

DOES STUDENT ADVISING AFFECT PERSISTENCE AND GRADUATION RATES?

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INTRODUCTION

The College of Business has a centralized student advising office, the Student Success Center (SSC) where since April 2014 students log in to a database every time they visit. The first phase of this study examines the cohort of entering Freshmen who first enrolled in Fall 2014. Subsequent analyses will examine other Freshman cohorts as well as Community College Transfers who first enrolled in 2014-15, 2015-16, and 2016-17.

For each cohort, student demographic and academic progress data are matched to the students who visited and logged into the CoB Student Success Center (SSC) over the 4-year period from May 2014 through May 2018. Some students in each cohort didn't visit the SSC at all, some visited it only once, and some visited multiple times. Of those who visited, some visited earlier in their academic career than others. There is also data indicating "reason for visit" for each logged visit.

The initial analysis examines whether visiting the SSC for advising on student Major or Course Planning had an impact on student persistence beyond their first two years. For those students who did persist, we then examine whether such visits had an impact on their likelihood of graduating within four years from time of first enrollment, which is a key goal for SFSU and CSUs in general.

DATA

736 Freshmen enrolled 1st-time with major designated Business (any concentration)

705 were Business majors with concentrations other than Economics/Labor Studies (ECON/LABR students use departments for advising rather than the SSC, so these students were excluded)

Demographic Characteristics	#	(%)
Gender:		
Female	383	(54.3%)
Male	322	(45.7%)
URM status:		
URM	208	(29.5%)
Not URM	497	(70.5%)
Pell Eligibility:		
Eligible	349	(49.5%)
Not Eligible	356	(50.5%)
First Generation Attending College:		
1st Gen	270	(38.3%)
Not 1st Gen	406	(57.6%)
N/A	29	(4.1%)

Visits to CoB Student Success Center (SSC)

The CoB Fall 2014 Freshman cohort visited the SSC a total of 2,448 times between August 1, 2014 and August 1, 2018.

Reason for visit	# visits
Major Advising /Choosing Classes	975
Change Major	351
Quick Question	281
Graduation Application	249
Other	204
Study Abroad	113
Academic Probation	80
Signature Needed	77
Petition	54
Prerequisites	44
Other	20
Total:	2448

METHODS

I. Persistence through first 2 years of enrollment

Research question: *What factors predict persistence (continued enrollment) beyond the first 2 years of college?*

548 of 705 students (77.7%) persisted to Fall 2016, the beginning of their 3rd year in college.

Of these 548 students, 202 (36.9%) visited the SSC at least once for Major Advising /Choosing Classes during their first 2 years.

Of the 157 students who did not persist, 17 (10.8%) visited the SSC for Major Advising /Choosing Classes.

Analysis

A binary logistic regression model was tested using persistence through Fall 2016 (No=0, Yes=1) as the dependent variable, and 7 independent variables:

- o Resident Status: over 85% of Non-Resident students at SFSU are International.
- o Gender: Female/Male
- o URM: Under-Represented Minority if African-American, Latin(x)-American, or Native American.
- o High School GPA: 3-year high school GPA on a 4.0 scale.
- o Pell Grant Eligibility: Binary (Yes/No) proxy for family income.
- o First Generation College: Neither parent attended college for any length of time.
- o Visited SSC during first 24 months (Yes/No): At least 1 visit for Major Advising /Choosing Classes.

II. Likelihood of graduating within 4 years

Research question: *For students who persist to their Junior year, what factors contribute to likelihood of graduating within 4 years?*

Of the 548 students who persisted to their Junior years, 193 graduated within 4 years of first enrollment as Freshmen.

158 (81.9%) of the 193 4-year graduates visited the SSC at least once.

175 (49.3%) of the 355 persisting students who didn't graduate within 4 years visited the SSC at least once.

Analysis

A binary logistic regression model was tested using Graduation Within 4 Years (No=0, Yes=1) as the dependent variable, and 7 independent variables:

- o Resident (CA) Status: Over 85% of SFSU's Non-Resident students at SFSU are International.
- o Gender: Female/Male
- o URM: Under-Represented Minority if African-American, Latin(x)-American, or Native American.
- o High School GPA: 3-year high school GPA on a 4.0 scale.
- o Pell Grant Eligibility: Binary (Yes/No) proxy for family income.
- o First Generation College: Neither parent attended college for any length of time.
- o Visited SSC during first 24 months (Yes/No): At least 1 visit for Major Advising /Choosing Classes.

RESULTS

I. Persistence through first 2 years of enrollment

Variables in the Equation:

	B	S.E.	Wald	df	Sig.	Exp(B)
Resident Status (NR=0, R=1)	-.326	.414	.621	1	.431	.722
Gender (F=0, M=1)	-.544	.196	7.657	1	.006*	.581
URM status (Y=0, N=1)	.732	.211	11.985	1	.001*	2.079
High School GPA	.229	.162	2.002	1	.157	1.258
Pell Eligibility (Y=0, N=1)	-.184	.216	.726	1	.394	.832
First Gen status (Y=0, N=1)	.595	.220	7.341	1	.007*	1.813
Visited SSC (N=0, Y=1)	1.601	.280	32.770	1	.000*	4.960
Constant	-.427	1.013	.177	1	.674	.653

Dependent variables with significance level < .05

<i>Gender</i>	Being Female was associated with <i>increased</i> likelihood of persisting through the first 2 years.
<i>URM Status:</i>	Not being an Under-Represented Minority was associated with <i>increased</i> likelihood of persisting.
<i>1ST Generation</i>	Not having First Generation college status was associated with <i>increased</i> likelihood of persisting.
<i>Visited SSC</i>	Visiting the SSC at least once for Major Advising/Class Planning was associated with <i>increased</i> likelihood of persisting.

II. Likelihood of graduating within 4 years

Variables in the Equation:

	B	S.E.	Wald	df	Sig.	Exp(B)
Visited SSC	.913	.211	18.643	1	.000	.401
Resident Status	-.614	.456	1.812	1	.178	1.847
Gender	.513	.199	6.642	1	.010	.599
URM/NURM	-.347	.223	2.432	1	.119	1.415
High School GPA	.549	.178	9.515	1	.002	1.731
Pell Eligibility	.439	.214	4.196	1	.041	.645
1st Gen Status	.449	.213	4.431	1	.035	.638
Constant	-1.667	.615	7.341	1	.007	.189

Dependent variables with significance level < .05

<i>Gender</i>	Being Female was associated with <i>increased</i> likelihood of graduating within 4 years.
<i>1ST Generation</i>	Having parents who attended at least some college was associated with <i>increased</i> likelihood of graduating within 4 years.
<i>Pell Eligibility</i>	Not being Pell eligible was associated with <i>increased</i> likelihood of graduating within 4 years.
<i>High School GPA</i>	Having earned a higher GPA in High School was associated with <i>increased</i> likelihood of graduating within 4 years.
<i>Visited SSC</i>	Visiting the SSC at least once for Major Advising/Class Planning was associated with <i>increased</i> likelihood of graduating within 4 years.

CONCLUSIONS

I. Persistence through first 2 years of enrollment

The magnitude of the Exp(B) parameter estimate for the Visited SSC (during 1st 24 months) variable (4.96) is more than twice that of the next highest significant variable, URM Status (2.08).

All things equal, *visiting the SSC is a much stronger predictor of persisting to Upper Division status than either a student's Gender, 1st Gen or URM status, or any other demographic trait.*

II. Likelihood of graduating within 4 years

The magnitude of the Exp(B) parameter estimate for the Visited SSC (during 4 years) variable is lower than that of the other significant parameter estimates.

All things equal, *for entering Freshmen who have persisted to their third year, a visit to the SSC appears to be a significant predictor of graduation within 4 years, though not as strong as either High School GPA, Gender, Pell Eligibility, or 1st Generation Status.*

FUTURE DIRECTIONS

The results of this and future studies will be distributed to various on-campus stakeholders, including the SFSU Center for Equity and Excellence in Teaching and Learning (CEETL), the SFSU University Chairs Council, the Academic Senate and its Executive Committee, plus the President and Provost. These are key stakeholders and decision-makers who can help shape the form and access to student advising services.

In addition to conducting similar analyses for other Freshman cohorts and entering cohorts of Community College transfer students, I plan to examine in greater detail whether patterns of advising access might differ for URM or other sub-categories of students, and whether utilization of advising services has a disparate impact on the persistence and graduation rates for these sub-groups.

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