

An Informational Intervention to Increase Semester Credits in College

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Abstract: Increased time to college degree completion increases tuition and foregone earnings costs. Encouraging college students to take more semester credits is a low-cost way to reduce time to completion. We implemented an experimental informational intervention to increase student course loads by varying the intensity of information about the benefits of taking 15 credits per semester. We find no effect of our treatment on students' course loads. Our null finding is of interest because of the increasing popularity of low-cost informational interventions. Uncovering null results like these is important for the design of future interventions.

Key words: degree completion, semester credits
JEL Codes: I21, I23

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I. Introduction

Bachelor's degree completion times beyond four years cost billions of dollars annually in lost earnings and tuition expenses in the United States (Huntington-Klein and Gill 2018). For bachelor's degrees earned between July 2014 and June 2015, average time to completion was 5.2 and 4.8 years in public and private not-for-profit institutions, respectively (Shapiro et al. 2016, Appendix C: Data Tables). In public institutions, 29.9 percent of bachelor's degrees recipients were enrolled for 6 years, and 18.2 percent were enrolled for 7 to 8 years. In our own 4-year public university, which provides the context for the work that follows, while the six-year graduation rate is above the national average, only 20.7 percent of incoming freshman students from the Fall 2010 and Fall 2011 cohorts graduated within four years (Huntington-Klein and Gill 2018).

One salient predictor of timely degree completion is the number of credits a student takes per semester. A student on the semester system, who is not required to take remedial classes, would have to take 15 units per semester to graduate from a typical 120-credit degree program in 4 years. We refer to a 15-unit semester as a “full course load” for this reason. Yet, as Volkwein and Lorang (1996) and Knight (2004) report, it is not at all unusual for a student to take 12 units per semester and still be considered a “full-time student” for the purposes of registration and financial aid, even though this rate of course-taking will not lead to a degree in four years. Taking more credits is associated with both reduced time-to-degree and an increased probability of degree completion (Volkwein and Lorang 1996; Knight 2004; Herzog 2006; Attewell, Heil, and Reisel 2012; Attewell and Monaghan 2016; Shapiro et al. 2016, Venit 2017). Many universities in the United States have responded to this evidence by implementing policies designed to encourage students to take 15 credits per semester (see, for example, Venit 2017). In work buttressing this policy to improve time-to-degree, Huntington-Klein and Gill (2018) find no evidence that students' grades suffer when they take 15 credits as opposed to 12 credits in a semester.

Against this backdrop, we report on an experimental intervention designed to increase course loads. The experiment was carried out at a regional 4-year public university in the United States. The intervention was low-cost and relatively non-intrusive, in which we simply provided information to students on the benefits of choosing a full course load. This intervention is in keeping with recent interest in inexpensive informational interventions concerning college (e.g., Bettinger et al. 2012; Hoxby and Turner 2013; Wiswall and Zafar 2015; Fryer 2016; Stoddard, Urban, and Schmeiser 2017; Avitabile and de Hoyos 2018).

II. Experimental Design and Implementation¹

Before each Fall term, new freshman and transfer students must sign up for student orientation. Orientation is grouped by freshman/transfer status and by the student's college. In the year of our study, 2017, 111 orientation sessions occurred on 15 different days.

Randomization was performed at the orientation session level to avoid information leak, and since there was no way to track student receipt of treatment within sessions. Each orientation session was randomly assigned to one of five treatments. In each case, we distributed an informational flyer to students. The flyer was included as part of the information packet received by students at their orientation session, which would also include other materials. Orientation leaders go through the provided information with students so they have a chance to be exposed to the experimental material. Leaders did not have a specific script to accompany the introduction materials, but were expected to discuss course load with students.

Sessions were assigned to one of five treatments. The first was Control, where students received a simple flyer welcoming them to the university. The other four treatments consisted of flyers encouraging students to take a full course load (15 credits). The first encouragement flyer is No Reason, which encouraged students to take more credits but did not give reasons why. The second was Financial, which outlined the tuition and lost-wages costs of having to stay in college an additional year. The third was Social-Normalizing, which pointed out that taking a full course load is the most common approach nationally, and that two-thirds of graduates finish college in four years. The fourth was Financial/Social-Normalizing, which combined the information from the Financial and Social-Normalizing interventions. Fliers are shown in Appendix A, and full flier files are available at <http://www.nickchk.com/gi2025fliers.zip>.

We then linked treatment to administrative data on student outcomes giving the number of credits attempted in the following Fall and Spring semesters. In the primary analysis, we limit the data to students taking at least 12 credits, and compare the probability that a student takes 15+, as opposed to 12-14, credits in a given term across the different treatments.

Before collecting data we performed a power analysis and determined that we had 80% power to detect a difference of five percentage points in the proportion of students taking 15 credits in a

¹ This experimental design and statistical approach was pre-registered at the American Economic Review Randomized Controlled Trial Registry, ID AEARCTR-0002234. Preregistration documents are in Appendix B. The original analysis plan detailed following students up to six years after intervention and including separate analyses for STEM and non-STEM students, but these plans have been abandoned.

given term.² We allowed for cluster-randomization at the orientation group level given 111 orientation groups with 75 students per cluster, and five treatment arms. Based on information about previous years, we assumed 30% of students would take a full course load without treatment. We had no basis for previous evidence on the intra-cluster correlation but suspected that it would be very low, since within a given college, sorting into orientation groups is unlikely to have much to do with the tendency to select a full course load, and so we set intra-cluster correlation to .005. The minimum detectable effect in this setting is .05, the difference between 30% of students taking a full course load and 35%.

Table 1 shows sample means for all full-time students taking at least 12 credits, both overall and in each treatment arm. About 40% of terms are taken with a full course load (15 credits or more). The university has a large proportion of Hispanic students, and a considerable majority of the students receive financial aid. Orientation groups were college-specific. The most popular colleges in the university among students attending orientation are the business school and Humanities and Social Sciences, but each of the seven colleges receives at least 7.9% of the students. Student characteristics are fairly balanced across treatment arms, but the proportion of students in each college does vary from arm to arm and does not appear balanced. Using a joint F-test with standard errors clustered at the orientation group level, we find no statistical significance across treatment arms in the proportion of students in any demographic group or college. However, the apparent imbalance among colleges motivates a model below that controls for college.

² The power calculation was performed using the *clustersampsi* command in Stata. Note that the power calculation described here occurred after orientation group numbers were finalized but before data was collected. The preregistered power calculation is slightly different; it underestimates the number of orientation groups and students and assumes no intra-class correlation. This is described in Appendix B and also finds a minimum detectable effect of .05. We re-performed the power analysis to account for the actual sample size.

Table 1: Sample Means in Each Condition

	Control	No Reason	Financial	Social- Normalizing	S-N and Financial	All
Takes 15 Credits in Fall	0.397	0.366	0.408	0.366	0.382	0.384
Takes 15 Credits in Spring	0.442	0.470	0.472	0.451	0.456	0.458
Female	0.615	0.643	0.633	0.575	0.582	0.609
White	0.179	0.189	0.208	0.208	0.243	0.207
Hispanic	0.493	0.469	0.441	0.439	0.418	0.45
Asian	0.231	0.216	0.232	0.249	0.231	0.232
Other/Decline to State	0.097	0.127	0.120	0.104	0.108	0.111
Receives Financial Aid	0.715	0.674	0.711	0.698	0.616	0.682
College of Orientation Group:						
Arts	0.031	0.168	0.119	0.048	0.044	0.081
Business and Economics	0.156	0.146	0.187	0.191	0.278	0.194
Communications	0.116	0.045	0.114	0.100	0.052	0.086
Engineering and Computer Science	0.191	0.079	0.081	0.172	0.144	0.134
Health and Human Development	0.242	0.204	0.145	0.147	0.096	0.164
Humanities and Social Science	0.225	0.256	0.287	0.172	0.237	0.235
Natural Sciences and Mathematics	0.04	0.103	0.066	0.171	0.149	0.107

Notes: In each column, the entry indicates the proportion of the sample in that treatment condition that is in the group listed in that row. Stars in the Total column would indicate the statistical significance of a joint F-test regressing the group indicator given in the row on a set of treatment indicator dummies, with clustered standard errors, but none were significant at the 10% level.

Table 2: Effects of Experimental Intervention

Fall Full Course Load Taken, Conditional on Taking at Least 12 Credits				
No Reason	0.011 (0.022)	0.011 (0.053)	0.003 (0.053)	-0.025 (0.048)
Financial	-0.030 (0.024)	-0.030 (0.049)	-0.035 (0.049)	-0.057 (0.044)
Social-Normalizing	-0.030 (0.023)	-0.030 (0.048)	-0.039 (0.048)	-0.045 (0.045)
Financial/Social-Normalizing	-0.014 (0.023)	-0.014 (0.058)	-0.023 (0.057)	-0.044 (0.048)
Observations	4,586	4,586	4,586	4,586
Spring Full Course Load Taken, Conditional on Taking at Least 12 credits				
No Reason	0.030 (0.022)	0.030 (0.041)	0.022 (0.040)	0.001 (0.036)
Financial	0.028 (0.024)	0.028 (0.042)	0.021 (0.041)	0.002 (0.037)
Social-Normalizing	0.009 (0.023)	0.009 (0.051)	0.001 (0.049)	-0.004 (0.043)
Financial/Social-Normalizing	0.014 (0.023)	0.014 (0.040)	0.003 (0.039)	-0.010 (0.031)
Observations	4,818	4,818	4,818	4,818
Number of Full Course Load Terms; Ordered Logit Coefficients				
No Reason	0.097 (0.088)	0.097 (0.214)	0.053 (0.217)	-0.068 (0.193)
Financial	-0.005 (0.093)	-0.005 (0.206)	-0.042 (0.212)	-0.134 (0.185)
Social-Normalizing	-0.078 (0.090)	-0.078 (0.224)	-0.127 (0.223)	-0.153 (0.199)
Financial/Social-Normalizing	0.055 (0.091)	0.055 (0.210)	0.009 (0.208)	-0.082 (0.168)
Observations	4,205	4,205	4,205	4,205
Model (Applies to all three panels)				
Clustered at Session Level	N	Y	Y	Y
Control for Demographics	N	N	Y	Y
Control for College	N	N	N	Y

Notes: Demographics include gender, race, and financial aid status. **Panels 1 and 2:** The dependent variable is binary (= 1 if the student took 15 or more credits, = 0 if the student took 12-14 credits). Columns 1 and 2 give differences in means. Columns 3 and 4 give linear probability estimates; logit marginal effects are effectively identical. Coefficient estimates multiplied by 100 give the percentage point change in the probability of taking 15 credits relative to the Control. Part-time course loads are dropped. Spring observations outnumber Fall observations because of a disproportionate number of students taking part-time course loads in Fall. **Panel 3:** Fall and Spring terms combined, and includes only students who took at least 12 credits in both semesters. The dependent variable is the number of semesters (0, 1, or 2) a student took at least 15 credits. All columns give ordered logit coefficients relative to the control.

III. Experimental Results

Experimental effects estimates can be seen in Table 2, where each treatment is being compared to the Control group, and significance indicates that the dependent variable is significantly different for a given treatment group compared to the Control. The first two panels of Table 2 display the results when the dependent variable is a binary indicator taking value of 1 if the student took 15 or more credits, and 0 if they took 12-14 credits. Non-full-time students (fewer than 12 credits) are not included. Columns 1 and 2 of Table 2 give the results of simple differences in means, while Columns 3 and 4, which include controls for demographics (Column 3) and demographics and college (Column 4), display estimates from linear probability regressions.³ The coefficient estimates reported in these panels, when multiplied by 100, give the percentage point change in the probability of taking 15 credits for each of the treatments relative to the Control. Panel 3 of Table 2 combines the two terms, showing ordered logit coefficients where the dependent variable is the number of semesters (0, 1, or 2) a student took at least 15 credits.

The effects of the experiment are resolutely null. Standard errors were clustered within sessions (Column 2), since the treatment is applied at the session level. Even without this adjustment (Column 1), there are no significant effects of treatment compared to the control. Moreover, the largest positive effect size shown is 3.0 percentage points in Column 2 of Panel 2, and many of the point estimates for Fall are counterintuitively negative. Adding controls for demographics (Column 3) or the college applied to (Column 4) in order to improve precision does not turn up any meaningful effects, and the largest positive point estimate in Column 4 is 0.2 percentage points. Panel 3 of Table 2 gives the ordered logit coefficients for the number of semesters a student takes at least 15 credits for the combined Fall and Spring terms. There are no significant effects of the treatment across all columns of the panel.

In the cases of the largest positive effects in Panels 1 and 2 we cannot reject the presence of meaningfully large positive effects of treatment – Performing 95% one-sided tests on the effect of the No Reason intervention on taking a full course load in Spring in column 2, we cannot reject positive impacts smaller than 9.9 percentage points, which would be meaningfully large. In Column 4, the largest positive effect is 0.2 percentage points for Financial and we cannot reject

³ We use a linear probability model here for simplicity; standard problems with linear probability models are less likely to apply since all right-hand-side variables are binary. We also estimate the regressions in this table using logit. Marginal effects from logit are identical to linear probability model results up to the third decimal place; standard errors are identical to the second decimal place.

positive impacts smaller than 6.5 percentage points. However, in both cases these are selected as the most extreme positive findings, and the presence of negative point estimates of the same treatments the term before make it unlikely that these are true positive effects. The fact that these positive effects represent the right tail of the distribution of effects in Table 2 suggests that it is very unlikely that any true effects are indeed as positive as 6.5 percentage points or 9.9 percentage points.

The comparisons in Table 2, specifically for Panels 1 and 2 with the inclusion of session-level clusters in Column 2, are based on the preregistered analysis, and there are no effects found. We perform further minor exploratory analyses by comparing the actual number of credits taken (on average 13.7 and 14.0 in the Fall and Spring terms), rather than a binary variable for taking a full course load. These results can be seen in the Tables 3 and 4. Table 4 also includes part-time students. Neither table shows meaningful effects of treatment once clusters are included. Without clusters, there are a few significant effects, but they are counterintuitively negative, they do not adjust for the number of comparisons performed, and a cluster-free analysis is not ideal. We performed an additional analysis (not shown) in which all non-Control students are grouped together to improve statistical power. We similarly find no significant effect of treatment with this approach.

IV. Conclusion

We performed a randomized controlled trial in which we provided students with information and encouragement to take full course loads. We then tracked whether those students actually increased their course loads and found no effect.

Since estimated effects were not just insignificant but also consistently small across all treatments and analyses (both preregistered and exploratory) and standard errors were not unexpectedly large, we do not expect that these results are a consequence of an underpowered experiment, and conclude that the true effect of the intervention was meaningfully zero.

Our null finding is of interest because of the growing range of attempts to influence student behavior through information provision. These interventions typically aim for small but nonzero effects, with implementation justified by low costs. Fields in which researchers are interested in very small effects, and often find them, are especially likely to overstate results if null findings are not publicized. Additional information about the versions of these policies that lead to no effect at all is valuable in directing research on this new vein of policy design to be as effective as possible.

Table 3: Effects of Experimental Intervention on Number of Credits

Fall Units Taken				
No Reason	-0.132*	-0.132	-0.141	-0.188
	(0.080)	(0.249)	(0.242)	(0.218)
Financial	-0.030	-0.030	-0.050	-0.074
	(0.076)	(0.267)	(0.260)	(0.224)
Social-Normalizing	-0.074	-0.074	-0.105	-0.189
	(0.077)	(0.258)	(0.253)	(0.218)
Financial/Social-Normalizing	0.007	0.007	-0.016	-0.097
	(0.079)	(0.269)	(0.263)	(0.231)
Observations	4,586	4,586	4,586	4,586
Spring Units Taken				
No Reason	0.010	0.010	-0.012	-0.078
	(0.084)	(0.162)	(0.156)	(0.156)
Financial	-0.075	-0.075	-0.102	-0.105
	(0.080)	(0.169)	(0.163)	(0.146)
Social-Normalizing	0.051	0.051	0.017	-0.013
	(0.081)	(0.219)	(0.216)	(0.172)
Financial/Social-Normalizing	0.044	0.044	0.002	0.022
	(0.082)	(0.181)	(0.173)	(0.140)
Observations	4,818	4,818	4,818	4,818
Fall Units Taken + Spring Units Taken				
No Reason	-0.110	-0.110	-0.162	-0.185
	(0.134)	(0.421)	(0.410)	(0.354)
Financial	-0.104	-0.104	-0.144	-0.264
	(0.142)	(0.376)	(0.366)	(0.344)
Social-Normalizing	-0.055	-0.055	-0.123	-0.229
	(0.136)	(0.450)	(0.442)	(0.367)
Financial/Social-Normalizing	0.085	0.085	0.024	-0.022
	(0.140)	(0.424)	(0.412)	(0.353)
Observations	4,205	4,205	4,205	4,205
Model (Applies to all three panels)				
Clustered at Session Level	N	Y	Y	Y
Control for Demographics	N	N	Y	Y
Control for College	N	N	N	Y

Notes: Demographics include gender, race, and financial aid status. **Panels 1 and 2:** The dependent variable is the number of credits taken per semester. Regression estimates in all columns give the change in credits taken relative to the Control in a linear regression. Part-time course loads are dropped. Spring observations outnumber Fall observations because of a disproportionate number of students taking part-time course loads in Fall. **Panel 3:** Credits for Fall and Spring terms combined, and includes only students who took at least 12 credits in both semesters. Regression estimates in all columns give the change in credits taken relative to the Control.

Table 4: Effects of Experimental Intervention on Number of Credits; Part-Time Students Included

Fall Units Taken				
No Reason	0.277*	0.277	0.255	0.161
	(0.159)	(0.399)	(0.386)	(0.367)
Financial	-0.159	-0.159	-0.082	-0.165
	(0.165)	(0.460)	(0.456)	(0.455)
Social-Normalizing	0.092	0.092	0.093	0.052
	(0.161)	(0.406)	(0.392)	(0.389)
Financial/Social-Normalizing	-0.578***	-0.578	-0.423	-0.478
	(0.159)	(0.543)	(0.461)	(0.446)
Observations	6,047	6,047	6,047	6,047
Spring Units Taken				
No Reason	0.061	0.061	0.037	-0.040
	(0.148)	(0.361)	(0.351)	(0.350)
Financial	-0.289*	-0.289	-0.280	-0.371
	(0.154)	(0.456)	(0.450)	(0.448)
Social-Normalizing	0.058	0.058	0.034	-0.046
	(0.150)	(0.408)	(0.401)	(0.380)
Financial/Social-Normalizing	-0.280*	-0.280	-0.280	-0.345
	(0.149)	(0.374)	(0.356)	(0.345)
Observations	5,772	5,772	5,772	5,772
Fall Units Taken + Spring Units Taken				
No Reason	0.128	0.128	0.097	-0.023
	(0.078)	(0.235)	(0.236)	(0.223)
Financial	-0.051	-0.051	-0.062	-0.154
	(0.082)	(0.255)	(0.258)	(0.248)
Social-Normalizing	-0.011	-0.011	-0.044	-0.076
	(0.080)	(0.244)	(0.245)	(0.238)
Financial/Social-Normalizing	-0.094	-0.094	-0.132	-0.200
	(0.079)	(0.245)	(0.245)	(0.209)
Observations	5,772	5,772	5,772	5,772
Model (Applies to all three panels)				
Clustered at Session Level	N	Y	Y	Y
Control for Demographics	N	N	Y	Y
Control for College	N	N	N	Y

Notes: Demographics include gender, race, and financial aid status. Includes part-time students.

Panels 1 and 2: The dependent variable is the number of credits taken per semester. Regression estimates in all columns give the change in credits taken relative to the Control. Panel 3: Credits for Fall and Spring terms combined. Regression estimates in all columns give the change in credits taken relative to the Control.

Acknowledgements

The authors are grateful for financial support from the California State University, Fullerton Graduation Initiative 2025. The Graduation Initiative had no role in the analysis and preparation of this manuscript.

Declarations of interest: none

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Appendix A: Informational Fliers

Figure A1: Control Condition



**Welcome to
CSU Fullerton!**




This sheet is being provided as part of a research study with the purpose of understanding student course-taking behavior. If you are 18 or older we may link your receipt of this sheet to six-year administrative course-taking data already collected by the university.

This study poses no risk to you, and has no meaningful benefit. You don't have to take any action to participate. No identifying information will be stored or presented about you. Your participation in this study is completely voluntary. You may choose not to be a part of this study by opting out, with no penalty to you. Confidentiality will be provided to the extent allowed by law. If you have questions about this study or the info on this form, or do not wish to participate, please contact Dr. Nick Huntington-Klein at nhuntington-klein@fullerton.edu or (657) 278-3918. If you have questions about your rights as a research participant, or would like to report a concern or complaint about this study, please contact the Institutional Review Board at (657) 278-7640, or e-mail irb@fullerton.edu.

Figure A2: No Reason Condition

Want to Graduate on Time?



Graduating with a CSUF Bachelor's degree requires the completion of 120 credits.

To get there in four years (as a freshman) or two (as a transfer) you'll have to take


15 CREDITS PER SEMESTER

CSU Fullerton recommends that you try to take 15 credits per semester. You should think of 15 credits as the **default** amount to take.

There are plenty of resources available to help you with this! Faculty and staff advisors are at hand.

Please consider taking 15 credits when registering.

Welcome to CSU Fullerton!



This information is being provided as part of a research study with the purpose of encouraging 15 unit course loads. If you are 18 or older we may link your receipt of this info to six-year administrative data already collected by the university so that we can observe the effect of this information on course loads.

This study poses no risk to you, and may offer a benefit if it encourages you to take 15 credits. You don't have to take any action to participate. No identifying info will be stored or presented about you. Your participation in this study is completely voluntary. You may choose not to be a part of this study by opting out, with no penalty to you. Confidentiality will be provided to the extent allowed by law. If you have questions about this study or the info on this form, or do not wish to participate, please contact Dr. Nick Huntington-Klein at nhuntington-klein@fullerton.edu or (657) 278-3918. If you have questions about your rights as a research participant, or would like to report a concern or complaint about this study, please contact the Institutional Review Board at (657) 278-7640, or e-mail irb@fullerton.edu.

Figure A3: Financial Condition

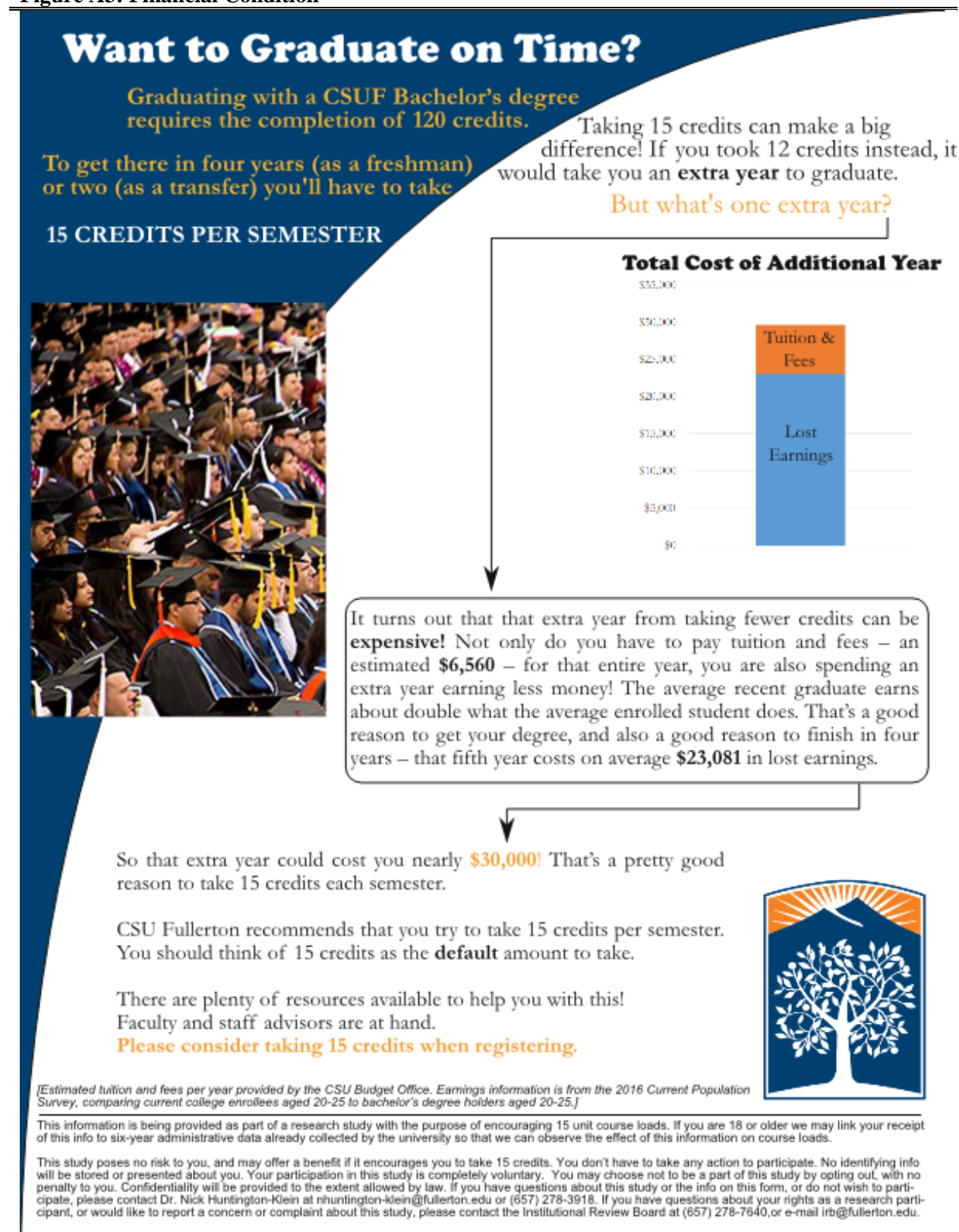


Figure A4: Social-Normalizing Condition

Want to Graduate on Time?

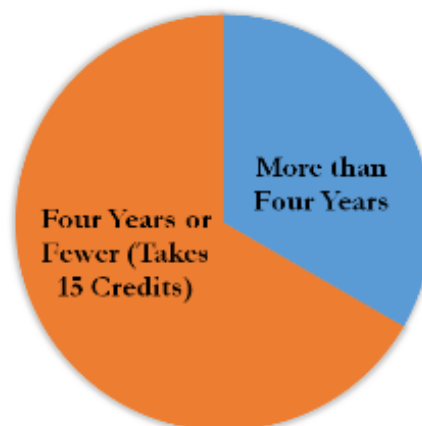
Graduating with a CSUF Bachelor's degree requires the completion of 120 credits.

To get there in four years (as a freshman) or two (as a transfer) you'll have to take

15 CREDITS PER SEMESTER

This is not impossible! In fact, two out of every three U.S. college graduates finishes within four years. This is true even if we just limit it to public colleges like CSUF. At public colleges, 60% of college graduates finish in four years.

Taking the credits to graduate in four years is the norm!



Time to Graduation in the U.S.

Taking 15 credits might be a bit more work while you're here, but you're not alone in doing it! And you can get your degree **one year faster** than if you take 12 credits per semester.

CSU Fullerton recommends that you try to take 15 credits per semester. You should think of 15 credits as the **default** amount to take.

There are plenty of resources available to help you with this! Faculty and staff advisors are at hand.

Please consider taking 15 credits when registering.

[Statistics on graduation rates taken from the National Center for Education Statistics 2015 Digest of Education Statistics, starting cohort of 2008.]

This information is being provided as part of a research study with the purpose of encouraging 15 unit course loads. If you are 18 or older we may link your receipt of this info to six-year administrative data already collected by the university so that we can observe the effect of this information on course loads.

This study poses no risk to you, and may offer a benefit if it encourages you to take 15 credits. You don't have to take any action to participate. No identifying info will be stored or presented about you. Your participation in this study is completely voluntary. You may choose not to be a part of this study by opting out, with no penalty to you. Confidentiality will be provided to the extent allowed by law. If you have questions about this study or the info on this form, or do not wish to participate, please contact Dr. Nick Huntington-Klein at nhuntington-klein@fullerton.edu or (657) 278-3918. If you have questions about your rights as a research participant, or would like to report a concern or complaint about this study, please contact the Institutional Review Board at (657) 278-7640, or e-mail irb@fullerton.edu.



Figure A5: Financial/Social-Normalizing Condition

Want to Graduate on Time?

Graduating with a CSUF Bachelor's degree requires the completion of 120 credits.

To get there in four years (as a freshman) or two (as a transfer) you'll have to take

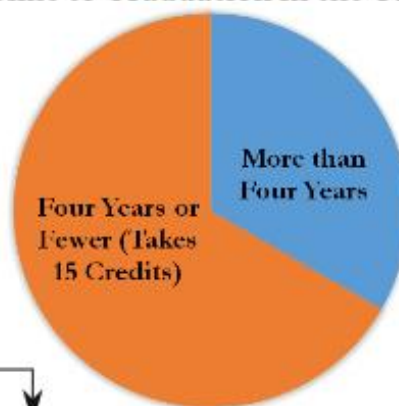
15 CREDITS PER SEMESTER



Taking 15 credits might be a bit more work while you're here, but you're not alone in doing it! And you can get your degree **one year faster** than if you take 12 credits per semester.

This is not impossible! In fact, two out of every three U.S. college graduates finishes within four years. This is true even if we just limit things to public colleges like CSUF. At public colleges, 60% of college graduates finish within four years. Taking enough credits to graduate in four years is the norm!

Time to Graduation in the U.S.



Also, it turns out that that extra year from taking fewer credits can be **expensive!** Not only do you have to pay tuition and fees – an estimated **\$6,560** – for that entire year, you are also spending an extra year earning less money! The average recent graduate earns about double what the average enrolled student does. That's a good reason to get your degree, and also a good reason to finish in four years – that fifth year costs on average **\$23,081** in lost earnings.

So that extra year could cost you nearly **\$30,000!** That's a pretty good reason to take 15 credits each semester.

CSU Fullerton recommends that you try to take 15 credits per semester. You should think of 15 credits as the **default** amount to take.

There are plenty of resources available to help you with this! Faculty and staff advisors are at hand.

Please consider taking 15 credits when registering.

[Statistics on graduation rates taken from the National Center for Education Statistics 2015 Digest of Education Statistics, starting cohort of 2008. Estimated tuition and fees per year provided by the CSU Budget Office. Earnings information is from the 2016 Current Population Survey, comparing current college enrollees aged 20-25 to bachelor's degree holders aged 20-25.]

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Title: The Effect of a Minor Informational Intervention on Courseload and Time to Degree

Last registered on June 02, 2017

General Information

RCT ID: AEARCTR-0002234

Initial registration date: June 02, 2017

Last updated: June 02, 2017 6:33 PM EDT

Country: United States of America

Region: California

Primary Investigator

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Other Primary Investigator(s)

PI Name: Andrew Gill

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Additional Trial Information

Status: In development

Start date: 2017-06-12

End date: 2023-07-31

Keywords: Education

Additional Keywords: Information, education, time-to-degree

JEL code(s): I23, D83

Abstract: This experiment is designed with the intent of increasing the proportion of students at a regional public university taking a full course load (five courses per semester) rather than a partial course load (four or fewer courses per semester). Partial course loads are partially responsible for a high proportion of students at the university taking more than four years to complete their degree. In the intervention, students are provided with different forms of encouragement to take a full course load. Different college orientation groups are randomly assigned to receive (1) no encouragement, (2) encouragement to take a full course load with no reasoning, (3) encouragement with financial reasoning, (4) encouragement with social-normalizing reasoning, and (5) encouragement with both financial and social-normalizing reasoning. We then observe course-taking and persistence behavior in the following years.

Sponsor(s)

Sponsor name: California State University Fullerton

Sponsor location: Fullerton, CA

Sponsor Url: <https://fullerton.edu>

Interventions

Intervention(s): In the intervention, students are provided with different forms of encouragement to take a full course load. Different college orientation groups are randomly assigned to receive (1) no encouragement, (2) encouragement to take a full course load with no reasoning, (3) encouragement with financial reasoning, (4) encouragement with social-normalizing reasoning, and (5) encouragement with both financial and social-normalizing reasoning. These information sheets are provided during

orientation. There is no other intervention aside from the information being presented and being made available through the information sheet.

Intervention Start Date: 2017-06-12

Intervention End Date: 2017-08-17

Primary Outcomes

Primary Outcomes (end points): Outcomes will be observed in several stages. In each case, we will use administrative data to calculate whether each student is taking a full or partial course load, and link this information to the orientation group they were in. The first report will examine differences in the rate of taking a full course load between treatment groups during the Fall and Spring semesters following orientation. The second report will examine differences in the rate of taking a full course load between treatment groups during the first four years after enrollment, as well as differences in four-year graduation rates. The final report will examine differences in the rate of taking a full course load between treatment groups during the Fall and Spring semesters following orientation. The second report will examine differences in the number of terms in which a student took a full course load between treatment groups during the first six years after enrollment, as well as differences in four, five, and six-year graduation rates. In each case, students in STEM orientation groups will be evaluated separately, looking for differences between treatment groups specifically for students with intentions to major in STEM. In total, there are seven outcomes: taking a full course load in the Fall term after the intervention, taking a full course load in the Spring term after the intervention, number of terms taking a full course load in the first four years after the intervention, number of terms taking a full course load in the first six years after the intervention, and four, five, and six-year graduation rates. These outcomes will be evaluated for the sample as a whole as well as for the STEM subsample.

Experimental Design: Randomization occurs at the level of orientation groups. Each orientation group will be randomly assigned to receive one of five treatments. Each orientation group is made up of students intending to major in the same college within the university. For example, one orientation group might be made up entirely of students planning to get a degree from the business school. There are 18 orientation days, and so students within each college will be observed under multiple treatments.

Experimental Design Details: There are no additional hidden details. Each orientation group will be randomly assigned to receive one of five treatment information sheets.

Randomization Method: Randomization will be done in office by a computer.

Randomization Unit: There are 18 days in which orientation activities are held. On each of these days, roughly 450 students register. These students are then divided into groups based on the college in which their intended major is housed. These groups are the randomization unit.

INSTITUTIONAL REVIEW BOARDS (IRBs)

IRB Name: Institutional Review Board, California State University Fullerton

IRB Approval Date: 2017-05-21

IRB Approval Number: HSR-17-0176