

Resilience and Adaptation in Undergraduate Education during COVID-19

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Goals

- Develop and disseminate new measures of undergraduate experiences and outcomes
- Inform efforts to improve institutional performance and advance educational equity
- Promote deeper understanding of educational processes and identification of educational value

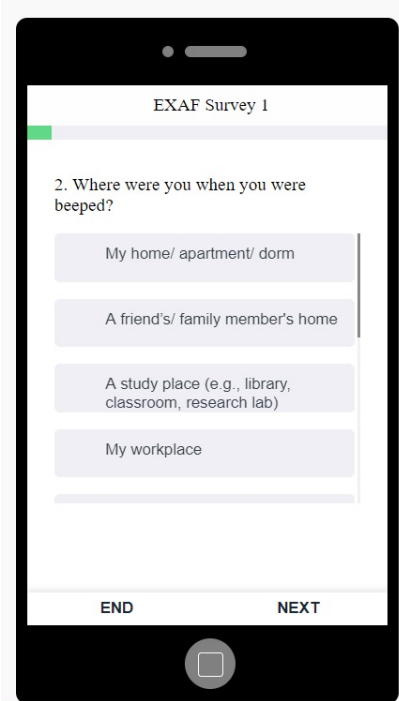
Data

- Administrative data
- Learning management systems data
- Surveys, experiential sampling and performance assessments

Sample for surveys/assessments

- UCI freshmen, transferring juniors & continuing juniors
- Cohorts of 1,250 students each from Fall 2019, Fall 2020, Fall 2021

Sample Data Elements



ETS Platform for Collaborative Assessment and Learning

Log out

Below is information about 3 apartments. Your task is to rank order the apartments based on the strengths and weaknesses (in this first phase, you will do this by yourself; later, you will work with your partners). You will have 10 minutes to study this material and make the ranking.

25% Progress Bar Time left: 09:40 SUBMIT ->

Text Chat Box

Hello everyone!

Hao 02:18 PM
hi

Hao 02:18 PM
how are you

Dessi 02:18 PM
How are you today?

Kirova 02:18 PM
:0

Kirova 02:18 PM
:0

Kirova 02:19 PM
:)

Type to chat... Send

In this first phase, you will rank the apartments by yourself -- PLEASE USE THE FULL 10 MINUTES

Rank-order the 3 apartments from the best to worst, such as ABC (if A is best and C is worst) or CAB (if C is best and B is worst). After you enter your rank order, press SUBMIT.

Apartment A

- Mail and packages are delivered directly to tenants' doors.
- The landlord is offering a rent special that guarantees the same rent for two years.
- The apartment includes free wi-fi.
- A celebrity once lived in the building.
- The exterior of the building is brick.
- The street on which the building stands is named "Tulip Street".
- The \$200 pet fee paid at the start of the lease is non-refundable.
- Tenants are not permitted to paint their walls
- The only available parking for tenants' cars is on street.

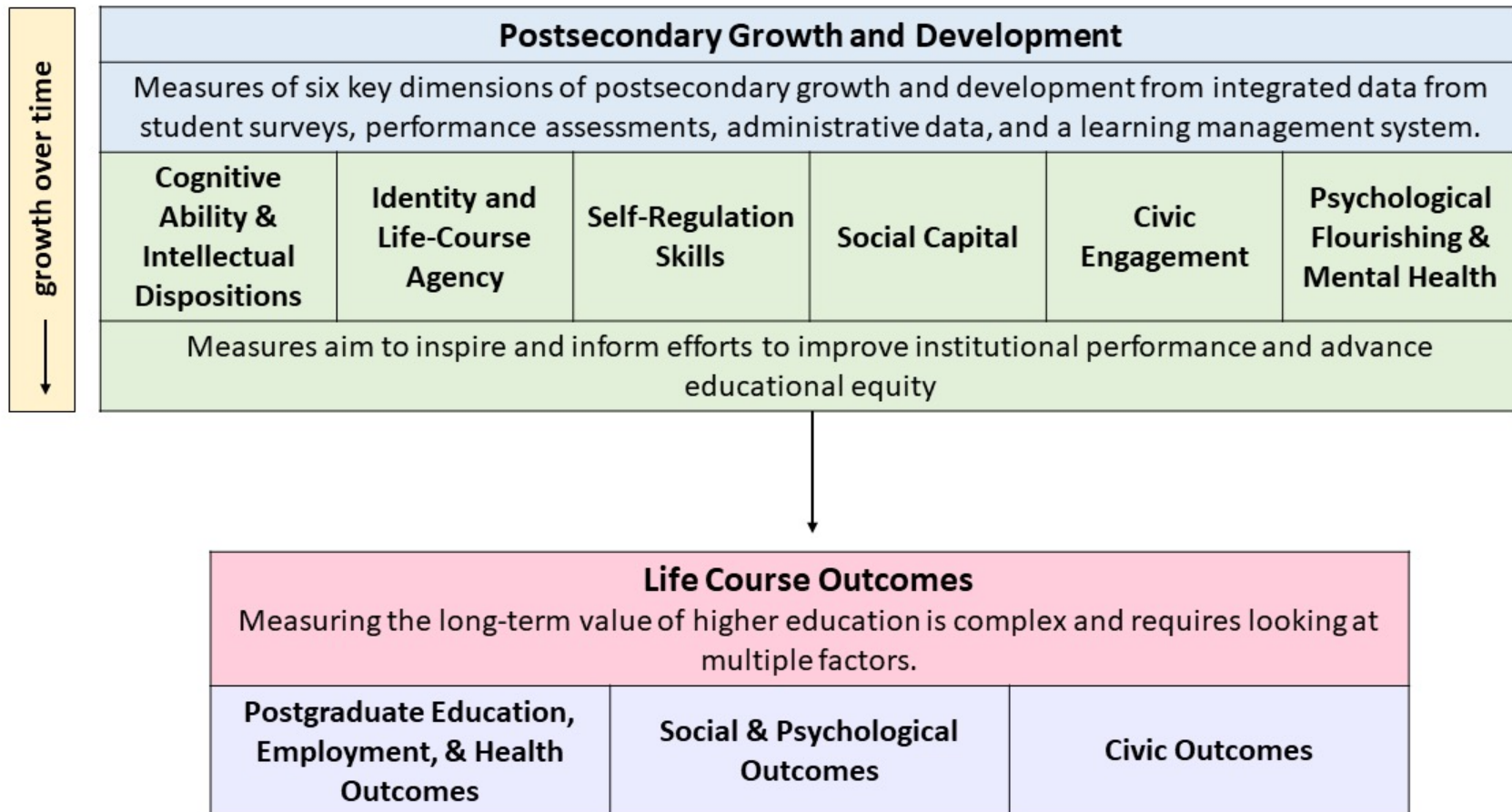
Apartment B

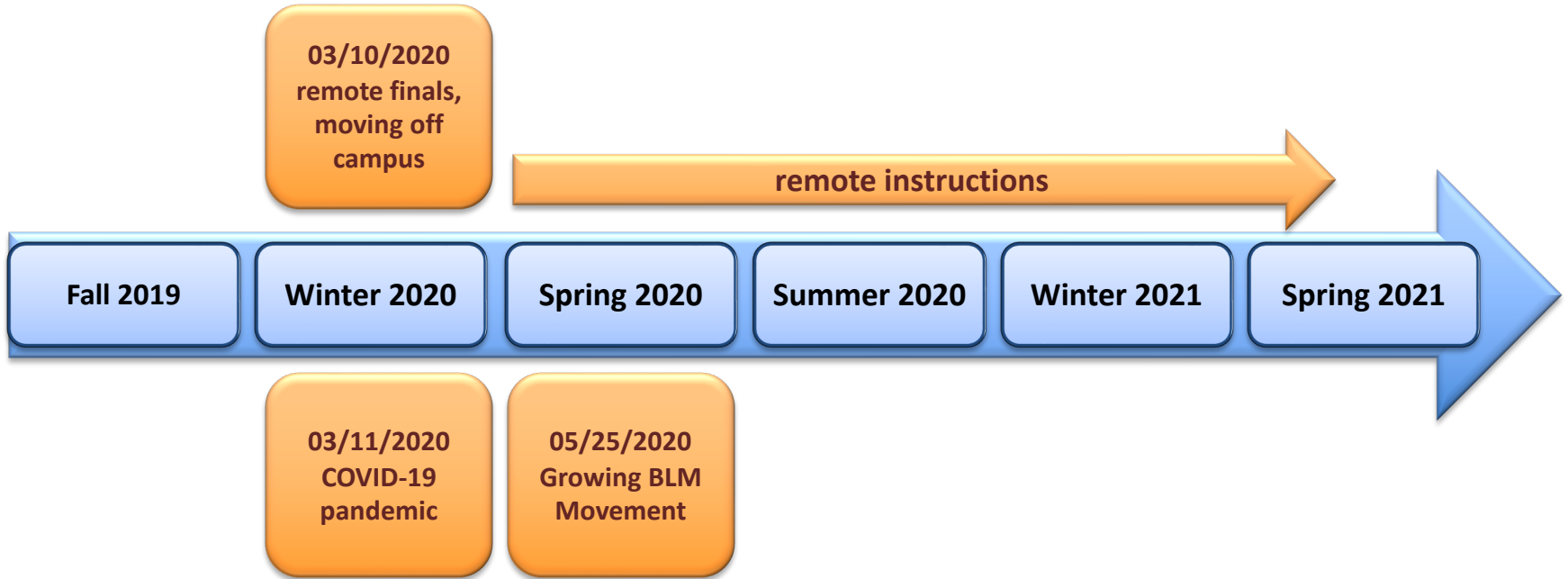
- The apartment has central airconditioning.
- The \$250 pet deposit is refundable (minus any damages) at the end of the lease.
- A washer and dryer is included in the apartment.
- Within walking distance of school and work for all roommates.
- The landlord offers 24-hour maintenance service.
- The supermarket and shopping district are close by.
- The hallways and stairwells are painted green and white.
- The landlord usually raises the rent by 20 percent after the first year's lease.
- Closet space is limited.

Sample Survey Items

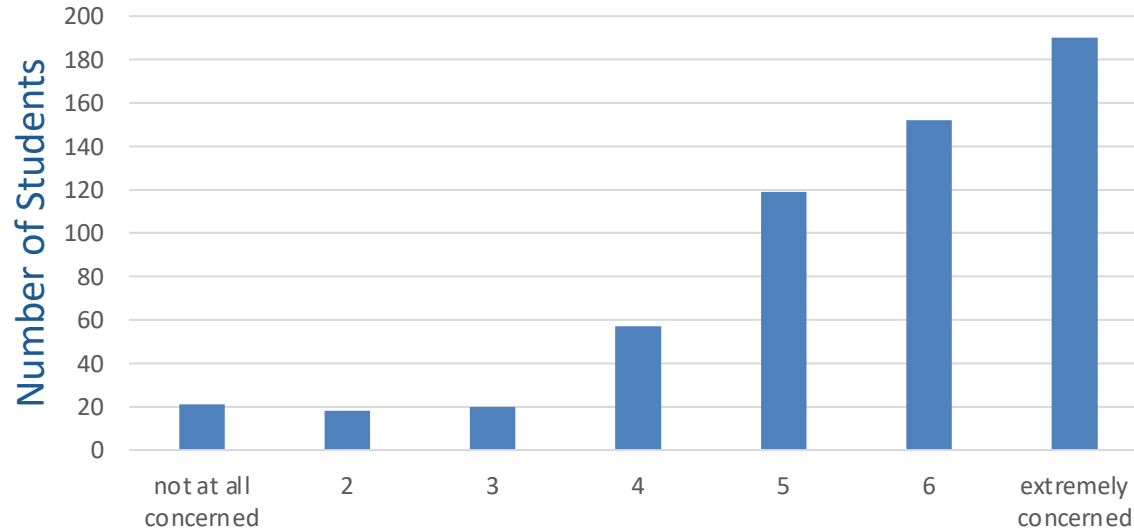
- How much was the knowledge discussed in this course beneficial to your future career?
- How important is it to you to have a job that gives you lots of opportunities to be helpful to others?
- How much did this course make you think of possible careers in the field?

Next Generation Undergraduate Success Measurement Project Framework

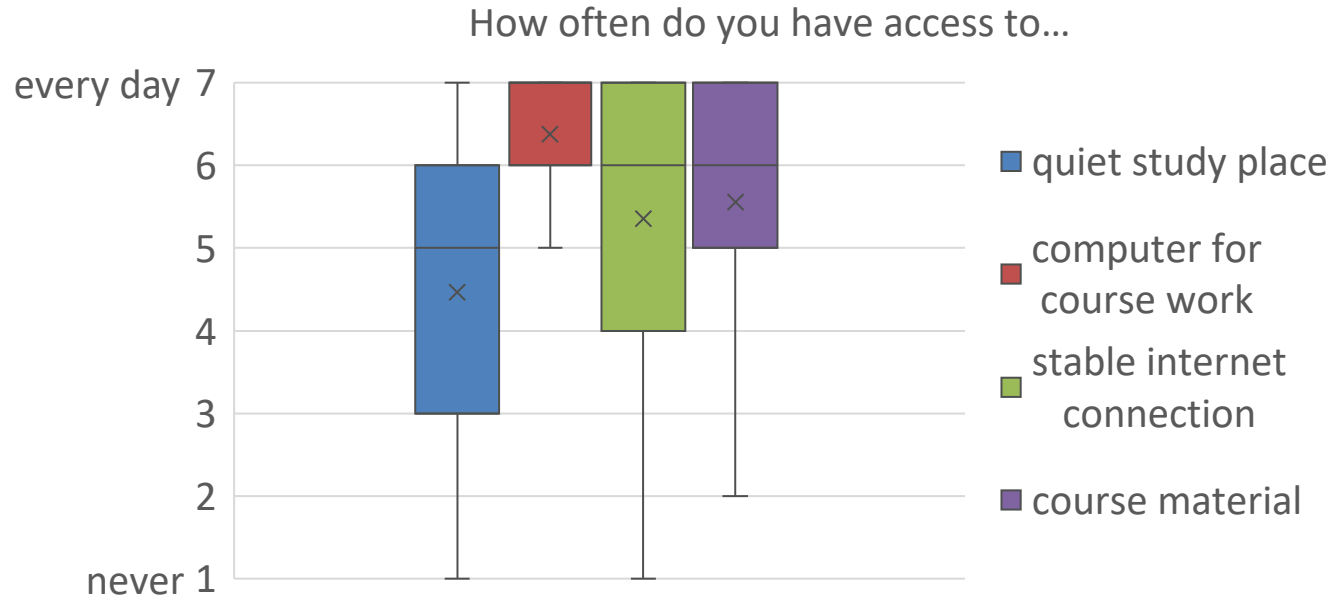




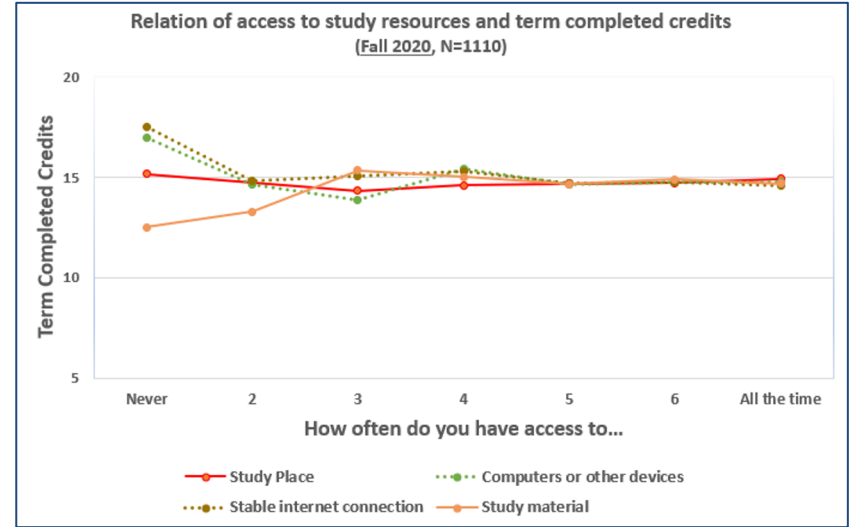
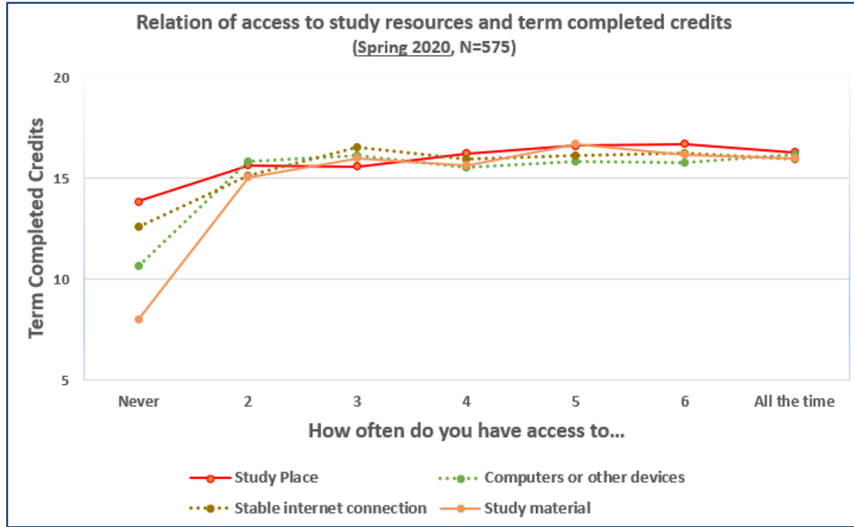
Concerns that the shift to remote classes will cause interruptions to academic progress



Note. $N = 577$; Frequencies. $M = 5.5$, $SD = 1.6$

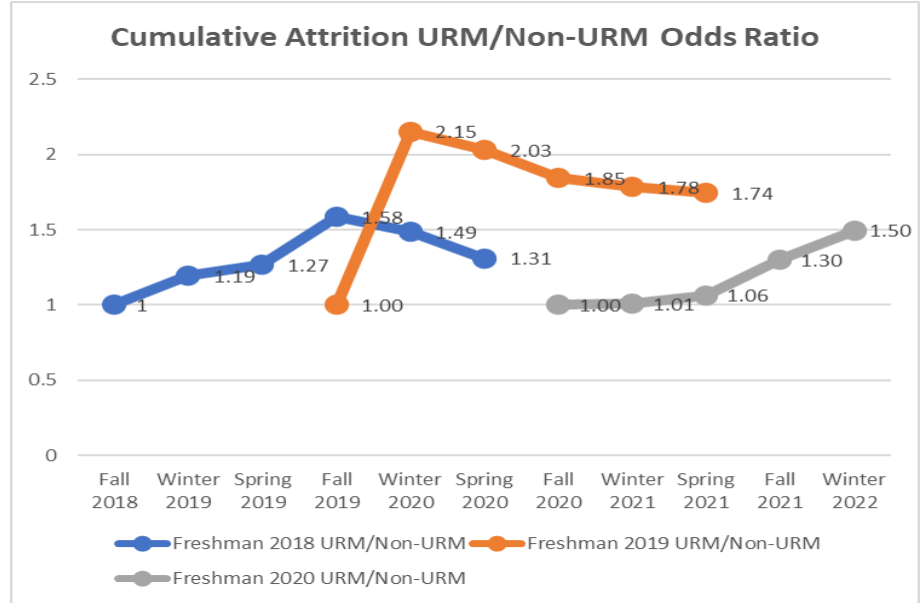
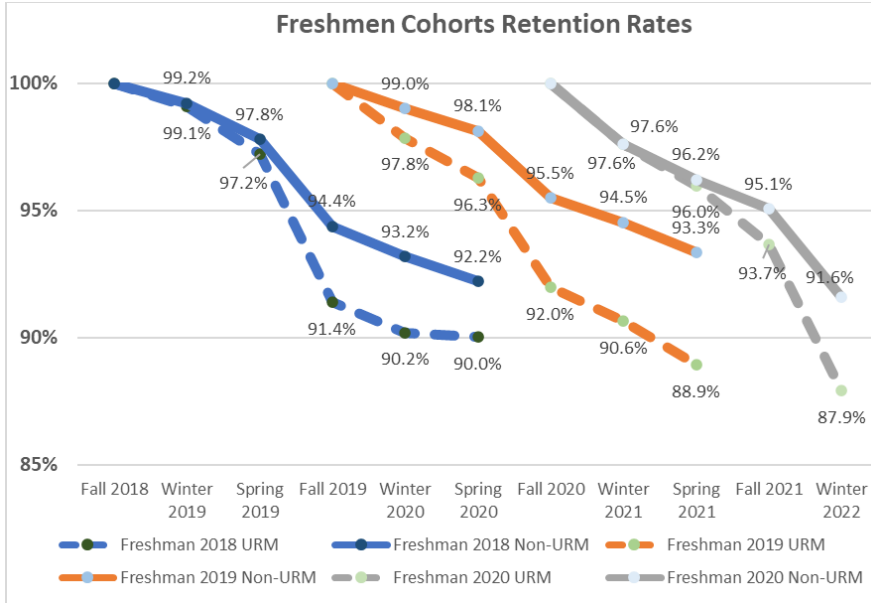


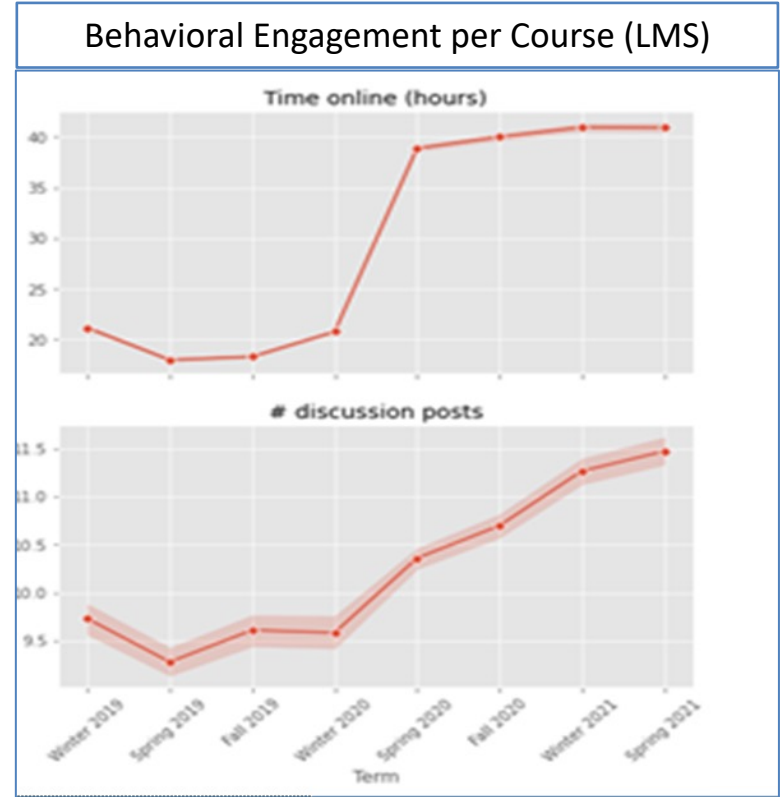
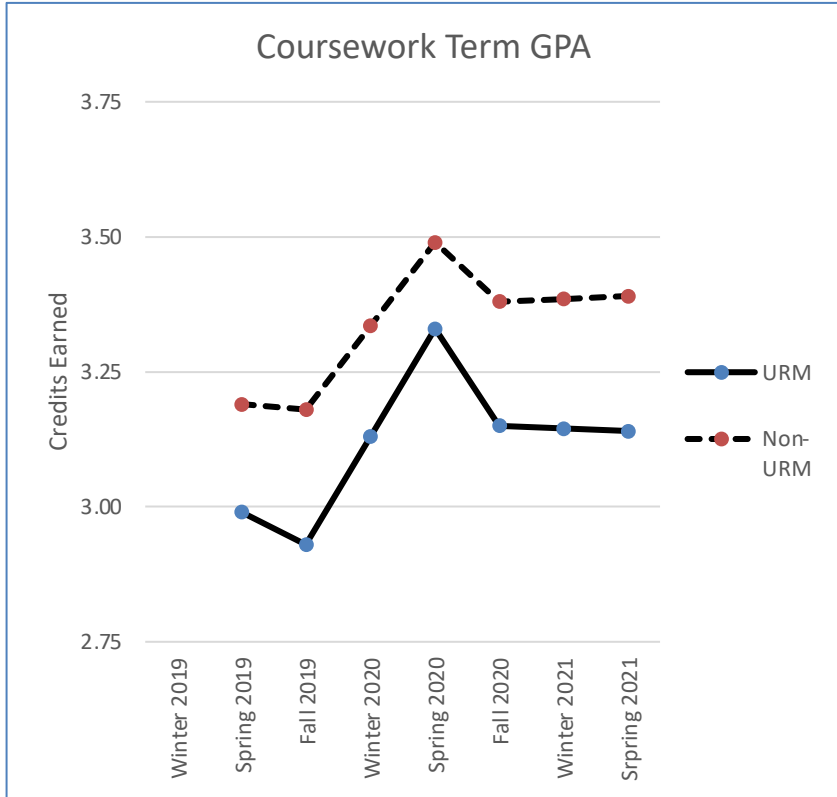
Note. $N = 574$



Correlation Table								
How often do you have access to...	Study Place	standard error	Computers or other devices	standard error	Stable internet connection	standard error	Study material	standard error
Term Completed Credits (Spring 2020)	0.164***	0.041	0.078	0.042	0.032	0.042	0.053	0.042
Term Completed Credits (Fall 2020)	0.037	0.030	0	0.030	-0.056	0.03	-0.011	0.03

Standard errors in parentheses * p<0.05 ** p<0.01 *** p<0.001





% of class time used for different activities in Fall 2019 and Fall 2020

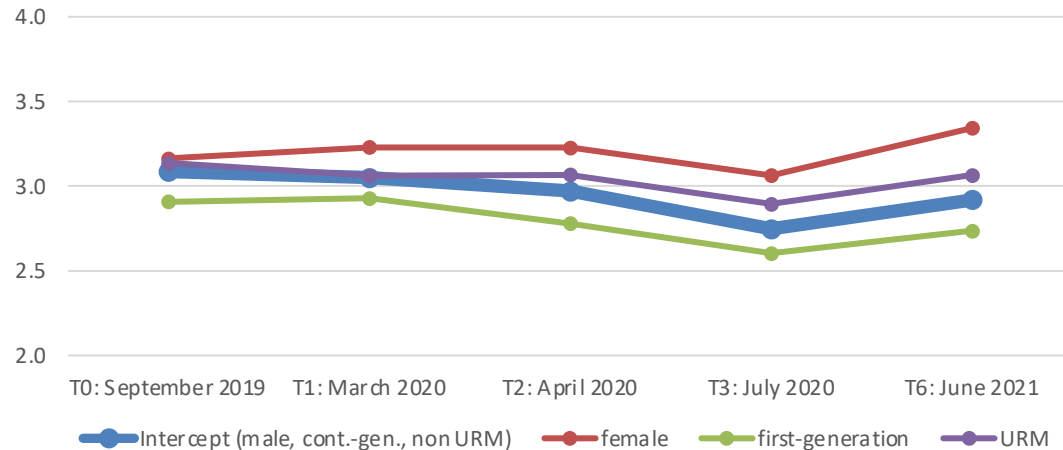
	Fall 2019	Fall 2020	Difference
Lecture	79.07	57.12	-21.95
Groupwork	4.54	3.57	-0.97
Discussion/Other Class Activities	16.39	39.3	22.91
Study Time	6.51	8.84	2.33

Note. 1. Amount of Class time on Lecture, Groupwork, Discussions/ other: How much of the time while you were in class for your course was spent on: Instructor lecture; Group projects; Class discussion; Other activities in %

2. Studying (out of class): How many hours did you spend studying out of class for your course in a typical week?

	T0 stress symptoms		change T0-T1		change T0-T2		change T0-T3		change T0-T6					
	estimate	(SE)	estimate	(SE)	estimate	(SE)	estimate	(SE)	estimate	(SE)				
Intercept	3,09	(0,07)	***	-0,04	(0,08)	-0,12	(0,09)	-0,34	(0,09)	***	-0,17	(0,09)	*	
female	0,08	(0,07)		0,10	(0,08)	0,18	(0,09)	*	0,24	(0,09)	**	0,35	(0,09)	**
first-generation	-0,18	(0,07)	*	0,06	(0,08)	-0,01	(0,09)		0,03	(0,08)		-0,01	(0,08)	
urm	0,05	(0,08)		-0,04	(0,09)	0,05	(0,09)		0,10	(0,09)		0,09	(0,09)	

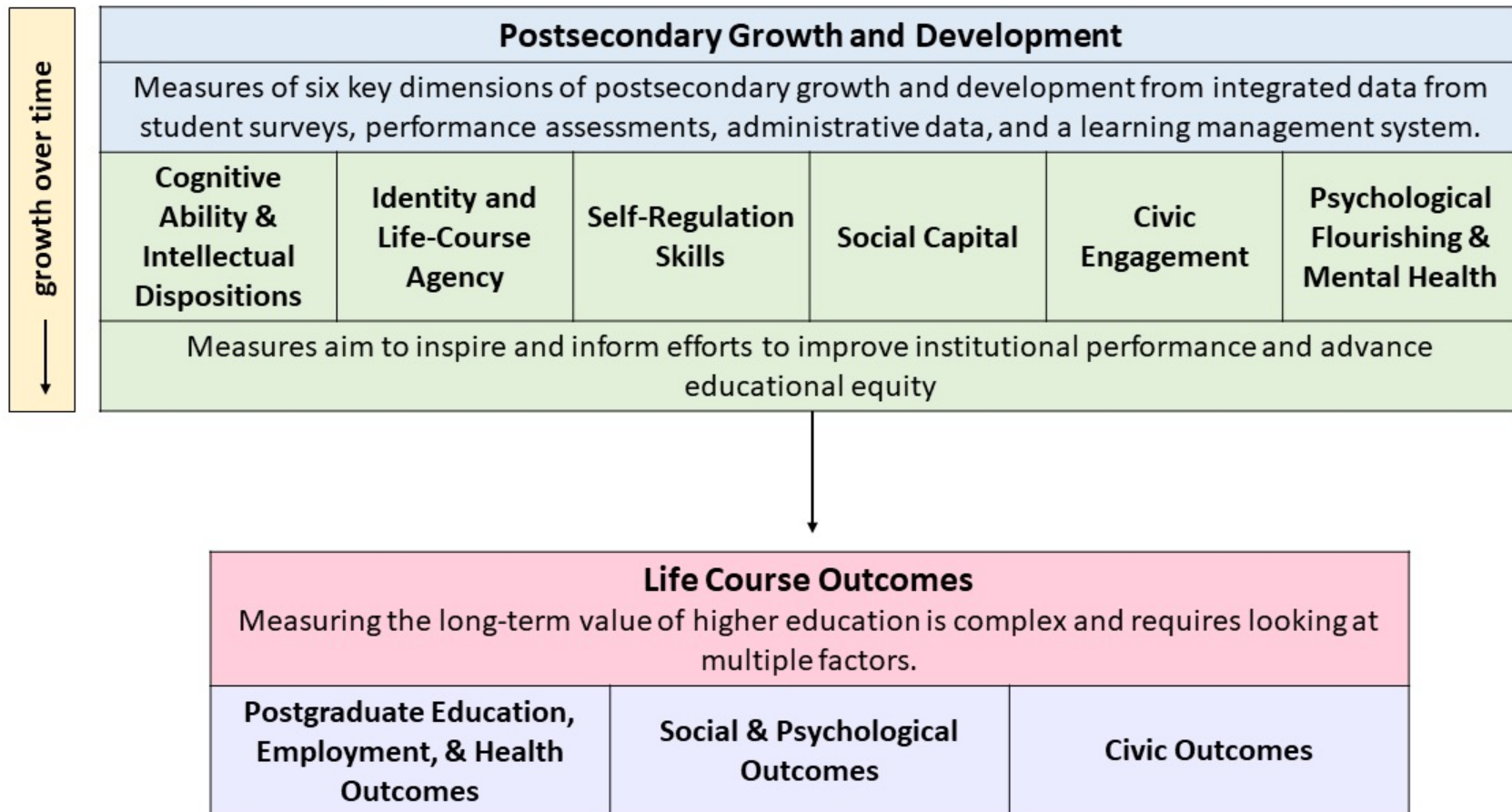
Stress Symptoms



- baseline models --> change relative to first time point
- unstandardized results
- only students included, who completed at least 3 out of 7 surveys (N=596)
- FIML to account for missing data
- *** p < .001, ** p < .01, * p < .05, + p < .10
- 4 items from K10 scale: During the last 7 days, how often did you feel (1 – none of the time to 5 – all of the time):
 - Nervous
 - So nervous that nothing could calm you down
 - Restless or fidgety
 - So restless you could not sit still

- Project has demonstrated the feasibility of integrating survey, performance assessment, administrative, and LMS data
- University and student adaptations have proven largely effective in promoting continued academic progress
- Student development has multiple dimension. Future research will explore how students during COVID-19 manifested continued growth in some domains, but potentially suffered in others.

Next Generation Undergraduate Success Measurement Project Framework



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