## Microcommitments: The Effect of Small Commitments on Student Success

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Control Group	Treatment Group				
Content delivered via text message every A link to the content is delivered via text message					
weekday morning at 9am.	day. In the morning it includes an "I commit" button and in				
	the afternoon, it includes an "I did it" button.				
9am Text Message	Commitment Device				
< 484848 😪 🔟	9am Text Message	4pm Text Message			
	Today's Activity-Production 3:	Did you do <u>it?-</u> Production 3:			
Production 3	http://prohab.it/kl1sxf4	http://prohab.it/aun5hy3			
10:00 AM, Oct 23	Production 3	Production 3			
Save"Knowledge is the only instrument of production that is not subject to diminishing returns." ~ John Maurice ClarkThe Law of Diminishing Returns states that a decrease in output can be observed if a single input is increased over time.Think about how this relates to your studying. As you begin studying for an exam, how much new information do you absorb in the first	<image/> <text><text><text><text><text></text></text></text></text></text>	<image/> <text><text><text><text><text></text></text></text></text></text>			
The twentieth hour?	Social Feed For Accountability				
	E Feed Stories				
	All time 👻				
	I was always s sorry for myse	1 grateful for? • omebody who felt quite If, what I had not got ny friends More 7 Likes			
	Student : Just started Pr Uke	2 16h ago roFocus (Level 1)			
	Student : Committed to* ProFocus (Lev	21st August Tech timeout*			
	Committed to " ProFocus (Lev	6:46AM Today's Activity" el Name) (\$12)			
	Student : Just started Pr	2 roFocus (Level Name)			

## Online Appendix Control and Treatment Experience

Image, "A twenty-four-year-old woman counting dollar bills", by Sharon McCutcheon.

	<u>Total Face-to-Face Online</u>					
	Definition	Mean	Mean	Mean		
		(s.d.)	(s.d.)	(s.d.)		
Dependent Variables						
Exam After	Score on exam immediately following	81.14	82.35	79.10		
	experiment, percentage	(13.36)	(10.91)	(16.53)		
Relative Exam	(Student Exam After Score – Class Mean	0.010	0.010	0.009		
After	Exam After)/Class Mean Exam After	(0.154)	(0.131)	(0.186)		
Explanatory Variables						
Microcommitments	=1 if student was offered microcommitments	0.532	0.530	0.535		
	with social accountability	(0.499)	(0.500)	(0.499)		
Exam Before	Percentage score on exam before the	85.41	87.15	82.46		
	experiment	(12.42)	(10.11)	(15.15)		
Relative Exam	(Student Exam Before Score – Class Mean	0.002	0.000	0.006		
Before	Exam Before)/Class Mean Exam Before	(0.138)	(0.112)	(0.174)		
Prior Econ	=1 if has taken a college-level micro- or	0.279	0.300	0.243		
	macroeconomic course in a prior semester	(0.449)	(0.459)	(0.429)		
High Perform	=1 if prior GPA > 3.75 or SAT score > 1450	0.571	0.777	0.222		
	or ACT score > 32	(0.495)	(0.416)	(0.416)		
Required	=1 if the course is required for major	0.769	0.748	0.804		
		(0.422)	(0.434)	(0.398)		
High Study Hours	=1 if student studies at least 7 hours per week	0.095	0.105	0.079		
		(0.294)	(0.306)	(0.271)		
Female	=1 if female	0.468	0.421	0.549		
		(0.499)	(0.494)	(0.498)		
Nonwhite	=1 if nonwhite	0.304	0.212	0.460		
		(0.460)	(0.409)	(0.499)		
Financial Aid	=1 if student receives financial aid	0.389	0.366	0.428		
		(0.488)	(0.482)	(0.495)		
High Efficacy Type	=1 the student's responses to the MSLQ self-	0.566	0.550	0.593		
_ • • • • •	efficacy questions were above average	(0.496)	(0.498)	(0.492)		
High Procrastination	=1 if the student's IPS responses were above	0.517	0.477	0.584		
-	the participant average	(0.500)	(0.500)	(0.493)		

## Table 1. Variable Definitions and Descriptive Statistics By Course Type

	Dependent Variable: Relative Exam After							
	To	tal	Face-To-Face		Hybrid		Online	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Microcommitments	0.017**	0.015**	0.001	-0.001	0.032*	0.040**	0.054***	0.044**
	(0.008)	(0.008)	(0.009)	(0.009)	(0.019)	(0.019)	(0.021)	(0.021)
Exam Before	0.576***	0.526***	0.535***	0.469***	0.690***	0.667***	0.614***	0.559***
	(0.028)	(0.029)	(0.038)	(0.042)	(0.124)	(0.129)	(0.049)	(0.052)
Prior Econ		-0.003		-0.001		-0.002		-0.005
		(0.010)		(0.011)		(0.034)		(0.022)
High Perform		0.042***		0.046***		0.027		0.064**
-		(0.010)		(0.011)		(0.022)		(0.022)
Required		0.029***		-0.021**		-0.044**		-0.068**
-		(0.009)		(0.010)		(0.021)		(0.033)
High Study Hours		-0.004		-0.010		-0.064		0.014
<b>c r</b>		(0.013)		(0.014)		(0.049)		(0.034)
Female		0.0004		-0.006		0.034*		-0.014
		(0.008)		(0.009)		(0.019)		(0.021)
Nonwhite		-0.002		0.012		-0.049**		-0.008
		(0.009)		(0.011)		(0.020)		(0.021)
Financial Aid		-0.020**		-0.014		0.005		-0.040*
		(0.008)		(0.009)		(0.021)		(0.021)
Adjusted R <sup>2</sup>	0.276	0.296	0.230	0.250	0.180	0.211	0.358	0.385
Sample Size	1155	1155	727	727	152	152	276	276

Table 2. Relative	Student Performance	ce By Class Type

Standard errors are in parentheses. \*, \*\* and \*\*\* indicate significance at the 10%, 5% and 1% levels, respectively

	Dependent Variable: Relative Exam After							
	By Procrastination				By Self-Efficacy			
	High	High	Low	Low	High	High	Low	Low
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Microcommitments	0.052***	0.051**	0.037*	0.048**	0.051***	0.051***	0.034	0.032
	(0.020)	(0.020)	(0.022)	(0.022)	(0.019)	(0.018)	(0.025)	(0.025)
Exam Before	0.568***	0.549***	0.675***	0.602***	0.669***	0.625***	0.479***	0.449***
	(0.059)	(0.061)	(0.062)	(0.064)	(0.054)	(0.056)	(0.072)	(0.074)
Prior Econ		-0.020		0.024		-0.026		0.038
		(0.024)		(0.027)		(0.022)		(0.031)
High Perform		0.029		0.061**		0.046**		0.024
-		(0.026)		(0.027)		(0.022)		(0.035)
Required		-0.048*		-0.057*		-0.053**		-0.046
		(0.026)		(0.034)		(0.025)		(0.032)
High Study Hours		-0.012		0.016		-0.021		0.055
		(0.044)		(0.035)		(0.032)		(0.053)
Female		0.007		0.003		-0.010		0.047*
		(0.021)		(0.022)		(0.019)		(0.026)
Nonwhite		-0.002		-0.056**		-0.022		-0.030
		(0.021)		(0.023)		(0.019)		(0.024)
Financial Aid		-0.013		-0.038*		-0.012		-0.039
		(0.021)		(0.025)		(0.020)		(0.025)
Adjusted R <sup>2</sup>	0.278	0.248	0.395	0.441	0.389	0.411	0.201	0.218
Sample Size	250	250	178	178	254	254	174	174

## Table 3. Online and Hybrid Student Performance By Procrastination and Self-Efficacy

Standard errors are in parentheses. \*, \*\* and \*\*\* indicate significance at the 10%, 5% and 1% levels, respectively