSA treatment effects for the groups generally one would expect. The effects among independents with no prior college and EFC predicted to be zero are larger for those who, before treatment, expressed strong interest in college (a 1.8 percentage point increase in enrollment from treatment for this group), and for those who say some do not go to college because they have to work (a 3.4 percentage point increase). The effects are also concentrated among females and those without dependent children. With one exception (Black participants with EFC>0 in information-only treatment sample), all of the information-only treatment effect estimates, and the FAFSA treatment effects for the predicted EFC>0 sample are not significantly different from zero.

V.   CONCLUSION

The results of the H&R Block FAFSA experiment suggest that seemingly small changes to the college application process can have large effects on enrollment and the amount of aid received. Information about likely grant and loan eligibility on its own did not increase applications and enrollment, but this information plus personal assistance with filling out a simplified application form did. This is true for students who were just graduating from high school and for independent adults without prior college experience. Even though we found no enrollment effect for non-traditional students who had already spent time in college, the FAFSA treatment did improve FAFSA submission rates, increase the likelihood that these participants received financial aid, and increase the average amount of financial aid received.

The effects of the FAFSA treatment are large, especially given the intervention's low marginal cost. The 8-minute treatment of providing FAFSA assistance cost about $2.50 per participant for tax professional training and time. Software installation, maintenance and printing materials added roughly another $15.00 per participant. The largest costs to the program were from call center support ($30.00 per participant) and participation incentives ($20.00 to participants, $20.00 to tax professionals).[28] These costs would likely fall significantly in a more automated and/or non-research setting. Still, even at $87.50 per participant, the resulting 8 percentage point increase in college enrollment among the high school senior sample is particularly impressive.[29] At an average cost of $1,094 per participant ($87.50/0.08) for helping one dependent student get to college, the program can likely pay for itself if the subsequent average earnings are 2 percent higher or more.[30]

---

[28] There is also the cost in aid to consider from a redistributive perspective: $375 on average per dependent ($3,826 on average for compliers), and approximately $100 on average per independent ($4,157 on average for compliers).

[29] The only other comparable estimate of an enrollment effect stems from the introduction of the Georgia Hope Scholarship (Dynarski 2000). However, that effect was due to a $3,000 scholarship. Moreover, that program and other interventions with large effects often go to students who would have enrolled anyway (Deming and Dynarski, 2009). Our estimate also far exceeds effects (or the lack thereof) found for the Pell Grant, which is also far more expensive per student.

[30] This assumes forgone earnings at $10,000 per year for two years, a salary for someone without college at age 20 of $35,000 and a real earnings growth rate of 2 percent until age 65. Discounting the earnings difference at 3 percent leaves a present value increase in earnings of $5,721, and an increase in tax revenue of $1,716 at a 30

It remains to be seen whether the large enrollment effects from the FAFSA experiment translate to these real long-term benefits. One concern is that the intervention nudged people into college who were not likely to receive a return from the additional schooling. An important consideration to note, however, is that we helped with financial aid applications but not with actual college applications (another seemingly small obstacle that may inhibit individuals from enrolling). Compliers therefore had to take at least some initiative. In addition, the barriers preventing some from filling out the FAFSA are not necessarily the same as the barriers preventing some students from succeeding in college. We will track subsequent enrollment and graduation outcomes for future analysis to explore these issues.

The FAFSA Experiment's main treatment effects operate through several possible mechanisms. A test of whether only providing information could explain the results failed to produce statistically significant effects. We thus reject the hypothesis that the information-only treatment had a similar effect on aid application submission rates as our FAFSA treatment, although we do not have enough statistical power to rule out information effects for younger students. We also note that we gave students information very late in the college application and planning process, and it could be that early information could have a distinct impact relative to late information.[31]

Another key mechanism driving the results could be simplification. By pre-populating the form with information already collected during the tax interview, we were able to greatly reduce the total completion time and the likelihood of not having the necessary remaining information on hand to finish the form in one sitting. Moreover, our analysis suggests that completely automating FAFSA filing in the office for all treated participants would have led to even larger FAFSA filing effects than the ones our program generated. Independents who had all necessary information collected in the office were given the choice of having H&R Block file their application directly with the Department

---

percent rate. For independents, the rate of return would have to be about 4 percent for present value tax revenues to exceed cost per participant nudged to college under similar assumptions.

[31] Several access initiatives focus on giving middle and early high school students information about college and financial aid.

of Education or having a complete paper FAFSA sent to their home address to be signed and mailed using a pre-paid envelope provided.[32] Interestingly, almost the entire difference in FAFSA filing between the independent treatment and control groups comes from those choosing to file electronically.   Among those that chose to receive the paper FAFSA in the mail, there was no difference from the control group in terms of FAFSA filling rates (13.5 percent versus 13.8 percent, respectively). Those who elected to receive the paper form are not a random subsample, and their preference to not have H&R Block submit the form could be indicative of less interest in college going.[33] However, the pattern is also consistent with the larger literature on the positive effects of simplification.

Another key mechanism driving the results could be the personal assistance provided immediately after receiving tax preparation services in filling out the FAFSA. If the reason behind not filing is that some participants do not take the initiative to access the form, no amount of simplification to the FAFSA will help. Springing on participants the opportunity to complete the form while already in the office likely lowered participants' time and convenience costs (for example, compared to the costs from asking participants to travel to an office only to complete the FAFSA, or accosting them at home or on the street). The assistance was also face-to-face, which allowed for immediate feedback and may have increased participant interest and trust.

The FAFSA Experiment was not designed to distinguish between the relative effectiveness of simplification versus assistance, but we hope future research can shed additional light on this issue. The main purpose of the project was to explore whether small changes to the application process could make the difference between some individuals going to college or not, and the results clearly indicate this to be the case. The combination of pre-populating the FAFSA with tax information,

---

[32] A number of obstacles prevented us from completing the FAFSA for every treated participant. First, dependents were usually not present, and the FAFSA application requires their signature. Parents also sometimes did not know all the information required to complete the form for their children (for example, driver's license number).

[33] Focus groups suggested that some participants felt they would be committing to go to college if they agreed to have H&R Block submit the file, while others preferred to visually see the application before sending it to the government.

providing face-to-face assistance, and making it easier to actually submit the form was highly effective, which has important implications as well for other benefit programs. On the other hand, simply informing high school seniors and older adults about their aid eligibility did not appear to improve the submission of financial aid applications, and this underscores the barriers imposed by the current FAFSA. The importance of reducing complexity and the time required to complete application forms for program take-up deserves more attention.

REFERENCES

Advisory Committee on Student Financial Assistance. (2001). *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity.* Washington, D.C.: Department of Education.

Advisory Committee on Student Financial Assistance. (2005). "The Student Aid Gauntlet: Making Access to College Simple and Certain." Final Report of the Special Study of Simplification of Need Analysis and Application for Title IV Aid. Washington, D.C.: Department of Education.

Avery, Chris and Caroline Hoxby. (2004). Do and should financial aid packages affect students' college choices? In Hoxby, C. (Ed.), *College Choices: The Economics of Which College, When College, and How to Pay For It.* Chicago: University of Chicago Press.

Bettinger, Eric, "Is the Finish Line in Sight? Financial Aid's Impact on Retention and Graduation." (2004) *College Choices: The Economics of Where to Go, When to Go, and How to Pay For It*, ed. Caroline M. Hoxby, Chicago University Press and NBER.

Bettinger, Eric (2004). "How financial aid affects persistence," in Caroline Hoxby ed., College Choices: The economics of where to go, when to go, and how to pay for it. Chicago: University of Chicago Press.

Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian (2006a). "The importance of default options for retirement savings outcomes: Evidence from the United States." NBER Working Paper #12009.

Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian (2006b). "Simplification and savings." NBER Working Paper #12659.

Bertrand, Marianne, Sendhil Mullainathan, and Eldar Shafir (2006). "Behavioral Economics and Marketing in Aid of Decision Making Among the Poor," Journal of Public Policy and Marketing, Vol. 25(1) Spring 2006, pp. 8-23.

Chetty, Raj, and Emmanuel Saez (2009). "Teaching the Tax Code: Earnings Responses to an Experiment with EITC Recipients," NBER Working Paper No. 14836, April 2009.

Commission on the Future of Higher Education. (2006). Commission Report 08/09/06. Accessed on 10/23/06 at http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/0809-draft.pdf .

Cornwell, C., Mustard, D., & Sridhar, D. (2006). The enrollment effects of merit-based financial aid: Evidence from Georgia's HOPE scholarship. *Journal of Labor Economics* 24 (2006) 761-786.

Currie, Janet (2004) "The Take Up of Social Benefits." NBER Working Paper #10488.

Deming, David, and Susan Dynarski (2009). "Into college, out of poverty? Policies to increase the postsecondary attainment of the poor," NBER Working paper #15387.

Dickert, N., Emanuel, E. & Grady, C. (2002) "Paying research subjects: an analysis of current policies." *Annals of Internal Medicine* 136: 368-373.

Dynarski, Susan. (2000). Hope for whom? Financial aid for the middle class and its impact on college attendance. *National Tax Journal, 53(3),* 629–661.

Dynarski, Susan. (2003). Does Aid Matter? Measuring the affects of student aid on college attendance and completion. *American Economic Review 93(1),* 279–288.

Dynarski, Susan and Jill Scott-Clayton (2006) "The Cost of Complexity in Federal Student Aid: Lessons from Optimal Tax Theory and Behavioral Economics." Harvard University mimeo.

Dynarski, Susan. (2002) "The Behavioral and Distributional Implications of Subsidies for College." *American Economic Review 92(2):* 279-285.

General Accountability Office. (2005). *Student Aid And Postsecondary Tax Preferences: Limited Research Exists on Effectiveness of Tools to Assist Students and Families through Title IV Student Aid and Tax Preferences.* GAO-05-684, July 29.

Hansen, W. L. (1983). "Impact of Student Financial Aid on Access," Proceedings of the Academy of Political Science, Vol. 35, No. 2, The Crisis in Higher Education, pp. 84-96

Hastings, Justine, and Jeffrey Weinstein (2008). "Information, school choice, and academic achievement: Evidence from two experiments," Quarterly Journal of Economics, Vol. 123(4), pp. 1372-1313.

Horn, Laura J., Xianglei Chen, and Chris Chapman. (2003). *Getting Ready to Pay for College: What Students and Their Parents Know About the Cost of College Tuition and What They Are Doing to Find Out*. National Center for Education Statistics Report No. 2003030. Washington, D.C.: National Center for Education Statistics.

Ikenberry, S. O. and T. W. Hartle. (1998). *Too little knowledge is a dangerous thing: What the public thinks about paying for college*. Washington, DC, American Council on Education.

Kane, Thomas J. (1996) "College costs, borrowing constraints and the timing of college entry," *Eastern economic Journal*, Vol. 22, No. 2, pp. 182-194

Kane, Thomas J. (1995). "Rising public college tuition and college entry: How well do public subsidies promote access to college?" NBER Working Paper 5164.

Kane, T. J. (2003). *A Quasi-Experimental Estimate of the Impact of Financial Aid on College-Going*. National Bureau of Economic Research Working Paper No. 9703, Cambridge, MA.

Kane, Thomas J. and Christopher Avery. (2004) "Student Perceptions of College Opportunities: The Boston COACH Program" in Caroline Hoxby (ed.) *College Decisions: The New Economics of Choosing, Attending and Completing College.* Chicago: University of Chicago Press.

King, Jacqueline E. (2004) "Missed Opportunities: Students who do not Apply for Financial Aid," American Council on Education Issue Brief.

Long, Bridget Terry (2004). How Have College Decisions Changed Overtime? An Application of the Conditional Logistic Choice Model. *Journal of Econometrics, 121(1-2),* 271-296.

Manski, Charles F. and Wise, David A. (1983) *College Choice in America*. Harvard University Press.

Oreopoulos, Philip, and Ryan Dunn. (2003) "Providing Information and Increasing Knowledge About Post Secondary Education: Evidence from a Randomized Field Experiment." unpublished mimeo.

Sallie Mae Fund (2003) Press release January 20, 2003. Accessed January 23, 2006, from http://www.thesalliemaefund.org/news/news_nr184.html.

Seftor, N. S. and Sarah Turner. (2002) "Back to School – Federal Student Aid Policy and Adult College Enrollment." *Journal of Human Resources*, 37(2): 336-352.

Sturrock, C. (2002). Students miss out on free aid. *Contra Costa Times*, December 26.

U.S. Department of Education. (2009) "Making College More Affordable By Simplifying The Student Financial Aid Application." Press Release, June 24. Accessed July 6, 2009, from http://www.ed.gov/print/finaid/info/apply/simplification.htm

Figure 1. Predicted Enrollments by Income, Independent Participants
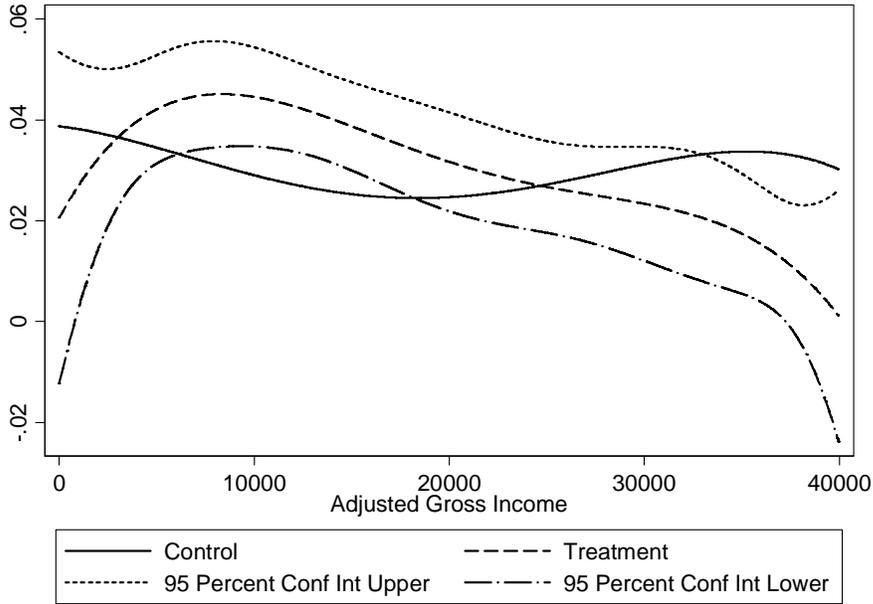
A. Independent Students with No Prior College Experience
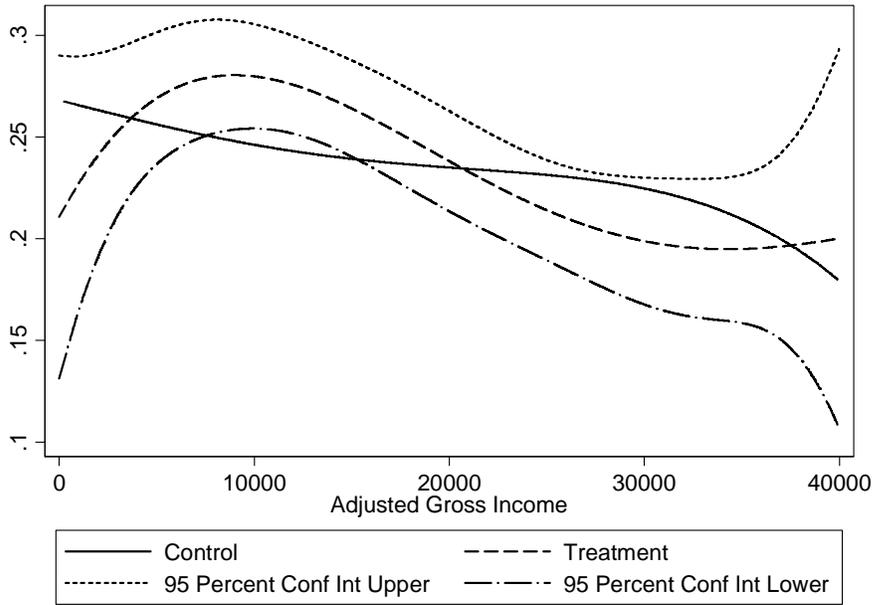
B. Independent Students with Prior College Experience

Notes: Predicted enrollments are estimated separately using a 4th order polynomial in adjusted gross income. Models are estimated separately for treatment and control.

Table 1. Consent, Exit, and Processing Rates by Treatment Status

	Randomi-zation Rate	Initial Screening Qualification (*number*)	Expressed Interest	Final Qualification	Accepted and Gave Consent	Finished Office Interview	Sample with Complete Data	High School Seniors Subsample
			(*Fraction of Individuals who Initially Qualified*)					
A. DEPENDENT SAMPLE								
Control Group	46%	6438	0.532	0.413	0.403	0.400	0.302	0.062
FAFSA Treatment Group	54%	7510	0.512	0.404	0.395	0.392	0.298	0.063
Full Sample	100%	13,948	0.521	0.408	0.398	0.396	0.300	0.062
F-test p-value (Testing of Equality of Means)			0.023	0.284	0.327	0.334	0.310	0.788

	Randomi-zation Rate	Initial Screening Qualification (*number*)	Expressed Interest	Final Qualification	Accepted and Gave Consent	Finished Office Interview	Sample with Complete Data	Subsample without Prior College
			(*Fraction of Individuals who Initially Qualified*)					
B. INDEPENDENT SAMPLE								
Control Group	46%	25,215	0.515	0.374	0.372	0.369	0.284	0.165
FAFSA Treatment Group	46%	25,491	0.521	0.379	0.377	0.374	0.293	0.171
Information-Only Treatment Group	8%	4377	0.511	0.367	0.365	0.361	0.283	0.167
Full Sample	100%	55,083	0.518	0.376	0.374	0.371	0.288	0.168
F-test p-value			0.274	0.287	0.216	0.144	0.060	0.208

Notes: The dependent sample figures includes both high school seniors and recent graduates, who are examined in this paper, as well as participants age 15-17, who will be examined in future work (they were not old enough to have enrolled in college yet). The independent sample analyzed in this paper includes both those with and without prior college experience. The last column of Panel B illustrates how the subsample without prior college experience varies across the treatment groups. To initially qualify for this study, families had to have an AGI less than $45,000 and a family member between the ages of 15 and 30 who did not already have a bachelor's degree. After asking whether these potentially eligible families were interested in learning more about college (the column labeled "Expressed Interest"), the tax professional posed additional questions to check for eligibility and determine final qualification (column labeled "Final Qualification"). Nearly all of these participants agreed to give consent (column labeled "Accepted and Gave Consent") and then completed the office interview (column labeled "Finished Office Interview"). The column labeled "Analysis Sample with Complete Data" reports the percentage of each group for whom we have complete survey, tax, and FAFSA filing data.   In order for the data to be complete, a paper consent form had to be sent via snail mail to the central project office by the tax professional. In addition, the analysis sample excludes 4 cases because either pre-enrollment status was unknown or there was a discrepancy regarding graduation status. The three analytic samples examined in this paper are: 866 high school seniors from the dependent sample (0.062088*13,946), 9,237 independent students with no prior college experience (0.16769*55,083), and 6,637 independent students with prior college experience (0.12049*55,083).

Table 2. Descriptive Statistics and Differences by Treatment Status

	Dependent Participants			Independent Participants with No Prior College Experience			Independent Participants with Prior College Experience		
	Control	FAFSA Treatment	Info Treatment	Control	FAFSA Treatment	Info Treatment	Control	FAFSA Treatment	Info Treatment
Female	0.560	.019 (.035)	.014 (.061)	0.573	-.001 (.011)	-.020 (.020)	0.641	-.007 (.012)	-.043* (.023)
White	0.553	.003 (.036)	.097 (.059)	0.713	-.009 (.010)	.007 (.018)	0.638	.002 (.012)	-.005 (.023)
Black	0.379	.014 (.035)	-.079 (.057)	0.233	.006 (.009)	-.013 (.017)	0.303	.006 (.012)	.007 (.022)
Hispanic	0.023	-.005 (.010)	.002 (.019)	0.025	.002 (.003)	-.002 (.006)	0.021	-.003 (.004)	-.001 (.007)
Age	17.72 (.46)	.020 (.035)	.042 (.051)	25.96 (3.12)	.021 (.068)	-.214* (.124)	26.14 (2.82)	.060 (.072)	-.118 (.132)
Previous College Enrollment	0.056	.003 (.017)	.057 (.037)	0	0	0	1	1	1
Married				0.132	-.020 (.013)	.002 (.007)	0.127	-.010 (.008)	-.023 (.015)
Single				0.801	.023 (.015)	.002 (.009)	0.807	.009 (.010)	.033* (.018)
Divorced or Separated				0.066	-.002 (.010)	-.003 (.005)	0.065	.001 (.006)	-.010 (.011)
Current College Student (self report)				0.070	-.029 (.008)	-.004 (.006)	0.324	.005 (.012)	.062** (.023)
Current High School Student	0.848	.022 (.025)	.013 (.043)						
Target Degree Would Be Bachelor's	0.412	-.014 (.035)	-.024 (.060)	0.275	-.006 (.010)	.005 (.018)	0.424	.001 (.013)	.046* (.024)
Target Degree Would Be Associate	0.222	.001 (.030)	-.010 (.050)	0.297	.012 (.010)	.007 (.018)	0.411	-.007 (.013)	-.016 (.023)
Adjusted Gross Income	$23,214 (11,667)	378.12 (817.76)	-704.66 (1403.14)	$16,315 (9741)	-261.57 (210.73)	-668.41* (374.82)	$17,944 (9834)	111.61 (251.66)	-207.08 (464.23)
P-value on Chi-squared Test that all Coefficients are Zero		0.968	0.908		0.939	0.164		0.898	0.217
Observations	396	390	80	4155	4350	732	3006	3124	507

Notes: Standard deviations appear in parentheses for non-binary variables. By FAFSA standards, dependent students are typically under the age of 24 and financially dependent on their parents. In this case, most dependent participants in the sample are high school seniors. Independent participants were over the age of 24 or married, had a child, a veteran, or an orphan. "Prior college experience" is defined using data from the National Student Clearinghouse.

Table 3. OLS Regressions of the Effects on FAFSA Filing
Dependent Variable = Filed a FAFSA with the U.S. Dept. of Education

	Dependent Participants		Independent Participants with No Prior College Experience		Independent Participants with Prior College Experience	
	Control Mean = .402		*Control Mean* = .138		*Control Mean* = .353	
	(1)	(2)	(3)	(4)	(5)	(6)
FAFSA Treatment	.157**	.146**	.257**	.257**	.204**	.206**
	(.035)	(.033)	(.009)	(.009)	(.012)	(.012)
Information-Only Treatment	-.012	-.034	-.011	-.013	.019	.023
	(.060)	(.055)	(.013)	(.013)	(.023)	(.022)
Female		.120**		.079**		.139**
		(.032)		(.009)		(.012)
White		-.147		-.005		-.014
		(.090)		(.028)		(.031)
Black		-.058		.050*		.092**
		(.091)		(.028)		(.032)
Hispanic		-.019		-.016		.056
		(.155)		(.036)		(.053)
Age (years)		.255**		-.010		-.013**
		(.021)		(.001)		(.002)
Previous College Enrollment		.290**				
		(.064)				
Father's Highest Educ = College		-.096		-.003		-.008
		(.065)		(.016)		(.023)
Father's Highest Educ = High school		-.069		-.005		-.010
		(.053)		(.013)		(.021)
Mother's Highest Educ = College		.195**		.002		.061**
		(.084)		(.018)		(.032)
Mother's Highest Educ = High school		.105		-.016		.042
		(.081)		(.015)		(.032)
Adjusted Gross Income (000's)		.0035**		-.0032**		-.0036**
		(.0014)		(.0004)		(.0006)
Observations	866	866	9237	9237	6637	6637

Notes: Robust standard errors appear in parentheses.

Table 4. OLS Regressions of Intention to Treat Effects on College Attendance using NSC Data

Dependent Variable = College Attendance between April 15 and November 1, 2008

	Dependent Participants		Independent Participants with No Prior College Experience		Independent Participants with Prior College Experience	
	Control Mean = .268		*Control Mean* = .029		*Control Mean* = .237	
	(1)	(2)	(3)	(4)	(5)	(6)
FAFSA treatment	.077** (.033)	.069** (.032)	.006 (.004)	.006 (.004)	.006 (.011)	.007 (.011)
Information-Only Treatment	.034 (.056)	.009 (.051)	-.0007 (.0070)	-.001 (.007)	.008 (.021)	.009 (.020)
Female		.119** (.029)		.009** (.004)		.040** (.011)
White		-.146 (.091)		-.018 (.013)		-.033 (.029)
Black		-.124 (.092)		.001 (.013)		-.027 (.030)
Hispanic		.064 (.152)		-.010 (.017)		.035 (.050)
Age (years)		.130** (.018)		-.003** (.001)		-.010** (.002)
Previous College Enrollment		.338** (.070)				
Father's Highest Educ = College		.043 (.060)		.001 (.007)		-.012 (.021)
Father's Highest Educ = High school		.008 (.046)		-.002 (.007)		-.024 (.020)
Mother's Highest Educ = College		.147** (.073)		.003 (.008)		-.007 (.029)
Mother's Highest Educ = High school		.063 (.066)		-.002 (.007)		-.027 (.029)
Adjusted Gross Income (000's)		.0026** (.0013)		.00002 (.00019)		-.0009* (.0005)
Observations	866	866	9237	9237	6637	6637

Notes: Enrollment is measured using the National Student Clearinghouse data. Robust standard errors appear in parentheses.

Table 5. OLS Regressions of the Effects on Aid Receipt and FAFSA Filing

Dependent Variable	Dependent Participants			Independent Participants with No Prior College Experience			Independent Participants with Prior College Experience		
		OLS Estimates			*OLS Estimates*			*OLS Estimates*	
	Control Mean	FAFSA Treatment	Info-Only Treatment	Control Mean	FAFSA Treatment	Info-Only Treatment	Control Mean	FAFSA Treatment	Info-Only Treatment
Received Any Pell Grant (not conditional on enrollment)	.298	.098** (.033)	-.018 (.051)	.096	.019** (.007)	-.016 (.011)	.233	.031** (.011)	.020 (.020)
Total Scheduled Amount of Federal Grants	$1363 (2229)	375** (156)	-192 (250)	444 (1415)	79** (31)	-76 (52)	1026 (1971)	145** (49)	78 (88)
Received Federal Student Loan	.232	.031 (.030)	-.065 (.045)	.069	.004 (.006)	-.018** (.009)	.179	.020** (.010)	.017 (.018)
Filed FAFSA Conditional on Attendance	.925	.034 (.033)	.011 (.066)	.836	.116** (.036)	.085 (.073)	.841	.040** (.017)	-.008 (.035)
Date of FAFSA Filing 2008 Conditional on Filing (in days)	May 11 (103.1)	-32.6 (10.1)	-17.5 (18.6)	Jul 7 (98.3)	-112.9 (4.6)	-25.1 (11.0)	Jun 6 (98.2)	-63.4 (3.6)	-12.9 (7.4)
Filed FAFSA before March 1, 2008 Conditional on Filing	.365	.039 (.052)	.006 (.096)	.064	.554 (.016)	.038 (.034)	.191	.291 (.017)	.015 (.032)

Notes: The outcomes are defined using data from the U.S. Department of Education. Specifications include controls for race, gender, age, prior college experience, parents' education levels, and family income. Robust standard errors appear in parentheses. Total scheduled amount of grant aid includes all payments scheduled during the 2008-2009 school year. Total paid reflects the actual amount of money transferred to schools as of March 2009. This may differ from the scheduled amounts if students withdraw from school or transfer or if payments for a spring term have not yet been transferred to the students' schools. The regressions with dependent participants have 868 observations, except for those that are conditional. The samples are 264 if conditional on attendance and 407 if conditional on FAFSA filing. The regressions with independent participants without prior college experience have 9237 observations. The samples are 295 if conditional on attendance and 2392 if conditional on FAFSA filing. The regressions with independent participants with prior college experience have 6637 observations. The conditional samples have 1594 if conditional on attendance and 2992 if conditional on FAFSA filing.

Table 6. OLS Regressions of Intention to Treat Effects on College Attendance using Multiple Sources

Dependent Variable = College Attendance between April 15 and November 1, 2008

	Attendance (NSC) (1)	Attendance (NSC - Ohio Only) (2)	Attendance (Ohio Only - OBR) (3)	Attend (NSC or OBR) (4)	Received Pell (DOE) (5)	Attend (NSC or DOE) (6)	Attend (NSC or DOE or OBR) (7)
			INDEPENDENTS WITH NO PRIOR COLLEGE EXPERIENCE				
Control Group Mean	.029	.028	.043	.054	.096	.105	.1112
Full Treatment	.0055 (.0038)	.0071* (.0039)	.0094** (.0046)	.0075** (.0050)	.0193** (.0065)	.0167** (.0068)	.0165** (.0069)
Information Only	-.0008 (.0067)	.0014 (.0070)	.00003 (.0082)	-.0041 (.0088)	-.0152 (.0109)	-.0188* (.0113)	-.0185 (.0117)
			INDEPENDENTS WITH PRIOR COLLEGE EXPERIENCE				
Control Group Mean	.237	.237	.198	.279	.233	.316	.337
Full Treatment	.0069 (.0109)	.0023 (.0115)	.0006 (.0101)	.0109 (.0115)	.0311** (.0106)	.0273** (.0118)	.0257** (.0120)
Information Only	.0087 (.0205)	-.0028 (.0215)	.0047 (.0191)	.0174 (.0217)	.0202 (.0196)	.0206 (.0222)	.0205 (.0226)
			DEPENDENTS				
Control Group Mean	.268	.271	.235	.313	.298	.356	.371
Full Treatment	.0693** (.0317)	.0473 (.0334)	.0059 (.0302)	.0609* (.0326)	.0978** (.0326)	.0850** (.0329)	.0797** (.0331)
Information Only	.0092 (.0511)	-.0174 (.0533)	-.0264 (.0485)	-.0115 (.0521)	-.0181 (.0514)	-.0431 (.0522)	-.0580 (.0521)

Notes: The NSC measure uses data from the National Student Clearinghouse. The OBR data uses data only from the Ohio Board of Regents which covers Ohio's 52 public colleges. The DOE data includes the universe of students who received Pell grant awards and were hence attending. Robust standard errors appear in parentheses.

Table 7. OLS Regressions of the Effects on Patterns of Attendance Post Experiment

	Dependent Participants (N = 868)			Independent Participants with No Prior College Experience (N = 9237)			Independent Participants with Prior College Experience (N = 6637)		
	Control Mean	*OLS Estimates*		Control Mean	*OLS Estimates*		Control Mean	*OLS Estimates*	
Dependent Variable		FAFSA Treatment	Info-only Treatment		FAFSA Treatment	Info-only Treatment		FAFSA Treatment	Info-only Treatment
Attended Public College	.222	.050* (.030)	.030 (.050)	.022	.006* (.003)	.001 (.006)	.181	.003 (.010)	-.003 (.018)
Attended Private College	.048	.018 (.016)	-.025 (.020)	.007	-.001 (.002)	-.002 (.003)	.058	.006 (.006)	.011 (.012)
Attended Four-year Campus	.169	.043 (.028)	-.019 (.043)	.009	.004* (.002)	.003 (.004)	.113	.003 (.008)	.013 (.016)
Attended Two-year Campus	.098	.027 (.023)	.027 (.041)	.019	.001 (.003)	-.003 (.005)	.122	.006 (.008)	-.002 (.016)
Attended Selective College	.038	.040** (.017)	.022 (.028	.001	.001 (.001)	-.0011** (.0005)	.026	-.005 (.004)	.010 (.090)
Attended Non-selective College	.174	.014 (.027)	-.002 (.045)	.024	.004 (.003)	.002 (.006)	.182	.005 (.010)	.001 (.018)
Attended Full-time	.189	.054* (.029)	-.017 (.045)	.013	.007** (.003)	-.004 (.004)	.116	-.007 (.008)	-.008 (.015)
Attended Part-time or Full-time	.207	.056* (.030)	.025 (.048)	.020	.006* (.003)	-.002 (.005)	.184	.0001 (.0099)	.014 (.019)
Withdrew from College Fall 2008 (uncondit.)	.010	-.006 (.006)	-.012* (.006)	.001	.0002 (.0008)	.0001 (.0015)	.016	.003 (.003)	.0003 (.0060)

Notes: Enrollment is measured using the National Student Clearinghouse data. Specifications include controls for race, gender, age, prior college experience, parents' education levels, and family income. Robust standard errors appear in parentheses. Selective colleges include those colleges classified by Barron's guide as "most," "highly," or "very competitive."

Table 8. OLS Regressions of Intention-to-Treat Effects
Independent Participants with No Prior College Experience
Dependent Variable = College Attendance between April 15 and November 1, 2008

	Participants with Estimated Expected Family Contribution (EFC) = 0			Participants with Estimated Expected Family Contribution (EFC) > 0		
	FAFSA Treatment	Info-Only Treatment	N	FAFSA Treatment	Info-Only Treatment	N
Full Sample	.012** (.005)	-.002 (.009)	6266	-.008 (.006)	.003 (.011)	2971
"Very Interested in College"	.018** (.008)	-.005 (.014)	3405	-.013 (.013)	-.004 (.022)	1200
Not "Very Interested"	.003 (.005)	.001 (.001)	2861	-.005 (.005)	.004 (.010)	1771
Some Do not Go because Must Work	.034*** (.011)	.032 (.020)	1250	.004 (.012)	.035 (.021)	798
Other Reasons Why Some Do not Go	.005 (.011)	-.012 (.010)	5016	-.012* (.007)	-.011 (.013)	2173
Female	.015** (.006)	-.008 (.012)	3890	-.006 (.010)	.011 (.018)	1388
Male	.006 (.008)	.005 (.013)	2376	-.009 (.007)	-.005 (.013)	1583
White	.010* (.005)	.006 (.010)	4598	-.008 (.006)	-.010 (.011)	2467
Black	.015 (.011)	-.028 (.021)	1668	-.007 (.018)	.073** (.035)	504
Without Dependent Children	.032 (.021)	-.044 (.037)	387	-.012 (.012)	-.012 (.024)	168
With Dependent Children	.010** (.005)	-.005 (.009)	5879	-.008 (.006)	.004 (.012)	2803

Notes: Robust standard errors appear in parentheses. Specifications include controls for race, gender, age, prior college experience, parents' education levels, and family income

Appendix Figure 1.
Information and Aid Calculation Worksheet

PERSONAL AID CALCULATION

The first step in applying for financial aid is to fill out a form called the Free Application for Federal Student Aid or FAFSA. The government uses this form to determine how much financial assistance you may be eligible for.

This letter provides you with an estimate of how much financial aid you may be eligible for if you were to attend college either part-time or full-time next year. This estimate can help you plan for your college education.

GRANT/SCHOLARSHIP AID

in college grants per year based on the information we have from helping you complete your taxes and the formula the Department of Education uses.

Even better, this financial aid would not need to be repaid.

The following is a list of local colleges, the full and part-time tuition expenses, and estimates of the financial assistance you could get from your state or the federal government.

College	Full-Time		Part-Time	
	Tuition	Estimated State and Federal Aid*	Tuition	Estimated State and Federal Aid*

*The estimate of financial aid is based on information reported to your H&R Block Tax Professional. If some of the information needed for the formula was not available, this may affect the reliability of the estimate. Local colleges' financial aid departments can arrange receipt of and provide the most accurate estimate of financial aid.

Please remember that eligibility for this type of financial aid is dependent upon the completion and submission of the Free Application for Federal Student Aid (FAFSA) form and selecting a college that is recognized by the federal government. Our estimates in this letter are based on the information we had available to us. The actual financial aid amount you receive could be higher or lower, depending on the rest of the information needed to complete the FAFSA.

LOAN AID

in Stafford student loans from the federal government.

You can use these loans to help pay for the costs of college that are not covered by other forms of aid. Although these loans must be repaid after graduating or leaving college, the government offers these at a very low interest rate making them especially helpful to many students. Given your information, it is likely that the federal government would even pay the interest on the loan for you while you are in college.

You may also be eligible for other aid in the form of grants, scholarships, and additional loans from some of the institutions that you may want to attend. Eligibility for these types of aid depends on various factors, which may include your financial need or your performance in high school. We encourage you to contact the admissions or financial aid offices of the schools that you may be interested in attending for further details.

We hope this information is helpful, and we thank you for your interest and participation in this program.