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Information or Experience? Experimental Evidence on Campus Visits and Human Capital Investment

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Abstract

Students from disadvantaged backgrounds often make educational decisions with limited exposure to higher education institutions. While a large literature studies information frictions in human capital investment, little is known about the role of direct experience with educational institutions. We provide experimental evidence on how experiencing a university campus affects students' educational investments. We conduct a randomized controlled trial involving approximately 12,000 ninth-grade students from Portuguese schools with low levels of parental education. Schools were randomly assigned to receive either information about the returns to education or the same information combined with a one-day visit to a university campus. Using administrative data on academic performance and high school track choice, we show that campus visits increase math exam scores and overall grade point averages and reduce the likelihood of failing ninth grade. Campus visits also increase the probability that students select the science and technology track, which is associated with the highest returns. Effects are concentrated among students from the lowest socioeconomic backgrounds and among those who initially believed they were unlikely to complete university. Our findings suggest that experiential exposure to higher education can affect students' human capital investments, highlighting the importance of multidimensional information frictions that extend beyond knowledge of returns.

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1 Introduction

Students make important decisions about lifetime human capital accumulation at very young ages, often lacking important information. Mincerian returns and costs represent one important kind of information (Jensen, 2010; Bleemer and Zafar, 2018). But for many students, information deficits run deeper; recent literature highlights their multi-dimensional nature (Avitabile and de Hoyos, 2018; Belfield et al., 2020; Delavande and Zafar, 2019). These kind of multi-dimensional information deficits may be related with stunted aspirations or goals: where students or those in their networks have no experience with college, it may feel too distant even to enter into the choice set, leading to reduced investment (Dalton et al., 2016; Carlana et al., 2022). Most research in economics addressing these gaps has focused on the provision of information in a controlled and scripted way (Baker et al., 2018). However, research from other domains highlights how direct experience can inform individuals' choices in ways scripted information cannot (Bryan et al., 2014; Malmendier and Nagel, 2011; Malmendier, 2021). Can direct interaction with the higher education system affect students' human capital investments?

Assessing the role of direct experience with higher education is empirically difficult; students who have firsthand knowledge of college are likely different on many dimensions than those who lack it. Some work has sought to increase the salience of the information by using videos to convey information rather than written or spoken paragraphs (Dinkelman and Martínez A., 2014). But it is likely impossible to replicate the information density of experiencing a college campus without being there.

In this article, we study the causal effect of visiting a college campus on the academic outcomes of middle-school students in Portugal. Portugal has low rates of parental education in general; in 2020 Portugal was the country within the EU with the highest share of the population without higher or upper secondary education completed, at around 48%. Our sample consists of students from schools at the bottom of the distribution of parental education.

Like many countries, Portugal features educational tracking. We focus on middle-school students because it is at this stage that students choose whether to enroll in high school on an academic track that prepares them for college, or in a vocational track which prepares them for direct labor market entry. Within the academic track, there are four areas of focus which prepare students for different university majors: Science and Technology, Socio-economic, Humanities, and Visual Arts. The vocational track also features many sub-tracks involving specific domain knowledge.

We test the effect of a campus visit treatment as well as an information-only treatment. The information-

only treatment arm consisted of a video shown to students in their classrooms, containing information from Portuguese administrative data on Mincerian returns to different high school tracks, and packaged in an attractive and digestible 8-minute video. The campus visit treatment arm consisted of the same video shown in the same way, plus a one-day class trip to the campus of one of the country's most selective colleges, in which students got a tour of the campus and interacted with students and professors. This allows us to distinguish the role of direct experience from the kind of Mincerian returns information seen elsewhere in the literature (Jensen, 2010). Our experimental sample consists of about 12,000 students, comprising 12.7% of all 94,000 ninth-grade students enrolled in public and private schools in mainland Portugal in the year of the intervention (2022/2023).

To measure the effects of the treatments on students' educational investments, we use administrative data on academic performance and tracking decisions from the Ministry of Education. Our primary outcomes of interest are students' national standardized test scores, grades, and high school track choices.

We show that the campus visit treatment significantly raised students' national exam scores in math (but not Portuguese), raised overall GPAs, and made students less likely to fail the ninth grade. The information treatment reduced failure by an equal amount; its effects on national exam scores and GPAs were not significant (but not significantly different from the effects of the campus visits).

We find no effect of either treatment on academic vs. vocational track choice, but the campus visit did significantly increase the share of students who chose the Science and Technology sub-track within the academic track — the subtrack with the highest Mincer returns. This is significant in light of recent randomized evidence showing that different high school tracks affect individual skill acquisition and self-perceived academic abilities (Ainsworth et al., 2025).

In heterogeneity analyses, we show that these effects were mainly concentrated among students of lower socioeconomic status, as proxied by whether they receive social support. Point estimates on positive academic performance effects are largest among these students. And among these students, the campus visit treatment did significantly increase students' likelihood of choosing the academic high school track. We also find that among students who did not consider themselves capable of finishing university at baseline, the campus visit increased the likelihood that they ended up choosing a different track than they expected to at baseline. We do not find clear differential effects by student gender.

These results suggest that the existing literature on information frictions in human capital acquisition is incomplete. While we confirm the finding that relatively light-touch information about returns seems to affect student effort, our results suggest that deeper multi-dimensional information deficits — including

broad ignorance about what college is like — may also constrain many students investment choices sub-optimally. Campus visits are a common practice in many parts of the developed world, especially as a strategy for recruiting URMs and first generation students. While these kind of visits are not precisely analogous to the campus visit we test, our results suggest that such visits may be consequential for students who have not previously experienced college campuses.

Our main contribution is to the literature on how different kinds of information affect students' investments in human capital. Most studies in this literature consider the effects of distinct pieces of information, presented in a controlled way (Bleemer and Zafar, 2018; Jensen, 2010; Nguyen, 2008). While these studies are valuable, they are silent on other important determinants of students' educational decisions which go beyond costs and labor market returns (Delavande and Zafar, 2019; Belfield et al., 2020).

We also contribute to the literature on aspirations. While our design does not permit us to study the effect of our intervention on aspirations *per se*, the intervention shares many features with interventions in the aspirations literature. Aspirations matter: Ross (2019) show that Indian students' aspirations gap at age 12 predicts educational achievement at age 19, and Eble and Escueta (2023) show that improving the quality of schooling affects learning more for students in families with higher educational aspirations. Light-touch interventions designed to raise aspirations have been shown to increase people's aspirations, investments, and living standards in Kenya and Ethiopia (Orkin et al., 2023; Bernard et al., 2014). Visualizing the future has been shown to improve people's economic outcomes (Nava Ashraf et al., 2022). Gehrke et al. (2023) show that a workshop designed to raise career aspirations increased investments in education for high performers, but reduced them for low performers. Edmonds et al. (2023) shows an example of an intervention (girls' empowerment classes in India) which affect concrete educational outcomes without affecting aspirations on education or employment.

The rest of this article is structured as follows: Section 3 describes our experimental designs; Section 4 presents our results, and Section 5 concludes.

2 Context

In Portugal, education in the public school system is free of charge up to the end of upper secondary education. Compulsory education spans ages 6 to 18 and is divided into four stages. Primary education is split into two cycles: the first cycle includes grades 1 through 4, while the second cycle covers grades 5 and 6. Students then progress to lower secondary education (third cycle), encompassing grades 7 to 9

– roughly comparable to "middle school" in the United States (we refer to this level of school as "middle school" in this paper). This is followed by upper secondary education, which consists of grades 10 to 12 (comparable to "high school").

At the transition to upper secondary — between grade 9 and grade 10 — students must decide which track they will follow: an academic or a vocational one. The academic track is designed for students who intend to pursue higher education after completing upper secondary school, while the vocational track prepares students to enter the labor market after the end of compulsory education at age 18.

The academic track is further divided into four sub-tracks — Science and Technology, Socioeconomic Sciences, Languages and Humanities, and Visual Arts — whose courses and curricula are focused on specific domains. In contrast, the vocational track comprises a wide range of sub-tracks aimed at training students for task-oriented professions. These programs cover diverse areas, including childcare, tourism and hospitality, information technology, and renewable energies. In 2022 around 34% of upper secondary students were enrolled in vocational track, a percentage which fluctuated between 30% and 40% in the recent decade.

The track decision has high-stakes consequences for students' future academic and labor market outcomes. Previous research shows that vocational tracks tend to be chosen more frequently by students from lower socioeconomic backgrounds and by those with lower academic achievement (Hartog et al., 2022; Dustmann, 2004). This suggests that track choice may be an important mechanism behind the intergenerational persistence of educational inequalities Estimates for 2020 indicate that young workers up to age 25 who completed only upper secondary education earn an average monthly wage of approximately €900, compared with €1,300 for those holding a bachelor's degree and €1,600 for those with a completed master's degree.

Given the importance of this decision, schools organize a range of vocational guidance activities during grade 9. These include psychometric skill assessments, job fairs, and sessions with professionals working in different fields. In 2018, administrative records indicate an average of 1.4 counselors per high school. The final decision is made when students enroll in upper secondary education at the end of grade 9, after teacher grades and the results of the national high-stakes examinations have been released. Parents, as students' legal guardians, must sign the final application form. Thus, while the decision is formally centered on the student, it involves direct participation from parents, counselors, and teachers. However, it is important to note that no formal teacher recommendation is included in this process.

Regarding the structure of the school system, 9th-grade students can be enrolled in two types of

schools. The first type includes schools with classes spanning grades 5 through 9, while the second type encompasses schools that provide both lower and upper secondary education, covering grades 9 through 12. In our sample, roughly 50% of students are in each type of school. This distinction is important because, during the transition from 9th to 10th grade, students may or may not need to change schools depending on the type of school they attend.

3 Data and Experimental Design

In this section we outline the administrative and survey data we use, as well as laying out the experimental design and the content of the treatment arms. We show that the treatment arms are balanced on observable pre-treatment covariates.

3.1 Administrative Data

Administrative data collected by the Ministry of Education compile information at the student level between the academic years 2008/2009 and 2023/2024. These data include information on students' socioeconomic characteristics, reported at the time of enrollment in each school year, as well as information on the classes and schools students attend and the teachers assigned to them. The dataset also includes measures of student proficiency, based on the scores awarded by teachers across different subjects, as well as results from high-stakes external national examinations.

This database allows us to follow the students included in our experiment, providing information on their academic trajectories prior to the 9th grade and after it. In particular, it enables us to observe, through administrative records, the upper secondary track choices students make before starting 10th grade, as well as subsequent academic outcomes. Currently, we do not observe academic outcomes beyond the 9th grade. However, this information will be available in the Ministry of Education's administrative data, which will allow us to expand the range of outcomes that can be analyzed.

3.2 Sampling

We built a sample of schools where students were less likely to have exposure to college or college-educated people, relying on the Ministry's administrative data. We invited middle school administrators to participate in the study where the school was in the lower tercile of parental education (as defined by

the share of students with at least one parent who finished high school). The final sample consists of 252 middle schools.

Within each selected school, we selected up to two participating classrooms. We limited the sample to two classrooms' worth of ninth-grade students from each school because this was the limit of the amount of students who could fit on one bus for the campus visit (about 50 students). We selected from among civics classrooms, as this is a class which every ninth-grader must take and which consists only of ninth graders. Where schools contained only one or two ninth-grade civics classrooms, these classes of students constituted the sample from that school. Where schools contained more than two ninth-grade civics classrooms, we randomized which classes were selected to be in the sample.

3.3 Baseline survey

Survey enumerators visited all 252 schools in the experimental sample in the fall of 2022 to conduct a baseline survey in the classrooms selected to be a part of the study. This survey asked students about their intentions regarding the track and sub-track they intended to follow in upper secondary school, as well as their expectations, aspirations, and beliefs about their own likelihood of completing higher education.

We also included psychometric measures, presenting students with a pair of statements and asking which they agree with more. (These measures take a value of missing if the student prefers not to answer.) "Locus of control" is a dummy taking a value of 1 if the student selects Statement 1 from the following:

- **From the statements below, select the one you agree with most:**

  (1) Each person is primarily responsible for their own success or failure in life.

  (2) A person's success or failure is a matter of destiny.

  (3) I prefer not to answer.

"Self-efficacy" is a dummy taking a value of 1 if the student selects Statement 1 from the following:

- **From the statements below, select the one you agree with most:**

  (1) To be successful, above all, you need to work hard.

  (2) To be successful, above all, you need to be lucky.

  (3) I prefer not to answer.

The survey also measured students' cognitive ability, as proxied by eight questions based on those given in the PISA.

3.4 Experimental Design

Our study involves three treatment arms: 1) an *information*-only treatment; 2) a *campus visit* treatment which also includes all the content of the information-only treatment; and 3) a pure control group which receives neither relevant information nor a visit to a college campus. The sample consists of 11,903 students from 844 classrooms in 234 schools, with randomization at the school level.

Information treatment. This treatment was conducted immediately after the baseline survey, in class. It consisted of presenting the Mincer returns to different high school tracks, using administrative data from Portugal, presented in the format of an attractive and digestible video lasting 8 minutes. This video consisted of two parts. The first provided general information on high school tracks, designed to align with the information students already receive from teachers or counselors regarding available options. The second part focused on labor market returns for different education levels, including returns by field of study, guidance on applying to university, and potential avenues for financial support in higher education.

The rationale for this treatment is that visiting the campus is likely to provide a wealth of new information to students, but some of the information that may be most relevant can also be provided in lower-cost ways, as indeed has been found in other contexts (Jensen, 2010; Nguyen, 2008)

Campus visit treatment. This treatment included the same video as the *information* treatment, shown at the same point (directly following the baseline survey). It also included an invitation for a one-day class visit to the campus of Nova School of Business and Economics, one of the country's newest and most prestigious college campuses. The school is a triple-accredited business and economics institution, offering several Master's programs that are highly ranked in the Financial Times rankings. At the Bachelor's level, the average application score of its students is the second highest in the country and the highest among business and economics schools in the Lisbon region. Bus transportation was provided for up to 2170 students (2 classes) per school selected for treatment. Students toured the campus, ate lunch, talked with professors, participated in a lab experiment (Batista et al., 2024), and sat in a lecture hall to watch a bespoke video featuring first-generation college students in Portugal discussing the ways in which college attendance changed their life.

Control group. In the control group, we presented a video of the same length as the information group, also directly following the baseline survey in class. This video contained no information about returns to schooling. Instead, we provided a 4-minute video presenting general information on upper secondary

school tracks. This video corresponded to the first part of the video shown to students in the other two treatment arms and contained general information on high school tracks—information that was already made available to students by teachers and counselors.

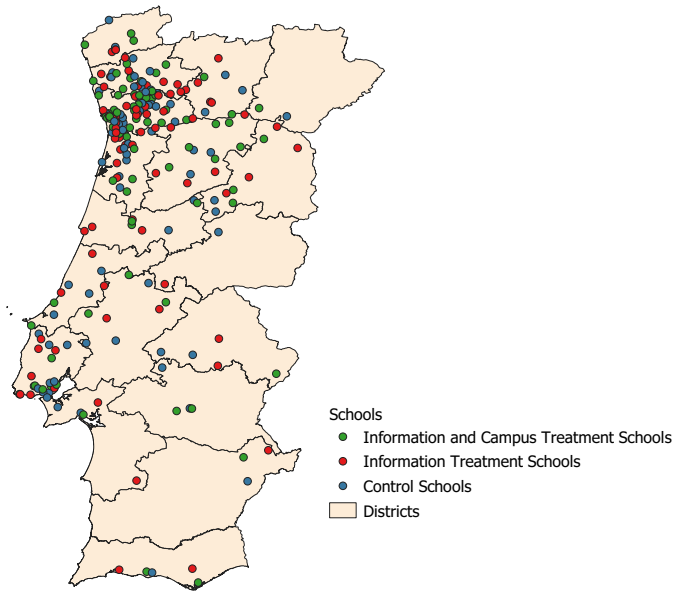
3.5 Randomization

We randomized treatment assignment at the school level. We created randomization strata: groups of 3-5 schools within a subregion with a similar level of parental education.[1] We defined parental education using administrative data at the school level on the share of students with at least one parent who completed high school. Within each stratum, we randomized assignment to one of the three treatment arms.

Figure 1 shows the location within Portugal of participating middle schools, representing all 18 districts on the mainland.

[1] "Subregion" here refers to the NUTS 3 classification of Eurostat's Nomenclature of Territorial Units for Statistics. There are 24 of these units in mainland Portugal and 21 are represented in our sample. Because our sample contained only one school in the Alentejo Litoral subregion, we lumped this together with the Alentejo Central subregion for stratification purposes.

Figure 1: Location of sampled middle schools



Note: This Figure displays a map of the participating schools in the experiment across Portugal. Each dot represents a school: blue for control schools, red for those that received the information treatment, and green for those that received both the information and campus visit treatments. The black lines indicate the boundaries of the districts.

3.6 Randomization balance and summary statistics

Table 1 shows that both administrative measures and survey measures are balanced across treatment arms.

We also highlight some illuminating descriptive patterns in the data. In our sample, 35% of students have no parent who went to college. 37% receive social support[2]. The number of students who expects they will finish college is a bit lower than the number who think they are *capable* of doing so, which is in turn significantly lower than the number who *ideally* would want to (this last is our measure of "aspirations"). These measures are all substantially higher than the share of students who ultimately choose the academic track (60%). This gap between students' aspirations and the actual share who pursue

[2]Social support is composed of two distinct level. The first level students are the ones that receive most support from government, such as paid meals, free textbooks, and a fixed budget for school materials. As in 2025, the first/ second/ third level are measured considering family income until 3 363.01€/ 6 726.302€/ 11 434.01€. Level 3 corresponds to very limited support, not covering school meals or school materials. Remaining students do not receive other kinds of social support from the Portuguese government.

Table 1: Balance - Control, Info, and Campus Groups

	Control		Info		Campus		F-test Joint Sign.	
	Mean	SD	Mean	SD	Mean	SD	Obs.	*p*-value
Panel A. Administrative Variables								
Female	0.49	0.50	0.51	0.50	0.50	0.50	11903	0.16
Age	15.25	0.56	15.21	0.52	15.23	0.55	11903	0.12
Receives Social Support	0.37	0.48	0.38	0.49	0.39	0.49	10410	0.47
No Parental College	0.35	0.48	0.37	0.48	0.37	0.48	10216	0.69
At least One Parent is Unemployed	0.10	0.31	0.11	0.32	0.12	0.32	8817	0.50
Track Choice: Vocational	0.40	0.49	0.39	0.49	0.38	0.49	11903	0.48
Panel B. Survey Variables								
Born in Portugal	0.95	0.22	0.95	0.23	0.94	0.24	10161	0.43
Science & Technology Subtrack	0.50	0.50	0.51	0.50	0.52	0.50	7695	0.12
Socioeconomic Subtrack	0.09	0.29	0.10	0.30	0.09	0.29	7695	0.74
Humanities Subtrack	0.28	0.45	0.27	0.44	0.27	0.44	7695	0.47
Visual Arts Subtrack	0.13	0.33	0.11	0.32	0.11	0.31	7695	0.28
Locus of Control	0.92	0.28	0.92	0.27	0.92	0.28	11903	0.12
Self-Efficacy	0.96	0.18	0.96	0.19	0.97	0.18	11903	0.29
Baseline Test Score (0-8)	4.97	1.76	4.96	1.86	5.03	1.73	11903	0.21
Expects to Finish University	0.76	0.43	0.77	0.42	0.78	0.42	10473	0.16
Aspires to Finish University	0.81	0.39	0.81	0.39	0.83	0.37	11027	0.27
Capable to Finish University	0.77	0.42	0.77	0.42	0.79	0.41	10571	0.19

Note: This table shows the difference in means between Control, Info and Campus groups for administrative (*Panel A*) and baseline (*Panel B*) variables. Means and standard deviations are unadjusted. F-test from regressions includes stratum fixed effects with standard errors clustered at the school level.

the academic track may be partly explained by a lack of confidence. In fact, 60% of students report that "not being good enough" is the main barrier to achieving their educational aspirations, while only 10

3.7 Manipulation check

For schools in the *information* and *campus visit* treatments, the informational video was shown directly after the baseline survey. For *control group* schools, the placebo video was shown after the baseline survey. For all schools, a brief follow-up survey was conducted immediately after the video, testing students' knowledge of the content of the *information* video. These two questions asked about the fields of study with higher labour market return and on the average wage of a worker with a BsC degree. Table 2 shows the effects of the different treatment arms on these knowledge questions.

Table 2: Effect of information video on knowledge

	(1) Neither	(2) Q1	(3) Q2	(4) Q1+Q2
Info	-0.525***	0.457***	0.504***	0.437***
	(0.0107)	(0.0122)	(0.0113)	(0.0115)
Campus	-0.528***	0.461***	0.522***	0.456***
	(0.0090)	(0.0104)	(0.0099)	(0.0101)
Observations	11903	11903	11903	11903
DV Mean Control	0.352	0.364	0.026	0.011
Test: Info=Campus	0.220	0.730	0.160	0.166

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of indicators capturing students' knowledge of the information video. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column (1)* shows the point estimate of replying incorrectly to both questions. *Column (2)* reports the point estimate on replying to a first question correctly. *Column (3)* reports the point estimate on replying to a second question correctly. *Column (4)* reports the point estimate on replying to a both question correctly. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

The low means among the control group show that the information presented was genuinely new for the students.

The large and significant treatment effects for the treated groups shows that students paid enough attention to grasp the content of the video. The indistinguishability between the effects of the two treatment

arms is expected; at this point, the experience of the students in the two treatment arms was identical.

4 Results

In this section we show the causal effect of the Information and Campus Visit treatments on students' human capital investments. We focus on two dimensions of investment: 1) academic performance, as measured by national standardized test scores and middle-school grades; and 2) tracking choices for high school.

4.1 Academic performance

Table 3 shows that the Campus Visit significantly improved students' academic performance on various measures. Columns 1 and 2 show effects on national standardized exams from the end of ninth grade. These exams are held in June, 1-5 months after the Campus treatment and 6-9 months after the Info treatment. The Campus visit increased students' Math exam scores by 0.08 SD ($p < 0.1$). The effect of the Info treatment was of a similar size but not statistically significant, although it was also not statistically distinguishable from the effect of the Campus treatment. Both treatments' effects on Portuguese exam scores were insignificant (though positive).

The Campus visit also increased students' Grade Point Average, measured by averaging the grades their teachers gave them in each of their eight core classes.[3] The magnitude of the increase was 0.08 SD ($p < 0.05$). The Info treatment's effect was not significant on its own, but was also not statistically different from the effect of the Campus treatment.

Both the Campus and the Info treatment made students 3-4 percentage points less likely to meet the requirements for failing the grade. Failing the grade is a composite measure consisting of two possible combinations: 1. failing scores in three distinct subjects; 2. Failing score both in the Portuguese and Mathematics high-stakes external exam at the end of the 9th grade. In the control group, 22% of students met these requirements, meaning they would be at risk of being held back[4]. The fact that both treatments reduced the likelihood of being eligible for failure suggests that they had an effect among students near the bottom of the distribution of test scores and grades.

[3] These core classes are Math, Portuguese, Natural Sciences, Physics/Chemistry, Geography, History, English, and another second language. Appendix Table A.2 shows how the treatments affected grades in each of these individual core subjects as well as in four optional subjects.

[4] (Leme, 2024) shows that only 5% of students in this situation actually fail the grade, despite meeting the criteria for failure. This suggests that, for many students, teachers use the exceptions allowed by law to ensure that students continue progressing from one grade to the next.

Table 3: Effect of campus visits and info on academic performance

	(1) Math	(2) Portuguese	(3) GPA	(4) Fail
Info	0.063	0.061	0.036	-0.038***
	(0.0466)	(0.0426)	(0.0349)	(0.0137)
Campus	0.075*	0.051	0.078**	-0.032**
	(0.0447)	(0.0410)	(0.0335)	(0.0149)
Observations	11908	11918	11449	9277
DV Control Mean	-0.028	-0.031	-0.034	0.220
Test: Info=Campus	0.774	0.832	0.211	0.670

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column (1)* shows the point estimate of standardized Math national scores. *Column (2)* reports the point estimate on standardized Portuguese national scores. *Column (3)* reports the point estimate of standardised GPA which is composed by the score (1-5) obtained by each student in *Natural Sciences*, *Phisics/Chemestry*, *Geography*, *History*, *English*, *Second Language*, *Portuguese*, *Mathematics* divided by the total number of classes. *Column (4)* reports the point estimate of a binary indicator fo failing the academic year, which is equal to 1 if the student either failed both the Math and Portuguese national exams, or fails 3 classes or more, and 0 otherwise. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 4 shows how the treatments affected students near the top of the distribution. Students receive a grade between 1 and 5 for each of their classes. Columns 1 and 2, respectively, show that the Campus visit treatment made students about 3 percentage points more likely to obtain top grades of 4 (or higher) and 5. Column 3 shows a similar 3-percentage-point increase in the share of students' core subjects which received a grade of 4 or better. In all cases, these treatment effects are significant only at the 10% level, and in all cases, the coefficient on the Info treatment is not individually significant while also not being significantly different from the Campus coefficient.

Table 4: Effect of campus visits and info on top grades

	(1) Any 4+	(2) Any 5	(3) % of 4 or 5
Info	0.020	0.023	0.012
	(0.0161)	(0.0169)	(0.0139)
Campus	0.033*	0.029*	0.028*
	(0.0159)	(0.0163)	(0.0149)
Observations	12461	12461	12461
DV Control Mean	0.749	0.346	0.443
Test: Info=Campus	0.445	0.738	0.268

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance indicators. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column (1)* shows the point estimate of a dummy equal to 1 if the student obtained at least one score of four or more in any of the eight core subjects, and 0 otherwise. *Column (2)* reports the point estimate of a dummy equal to 1 if the student obtained at least one score of five in any of the eight core subjects, and 0 otherwise. *Column (3)* the point estimate of an indicator representing the share of 4 and 5 scores a student obtained in their 8 classes. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Overall, we present evidence that among students in our sample, visiting a college campus led to increased academic performance as measured by both national standardized exams as well as the internal grades given at the school level. We show evidence that these gains accrued to students across the distribution: not only were students in both treatment arms less likely to fail, they were also more likely (in the Campus treatment) to obtain top grades.

4.2 High school track choice

We next turn to whether either treatment affected students' choices of which track (and sub-track) to pursue in high school. For this analysis, we use administrative data from the Ministry on which track students ultimately chose.

The predicted direction of the treatments' potential effect on track choices is ex ante unclear. The students in our sample come from the bottom of half of the distribution of most indices of socioeconomic status in the country, and their schools are in the bottom half of the distribution of academic performance.

Nevertheless, in the baseline survey they report planning to pursue the academic high school track at roughly the national average (around 60%). On the one hand, visiting a college campus might raise students' aspirations and increase their likelihood of enrolling in the academic track. On the other hand, a visit to a college campus could cause students to update negatively on their own likelihood of being able to qualify for college, leading them to turn toward the vocational track.

Table 5 shows that on average, neither treatment affected the track students chose to pursue in high school. About 60% of the control group chose the academic track, a figure not significantly different in either of the treatment arms. We also test whether students' ultimate track choice as reflected in the administrative data was different from that which they said they planned to pursue at the time of the baseline survey. There is significant churn overall; 21% of students end up in a different track than they planned. But this figure is not different across treatment arms.

Table 5: Effect of campus visits and info on high school track choices

	(1) Academic Track	(2) Change Track
Info	-0.008	0.008
	(0.0164)	(0.0109)
Campus	0.012	0.010
	(0.0151)	(0.0111)
Observations	11903	11903
Mean Control	0.599	0.206
Test: Info=Campus	0.238	0.879

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Colum 1* reports the point estimate of an indicator equal to 1 if the student chose the academic track in 10th grade, and 0 otherwise. *Colum 2* shows the point estimate of an indicator equal to 1 if the student chose a different track in 10th grade than at baseline. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Although neither treatment affected overall track choice on average, we find some evidence that the Campus visit changed which academic sub-track students chose to pursue. Table 6 shows treatment effects on dummy variables for whether students chose each of the four academic sub-tracks (in cases where the

Table 6: Effect of campus visits and info on high school sub-track choices

	(1) Science & Tech	(2) Socio-Econ	(3) Humanities	(4) Visual Arts	(5) Change Sub-Track
Info	0.007	-0.004	-0.009	-0.003	-0.01
	(0.0127)	(0.0080)	(0.0122)	(0.0063)	(0.0179)
Campus	0.022*	-0.008	0.006	-0.008	-0.084***
	(0.0123)	(0.0087)	(0.0117)	(0.0063)	(0.0177)
Observations	11903	11903	11903	11903	11903
Mean Control	0.283	0.072	0.192	0.052	0.594
Test: Info=Campus	0.258	0.599	0.212	0.415	0.000

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column 1* reports the point estimate of an indicator equal to 1 if the student chose the *Science&Technology* subtrack, and 0 otherwise. *Column 2* shows the point estimate of an indicator equal to 1 if the student chose the *Socio-Economic* subtrack, and 0 otherwise. *Column 3* reports the point estimate of an indicator equal to 1 if the student chose the *Humanities* subtrack, and 0 otherwise. *Column 4* shows the point estimate of an indicator equal to 1 if the student chose the *Visual Arts* subtrack, and 0 otherwise. *Column 5* reports the point estimate of an indicator equal to 1 if the student chose a different subtrack in 10th grade than at baseline, and 0 otherwise. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

student chose the vocational track, we code these as zeroes). The Campus visit made students marginally more likely to choose the most selective Science and Technology track in high school. As before, we measure whether the administrative data show that students ended up in the a different sub-track than that which they projected in the baseline survey. (For this measure, we group all vocational sub-tracks into one, such that there are five categories of sub-track: the four academic sub-tracks plus the vocational track.) Here we find even more evidence of churn under the status quo: a majority (59%) of the control group ended up choosing a different sub-track than that which they planned at the time of the baseline survey. However, this share was 8 percentage points lower for students in Campus Visit schools.

Overall, the picture that emerges is one in which the treatment increased students' effort in a way that improved their academic performance, while leaving tracking choices mostly unchanged on average.

4.3 Heterogeneity

In this section we test for whether the effects we identify above are concentrated in certain parts of the student population.

Table 7 shows heterogeneous effects on our main outcomes by student gender. We find that positive effects on Math exam scores as well as GPAs seem to be larger among boys, while the reductions in failure

Table 7: Heterogeneity by gender

	(1) Math	(2) Portuguese	(3) GPA	(4) Fail	(5) Academic	(6) Change
β_1: Info	0.102**	0.057	0.033	-0.033*	0.005	-0.017
	(0.0503)	(0.0465)	(0.0415)	(0.0175)	(0.0216)	(0.0149)
β_2: Campus	0.086*	0.036	0.088**	-0.013	0.020	-0.008
	(0.0516)	(0.0443)	(0.0417)	(0.0181)	(0.0203)	(0.0157)
α_1: Info × Female	-0.079	0.002	-0.004	-0.010	-0.033	0.051**
	(0.0525)	(0.0520)	(0.0549)	(0.0200)	(0.0253)	(0.0197)
γ_1: Campus × Female	-0.021	0.033	-0.024	-0.040*	-0.016	0.035*
	(0.0470)	(0.0509)	(0.0538)	(0.0215)	(0.0244)	(0.0191)
p-value$[\beta_1 + \alpha_n]$	0.6800	0.2690	0.5502	0.0097	0.1657	0.0190
p-value$[\beta_2 + \gamma_n]$	0.1931	0.1699	0.1662	0.0040	0.8208	0.0395
Observations	11908	11918	11449	9277	11903	11903

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column 1-6* report the point estimates on the main outcomes presented in this paper. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

rates are present across both genders. We also find that both the Info and Campus Visit treatments made girls more likely to ultimately choose a different track than they planned to at baseline (Column 6).

Table 8 shows hetereogeneous effects on our main outcomes by whether students received social support (a proxy for socioeconomic status). We find some evidence that poorer students were induced by the Campus treatment to select the academic track.

Table 8: Heterogeneity by social support

	(1) Math	(2) Portuguese	(3) GPA	(4) Fail	(5) Academic	(6) Change
β_1: Info	0.065	0.053	0.043	-0.038**	-0.025	0.034*
	(0.0531)	(0.0468)	(0.0479)	(0.0155)	(0.0216)	(0.0175)
β_2: Campus	0.044	0.015	0.052	-0.024	-0.004	0.019
	(0.0498)	(0.0465)	(0.0461)	(0.0177)	(0.0178)	(0.0145)
α_1: Info × Receives Social Support	-0.003	0.020	-0.010	-0.001	0.029	-0.052*
	(0.0502)	(0.0456)	(0.0532)	(0.0227)	(0.0349)	(0.0274)
γ_1: Campus × Receives Social Support	0.057	0.081	0.053	-0.017	0.060*	-0.030
	(0.0558)	(0.0493)	(0.0592)	(0.0254)	(0.0309)	(0.0229)
p-value$[\beta_1 + \alpha_n]$	0.1680	0.1021	0.3767	0.0376	0.8893	0.3318
p-value$[\beta_2 + \gamma_n]$	0.0369	0.0338	0.0101	0.0415	0.0320	0.5401
Observations	11908	11918	11449	9277	11903	11903

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column 1-6* report the point estimates on the main outcomes presented in this paper. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table explores heterogeneous effects by whether students reported in the baseline survey feeling capable of finishing university. The Campus treatment may have had a larger impact on changing students' upper secondary track for students who did not see themselves as capable of finishing university at baseline. Similar heterogeneity tables for related measures — students' expectations and aspirations to finish university – can be found in the appendix (Tables A.3 and A.4).

5 Conclusion

Even in the best of circumstances, students making decisions about human capital accumulation face a difficult choice environment and many uncertainties. For many underprivileged students, these difficulties are exacerbated by the fact that both they and most adults in their network lack any direct experience with higher education.

Our paper shows that bringing students from less-educated backgrounds to the campus of a public university made them perform better in school, and affected their decisions about their next level of schooling. Although all students in our sample were from schools with relatively low levels of parental ed-

Table 9: Heterogeneity by Capacity to Finish University

	(1) Math	(2) Portuguese	(3) GPA	(4) Fail	(5) Academic	(6) Change
β_1: Info	0.058	0.020	0.029	-0.058**	-0.010	0.029
	(0.0499)	(0.0531)	(0.0361)	(0.0267)	(0.0285)	(0.0249)
β_2: Campus	0.099*	-0.005	0.050	-0.012	-0.009	0.055**
	(0.0531)	(0.0482)	(0.0353)	(0.0292)	(0.0276)	(0.0253)
α_1: Info $\times$ Capable of Finishing Uni.	0.019	0.042	0.026	-0.020	0.007	-0.020
	(0.0522)	(0.0519)	(0.0462)	(0.0301)	(0.0320)	(0.0286)
γ_1: Campus $\times$ Capable of Finishing Uni.	-0.035	0.057	0.021	0.028	0.020	-0.051*
	(0.0571)	(0.0457)	(0.0446)	(0.0287)	(0.0315)	(0.0276)
p-value$[\beta_1 + \alpha_n]$	0.1251	0.1593	0.1878	0.0270	0.8730	0.5121
p-value$[\beta_2 + \gamma_n]$	0.1807	0.2238	0.0698	0.0180	0.4230	0.0034
Observations	11908	11918	11449	9277	11903	11903

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column 1-6* report the point estimates on the main outcomes presented in this paper. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

ucation, the effects on academic performance were particularly pronounced among those where parental education was lowest.

We highlight that our study examines the effect of visiting one particular college campus: NOVA School of Business and Economics, a part of the public Universidade NOVA de Lisboa. The School is highly selective — most students in the sample are unlikely to qualify for entrance — and distant from the modal student in our sample, many of whom live in the north of the country. It is possible that visiting a more accessible college campus (in terms of proximity and/or selectivity), or visiting a university with a different disciplinary focus, might have had different effects.

These results suggest that privileged students' familiarity with institutions of higher learning is one channel through which societal advantages become self-perpetuating. Public initiatives to increase the exposure of children from all walks of life to elite institutions may be thought of as broadly democratic, but it is generally difficult to measure their effects. Our study is unique in quantifying how such experiences can be transformative.

References

Ainsworth, Robert, Rajeev H. Dehejia, Andrei Munteanu, Cristian Pop-Eleches, and Miguel Urquiola (2025) "Malleable Minds: The Effects of STEM- vs. Humanities-Focused Curricula," November, 10 .3386/w34502.

Avitabile, Ciro and Rafael de Hoyos (2018) "The Heterogeneous Effect of Information on Student Performance: Evidence from a Randomized Control Trial in Mexico," *Journal of Development Economics*, 135, 318–348, 10.1016/j.jdeveco.2018.07.008.

Baker, Rachel, Eric Bettinger, Brian Jacob, and Ioana Marinescu (2018) "The Effect of Labor Market Information on Community College Students' Major Choice," *Economics of Education Review*, 65, 18–30, 10.1016/j.econedurev.2018.05.005.

Batista, Catia, Pedro Freitas, Ana Balcão Reis, and Wayne Aaron Sandholtz (2024) "Tracking with friends: Experimental evidence on students' valuation of peers."

Belfield, Chris, Teodora Boneva, Christopher Rauh, and Jonathan Shaw (2020) "What Drives Enrolment Gaps in Further Education? The Role of Beliefs in Sequential Schooling Decisions," *Economica*, 87 (346), 490–529, 10.1111/ecca.12307.

Bernard, Tanguy, Stefan Dercon, Kate Orkin, and Alemayehu Taffesse (2014) "THE FUTURE IN MIND: ASPIRATIONS AND FORWARD-LOOKING BEHAVIOUR IN RURAL ETHIOPIA," *CEPR Discussion Paper*.

Bleemer, Zachary and Basit Zafar (2018) "Intended college attendance: Evidence from an experiment on college returns and costs," *Journal of Public Economics*, 157, 184–211, 10.1016/j.jpubeco.2017.11.002.

Bryan, Gharad, Shyamal Chowdhury, and Ahmed Mushfiq Mobarak (2014) "Underinvestment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh," *Econometrica*, 82 (5), 1671–1748, 10.3982/ecta10489.

Carlana, Michela, Eliana La Ferrara, and Paolo Pinotti (2022) "Goals and Gaps: Educational Careers of Immigrant Children," *Econometrica*, 90 (1), 1–29, 10.3982/ecta17458.

Dalton, Patricio S., Sayantan Ghosal, and Anandi Mani (2016) "Poverty and Aspirations Failure," *Economic Journal*, 126 (590), 165–188, 10.1111/ecoj.12210.

Delavande, Adeline and Basit Zafar (2019) "University Choice: The Role of Expected Earnings, Nonpecuniary Outcomes, and Financial Constraints," *Journal of Political Economy*, 127 (5), 2343–2393, 10.1086/701808.

Dinkelman, Taryn and Claudia Martínez A. (2014) "Investing in Schooling in Chile: The Role of Information about Financial Aid for Higher Education," *The Review of Economics and Statistics*, 96 (2), 244–257, 10.1162/REST_a_00384.

Dustmann, Christian (2004) "Parental Background, Secondary School Track Choice, and Wages," *Oxford Economic Papers*, 56 (2), 209–230, https://www.jstor.org/stable/3488823.

Eble, Alex and Maya Escueta (2023) "When Your Bootstraps Are Not Enough: How Demand and Supply Interact to Generate Learning in Settings of Extreme Poverty," June, 10.3386/w31388.

Edmonds, Eric V., Benjamin Feigenberg, and Jessica Leight (2023) "Advancing the Agency of Adolescent Girls," *The Review of Economics and Statistics*, 105 (July), 852–866, 10.2139/ssrn.3649877.

Gehrke, Esther, Friederike Lenel, and Claudia Schupp (2023) "Career goals and investments in education: Experimental evidence from Cambodia," *CESifo Working Paper* (August).

Hartog, Joop, Pedro Raposo, and Hugo Reis (2022) "Fluctuations in the wage gap between vocational and general secondary education: lessons from Portugal," *Journal of Population Economics*, 35, 10.1007/s00148-021-00846-1.

Jensen, Robert (2010) "The (Perceived) Returns to Education and the Demand for Schooling," *Quarterly Journal of Economics*, 125 (2), 515–548, 10.1162/qjec.2010.125.2.515, Publisher: Oxford University Press ISBN: 0033-5533.

Leme, Afonso (2024) "Too young to quit school? Increasing the compulsory schooling leaving age and students' educational paths."

Malmendier, Ulrike (2021) "Experience Effects in Finance: Foundations, Applications, and Future Directions*," *Review of Finance*, 25 (5), 1339–1363, 10.1093/rof/rfab020.

Malmendier, Ulrike and Stefan Nagel (2011) "Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?*," *The Quarterly Journal of Economics*, 126 (1), 373–416, 10.1093/qje/qjq004.

Nava Ashraf, Gharad Bryan, Alexia Delfino, Emily Holmes, Leonardo Iacovone, and Ashley Pople (2022) "Learning to see the world's opportunities: The impact of visualization on entrepreneurial success," *Working Paper*, https://uc7a1e86fdadb9c8fa537016034a.dl.dropboxusercontent.com/cd/0/inline2/BUC9exw5gQtDhiz7kWh3iBMxcSWIecWKFAj3nboPQ6eBqXb_yyfl7dhOStWfqO-BRXjCWGIvd46p2o6oUlcr4bgpbEh9Yz1lxDDmlkBpRchQ7nrQmk8XxWAgdEm2HXhRl9qtzpLBLGMuUTkOA1e-6RVXFynWM_AOvQrOcARDhYYpG5p4zid.

Nguyen, Trang (2008) "Information, Role Models and Perceived Returns to Education: Experimental Evidence from Madagascar," *Working Paper*, 1–51, ISBN: 81381.

Orkin, Kate, Robert Garlick, Mahreen Mahmud et al. (2023) "Aspiring to a Better Future: Can a Simple Psychological Intervention Reduce Poverty?," https://www.socialscienceregistry.org/trials/996.

Ross, Phillip H (2019) "Occupation aspirations, education investment, and cognitive outcomes: Evidence from Indian adolescents," *World development*, 123, 104613.

A Additional analyses

Table A.1: Effect of campus visits and info on core subjects

	(1) Math	(2) Portuguese	(3) Nat. Sciences	(4) Physics/Chem.	(5) Geography	(6) History	(7) English	(8) Language (2)
Info	0.047	-0.032	-0.003	-0.019	0.025	-0.060	-0.018	-0.055
	(0.0359)	(0.0374)	(0.0448)	(0.0455)	(0.0520)	(0.0499)	(0.0434)	(0.0554)
Campus	0.047	0.023	0.094**	-0.013	0.019	0.053	0.081*	-0.032
	(0.0390)	(0.0357)	(0.0436)	(0.0444)	(0.0495)	(0.0465)	(0.0421)	(0.0528)
Observations	12461	12461	12461	12461	12461	12461	12461	12461
DV Control Mean	-0.021	0.000	-0.032	0.013	-0.018	-0.012	-0.030	0.014
Test: Info=Campus	0.999	0.123	0.039	0.889	0.899	0.019	0.032	0.630

Note: This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of standardised internal performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A.2: Effect of campus visits and info on supplementary subjects

	(9) IT	(10) Visual Arts	(11) P.E.	(12) Civil Education
Info	-0.033	-0.026	0.007	-0.034
	(0.0706)	(0.0443)	(0.0521)	(0.0913)
Campus	0.095	0.045	0.096**	-0.117
	(0.0743)	(0.0407)	(0.0480)	(0.0717)
Observations	12461	12461	12461	12461
DV Control Mean	-0.010	0.011	-0.033	0.081
Test: Info=Campus	0.087	0.129	0.073	0.296

Note: This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of standardised internal performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A.3: Heterogeneity by Expectations of Finishing University

	(1) Math	(2) Portuguese	(3) GPA	(4) Fail	(5) Academic	(6) Change
β_1: Info	0.052	0.003	0.052	-0.044	0.000	0.011
	(0.0516)	(0.0498)	(0.0384)	(0.0271)	(0.0274)	(0.0260)
β_2: Campus	0.092*	0.018	0.077**	-0.034	-0.005	0.036
	(0.0502)	(0.0493)	(0.0372)	(0.0293)	(0.0226)	(0.0270)
α_1: Info $\times$ Thinks Can Finish Uni.	0.018	0.078	-0.001	0.005	-0.012	0.006
	(0.0535)	(0.0489)	(0.0486)	(0.0303)	(0.0294)	(0.0307)
γ_1: Campus $\times$ Thinks Can Finish Uni.	-0.032	0.040	-0.016	-0.002	0.015	-0.029
	(0.0531)	(0.0510)	(0.0472)	(0.0288)	(0.0260)	(0.0299)
p-value$[\beta_1 + \alpha_n]$	0.1579	0.0695	0.2093	0.0064	0.1657	0.2015
p-value$[\beta_2 + \gamma_n]$	0.2043	0.1882	0.1178	0.0131	0.2313	0.1906
Observations	11908	11918	11449	9277	11903	11903

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column 1-6* report the point estimates on the main outcomes presented in this paper.. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A.4: Heterogeneity by Aspirations to Finish University

	(1) Math	(2) Portuguese	(3) GPA	(4) Fail	(5) Academic	(6) Change
β_1: Info	0.092*	0.011	0.065	-0.041	-0.020	0.024
	(0.0528)	(0.0549)	(0.0419)	(0.0301)	(0.0288)	(0.0288)
β_2: Campus	0.118**	0.021	0.076*	-0.016	-0.012	0.029
	(0.0555)	(0.0507)	(0.0406)	(0.0302)	(0.0254)	(0.0298)
α_1: Info $\times$ Aspires to Finish Uni.	-0.023	0.079	-0.010	-0.007	0.022	-0.016
	(0.0526)	(0.0520)	(0.0479)	(0.0314)	(0.0320)	(0.0331)
γ_1: Campus $\times$ Aspires to Finish Uni.	-0.057	0.032	-0.009	-0.020	0.023	-0.022
	(0.0535)	(0.0508)	(0.0462)	(0.0301)	(0.0292)	(0.0332)
p-value$[\beta_1 + \alpha_n]$	0.1650	0.0349	0.1652	0.0004	0.9448	0.5188
p-value$[\beta_2 + \gamma_n]$	0.2001	0.2090	0.0747	0.0154	0.5348	0.3451
Observations	11908	11918	11449	9277	11903	11903

Note : This Table presents estimates from Ordinary Least Squares (OLS) regressions, where the dependent variable are a set of academic performance grades. *Info* is an indicator equal to 1 for students assigned to the group that watched a 30-minute video in their own school presenting information on the returns to college, featuring college graduates from similar backgrounds to themselves. While, *Campus* is an indicator equal to 1 for students assigned to the group that took a field trip to visit the campus of a university, tour the facilities, and meet with students. *Column 1-6* report the point estimates on the main outcomes presented in this paper. All regressions include stratification and standard errors clustered at the schools level. * significant at 10%; ** significant at 5%; *** significant at 1%.