

Are undergraduate students disengaged before they drop out?

Yang Yang
Tongshan Chang
UC Office of the President
Institutional Research Office

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I. Background

- Dropouts
- Engagement vs. Disengagement

I. Background (Cont'd)

Brint and Cantwell (2012)'s definition of academic disengagement:

Four dimensions-

1. Values Disengagement
2. Behavioral Disengagement
3. Alternative Disengagement
4. Interactional Disengagement

Focusing on the development of students' intellectual capacities.

II. Research Questions

- Are college students academically disengaged before they drop out?
- Is there a positive relationship between academic disengagement and dropout?
- How do dropped-out and retained students differ in their academic disengagement?

III. Methods - Data

- UC Undergraduate Experience Survey (UCUES) 2010: response rates ranging from 33% to 53% across campuses
- 2009 Fall entering freshman cohort
- Dropouts after the completion of UCUES 2010 survey
- Dropouts are defined as all those who left UC in the first three years, either dropped out or stopped out or transferred to other institutions
- A final sample of 3,902 students

III. Methods – Data (Cont'd)

Dropout rates of 2009 Fall entering freshman cohort who completed UCUES2010 survey
(N=3,902)

	#	%
1st year dropout	108	2.77
2nd year dropout	203	5.2
3rd year dropout	169	4.33
Three-year dropout	470	12.05

III. Methods – Variable Specification

Components of disengagement measures	Answer scales
Educational Values	
Values: prepare for graduate or professional school	1 – not important
Values: achieve a high GPA	2 – important
Values: develop an in-depth understanding of a specific field of study	3 – very important
Behavior	
Academic irresponsibility	
In this academic year: turned in a course assignment late	1 – never
In this academic year: came to class without completing assigned reading	2 – rarely
In this academic year: came to class unprepared	3 – occasionally
In this academic year: skipped class	4 – somewhat often
	5 – often
	6 – very often
Study Time (sum of 2 items)	
Time allocation: attend classes, discussions sections, or labs (coded to the midpoint)	1 – 0; 2 – 1-5
	3 – 6-10; 4 – 11-15
	5 – 16-20; 6 – 21-25
Time allocation: study and other academic activities outside of class (coded to the midpoint)	7 – 26-30; 8 – more than 30
Reading completion: On average, how much of your assigned course reading have you completed this academic year?	1 – 1-10%, ...
	5 – 41-50%, ...
	10 – 91-100%

III. Methods – Variable Specification (Cont'd)

Components of disengagement measures	Answer scales
Alternative Commitments	
Social Time (sum of 2 items)	1 – 0
Time allocation: socializing with friends (coded to midpoint)	2 – 1-5
Time allocation: partying (coded to the midpoint)	3 – 6-10
Passive Entertainment (sum of 2 items)	4- 11-15
Time allocation: watching TV (coded to midpoint)	5 – 16-20
Time allocation: using computer or smart phone for non-academic purposes (coded to midpoint)	6 – 21-25
Work Time: Time allocation: Total work hours for pay per week (coded to midpoint)	7 – 26-30
	8 – more than 30
Interaction -	
Participation with Faculty	
In this academic year: communicated with a faculty member by email or in person	1 – never
In this academic year: talked with the instructor outside of class about issues and concepts derived from a course	2 – rarely
In this academic year: interacted with faculty during lecture class sections	3 – occasionally
In this academic year: contributed to class discussion	4 – somewhat often
In this academic year: brought up ideas or concepts from different courses during class discussions	5 – often
In this academic year: asked an insightful question in class	6 – very often
In this academic year: found a course so interesting that you did more work than was required	

III. Methods – Variable Specification (Cont'd)

Disengagement measures	Measurement
Values: Low Education Values	Three items; selected "not important" or "important" on all three variables
Behavior	
Academic Irresponsibility	Four items; selected "often" or "very often" on at least three of the items
Low Study Time	Reported less than 18 hours per week spent in class or preparing for class
Low Reading	Reported reading less than 50% of the assigned reading in the last school year
Alternative Commitments	
High Passive Time Use	Reported above the mean hours per week on both watching television and surfing the internet
High Social Time Use	Reported above the mean hours per week on both social activities socializing with friends and partying
High Work Hours	Reported working 16 or more hours per week
Behavior: Low Participation in Courses	Seven items; selected "rarely" or "never" on at least five of the items

III. Methods – Data Analysis

The model

- Includes all the eight disengagement measures
- Includes cases without missing values of all the component items
- Includes control variables:

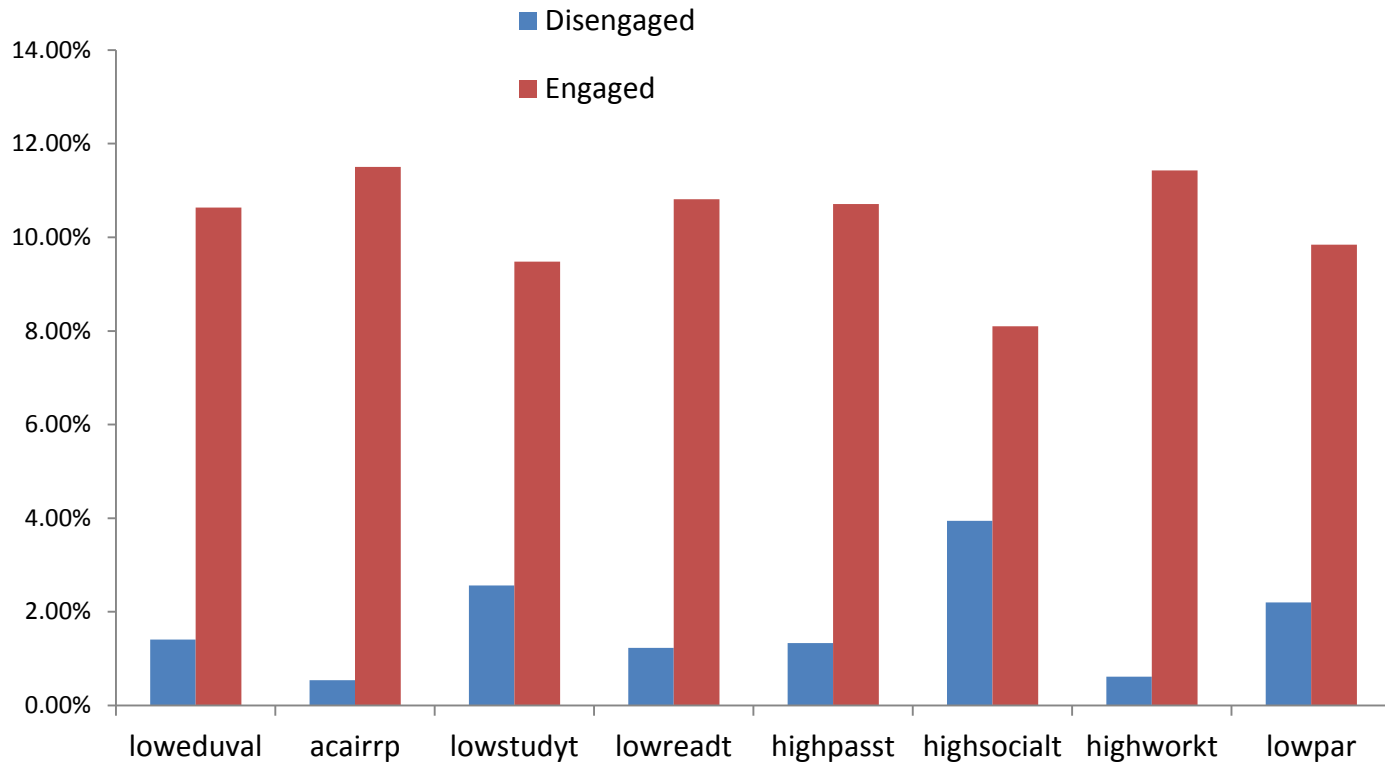
III. Methods – Data Analysis (Cont'd)

Independent Variables

Model 1 (basic)	Model 2	Model 3	Model 4 (Full)
Disengagement	Demographic	Social-economic	Academic achievement
Academic Irresponsibility	Gender	First Language	College CumGPA
Low Study Time	American Indian	First Generation	HSGPA
Low Reading	Black	Family Income	Highest SAT/ACT
High passive time use	Hispanic		
High social time use	Asian		
High work hours	White		
Low participation in courses	Other		
	Unknown		
	International		
	Berkeley		
	Davis		
	Los Angeles		
	Riverside		
	San Diego		
	Santa Cruz		
	Santa Barbara		
	Irvine		
	Merced		

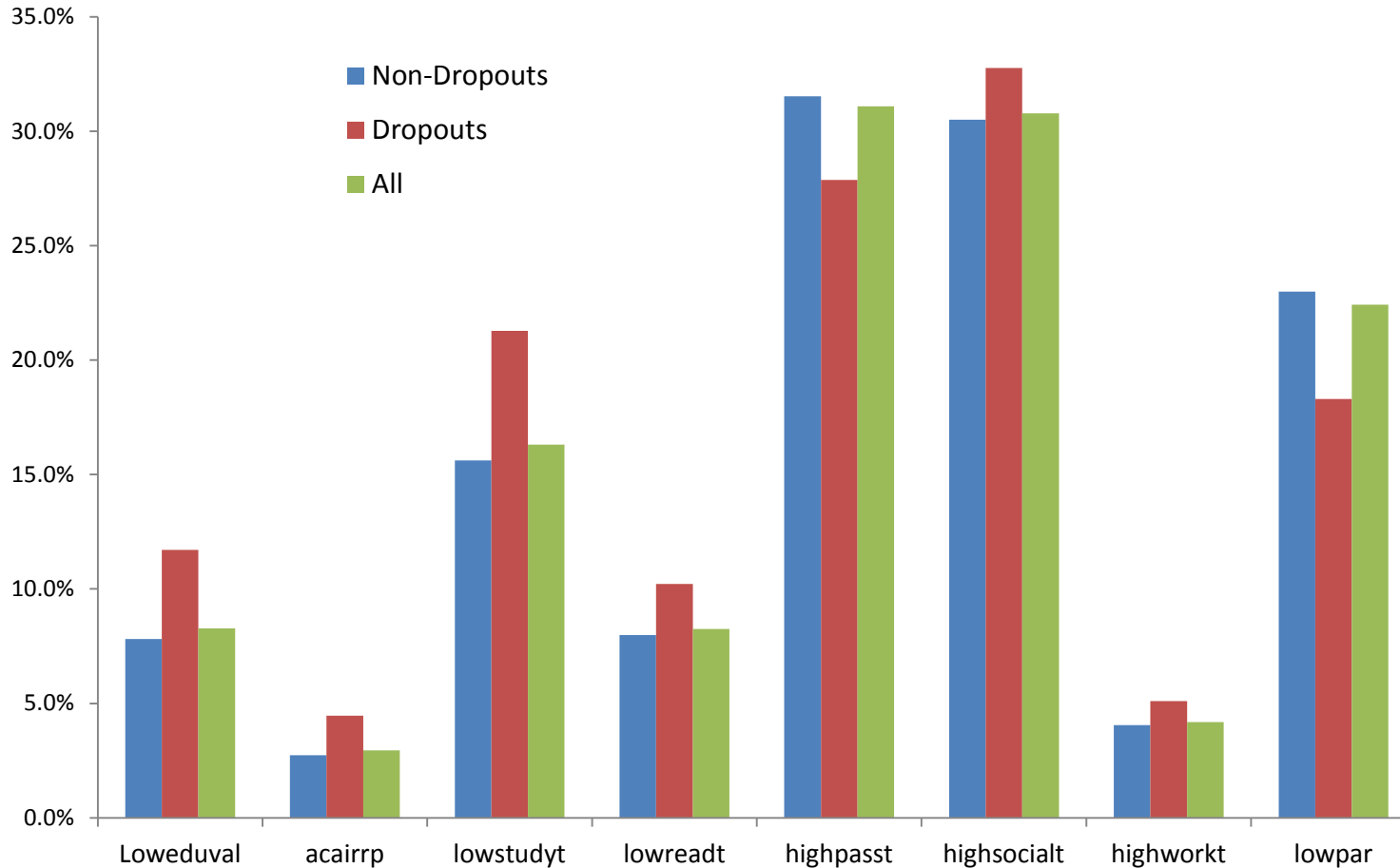
III. Methods – Results

Three-year dropout rates by engagement status



III. Methods – Results (Cont'd)

Size of disengaged population on disengagement measures by dropout status



Results of logistic regression models

Variable	Model 1 (N=3,902)		Model 2 (N=3,901)		Model 3 (N=3,723)		Model 4 (N=3,708)	
	Coeff	p	Coeff	p	Coeff	p	Coeff	p
Disengagement								
Low Education Values	0.4097	0.0101	0.4705	0.0039	0.5604	0.0007	0.3982	0.0249
Academic Irresponsibility	0.3419	0.1875	0.4203	0.1140	0.3527	0.2032	-0.0363	0.9039
Low Study Time	0.3311	0.0085	0.3144	0.0147	0.3262	0.0135	0.2249	0.1059
Low Reading	0.1758	0.3136	0.2113	0.2363	0.1542	0.4032	0.0240	0.9010
High Passive Time	-0.2182	0.0534	-0.2353	0.0414	-0.2128	0.0714	-0.2591	0.0365
High Social Time	0.1135	0.2959	0.0753	0.4998	0.1551	0.1759	0.1028	0.3911
High Work Time	0.1900	0.4055	0.1530	0.5138	0.1080	0.6513	0.0649	0.7955
Low Participation in Courses	-0.3140	0.0142	-0.3077	0.0188	-0.3154	0.0192	-0.3993	0.0043
Demographic								
sex			0.0073	0.9444	-0.0270	0.8020	-0.1547	0.1805
American Indian			-0.8267	0.2289	-0.8284	0.2419	-0.7646	0.3195
Black			-0.1661	0.6765	-0.4171	0.3461	-0.7014	0.1528
Hispanic			-0.3801	0.2288	-0.4891	0.1637	-0.4946	0.2010
Asian			-0.8664	0.0046	-0.9294	0.0059	-0.8217	0.0260
White			-0.6908	0.0249	-0.6874	0.0458	-0.3503	0.3533
Other			-0.9797	0.1075	-0.9756	0.1202	-0.5710	0.3983
Unknown			-0.3440	0.3645	-0.4832	0.2586	-0.2358	0.6085
Berkeley			-0.6895	0.0022	-0.7440	0.0014	-0.5129	0.0368
Davis			-0.1562	0.3860	-0.2450	0.1838	-0.4347	0.0244
Los Angeles			-1.2323	0.0000	-1.2661	0.0000	-1.0098	0.0001
Riverside			0.2448	0.2473	0.2040	0.3413	-0.0773	0.7401
San Diego			-0.3739	0.0500	-0.4003	0.0388	-0.3555	0.0818
Santa Cruz			0.0628	0.7905	0.0568	0.8133	0.1612	0.5238
Santa Barbara			0.0440	0.8256	-0.0757	0.7138	-0.0243	0.9106
Social-economic								
First Language					-0.0772	0.5997	-0.0550	0.7193
First Generation					0.2251	0.0593	-0.0660	0.6187
Family Income					0.0000	0.1939	0.0000	0.1176
Academic achievement								
College CumGPA							-1.4669	0.0000
HSGPA							-0.1500	0.1507
Highest of SAT/ACT							0.0010	0.0299

IV. Conclusions

- Academic disengagement in dimensions of educational values and interactions tend to have more significant effects on college student dropout.
- Behavioral disengagement and alternative involvements present less impact on college student dropout.
- Unexpected findings are 1) high passive time use on watching TV and surfing the internet for fun and 2) low participation in class and with faculty are not positively associated with dropout. These might be because of larger percentage of disengaged non-dropouts than dropouts in our sample.
- The relationship between academic disengagement and college dropout is bilateral.

IV. Conclusions (Cont'd)

- More students are disengaged in the dimension of alternative commitments. Over one-third of the disengaged population either spend time on TV and internet or on socializing with friends and partying.
- About one-fourth of the disengaged population are not actively involved in class activities and interaction with faculty.
- Generally, more dropped-out students are disengaged on those eight measures than their retained peers, but more retained students reported to have higher passive time use and less participation in courses.

Questions?

Thank you!