Predicting College Success: How Do Different High School Assessments Measure Up?

SUPPLEMENTAL TABLES November 2019

The tables presented here supplement the report, *Predicting College Success: How Do Different High School Assessments Measure Up?*, released by Policy Analysis for California Education (PACE) in March 2019.¹

Tables S1- S4 include results from our updated analysis using a sample that includes California 11th grade students who took the SBAC in the 2015-16 academic year and took the redesigned SAT during high school and then subsequently applied and enrolled as first-time freshmen in 2017–18 at one of the nine UC campuses.^{2,3} All analyses use the identical matching procedure and methodology as described in the original report.

¹ The original report, authored by Michal Kurlaender and Kramer Cohen can be found at: <u>https://edpolicyinca.org/publications/predicting-college-success-how-do-different-high-school-assessments-measure-2019</u>

² A redesigned SAT was launched in March 2016. The new test has two sections: Math and Evidence-based Reading and Writing. The total score range is 400–1600, with an optional essay scored separately. The tests are administered on paper and students have 3 hours (plus 50 minutes for the optional essay) to complete the exam. ³ Using student name, date of birth, gender, and high school attended, we are able to match 85 percent of Fall 2016 UC applicants from California public high schools, to the 11th grade assessment data. Sample sizes are smaller because some students still applied their SAT scores from the prior administration; thus, this analysis represents a more select sample of applicants that had valid scores on the redesigned SAT.

Panel A: First-Year GPA (N = 18,156)								
1 2 3 4								
HSGPA	.48 (.36)	.48 (.36)	.52 (.42)	.54 (.45)				
SAT	.53 (.46)	.54 (.46)	.54 (.47)	.54 (.47)				
SBAC	.48 (.40)	.49 (.40)	.51 (.43)	.51 (.44)				
HSGPA & SAT	.60 (.51)	.60 (.51)	.60 (.51)	.61 (.52)				
HSGPA & SBAC	.56 (.46)	.56 (.46)	.58 (.48)	.59 (.49)				
HSGPA, SAT, & SBAC	.60 (.51)	.60 (.51)	.60 (.52)	.61 (.52)				
Campus FE	Ν	Y	Y	Y				
SED	Ν	Ν	Y	Y				
HS CCI	N	N	N	Y				

Table S1. Multiple Correlation Coefficients, Adjusted (Raw) for UC Analysis

			,,	
	1	2	3	4
HSGPA	.18 (.13)	.18 (.14)	.19 (.15)	.20 (.16)
SAT	.18 (.15)	.19 (.16)	.19 (.16)	.19 (.16)
SBAC	.18 (.15)	.19 (.16)	.19 (.16)	.20 (.16)
HSGPA & SAT	.21 (.17)	.22 (.18)	.22 (.18)	.22 (.18)
HSGPA & SBAC	.21 (.17)	.21 (.17)	.21 (.17)	.22 (.18)
HSGPA, SAT, & SBAC	.21 (.17)	.22 (.18)	.22 (.18)	.22 (.18)
Campus FE	N	Y	Y	Y
SED	N	N	Y	Y
HS CCI	N	N	N	Y

Panel B: Persistence to Second Year (N = 21,755)

Notes: This table updates Table 5 in the original report. The sample size is smaller relative to tables in the original report because this sample includes only students who participated in the redesigned SAT. All correlation coefficients presented include UC campus differences (fixed effects), high school CCI levels, and a socioeconomic disadvantage (SED) indicator. Panel A does not include UC Riverside due to data availability.

Table S2. Multiple Correlation Coefficients, Adjusted (Raw) for UC Analysis, byRace/Ethnicity

	A II	Race					
	(N = 18 156)	Asian Am/PI	Black/Af Am	Latinx	White	Other	
	(11 10)100)	(N = 5,565)	(N = 666)	(N = 7,219)	(N = 4,089)	(N = 617)	
HSGPA	.54 (.45)	.53 (.43)	.50 (.39)	.44 (.34)	.50 (.41)	.55 (.47)	
SAT	.54 (.47)	.53 (.46)	.48 (.38)	.43 (.36)	.47 (.40)	.56 (.50)	
SBAC	.51 (.44)	.51 (.44)	.49 (.39)	.42 (.34)	.41 (.35)	.50 (.46)	
HSGPA & SAT	.61 (.52)	.60 (.51)	.56 (.46)	.51 (.42)	.55 (.47)	.61 (.54)	
HSGPA & SBAC	.59 (.49)	.59 (.49)	.57 (.46)	.50 (.40)	.52 (.43)	.58 (.51)	
HSGPA, SAT, & SBAC	.61 (.52)	.61 (.51)	.58 (.48)	.52 (.43)	.55 (.47)	.62 (.55)	

Panel A: First-Year GPA

Panel B: Persistence to Second Year Race All Asian Am/PI Black/Af Am White Other Latinx (N = 21,755)(N = 6,689) (N = 794) (N = 8,958) (N = 4,906) (N = 705) HSGPA .20 (.16) .19 (.15) .25 (.20) .18 (.14) .20 (.18) .28 (.25) SAT .19 (.16) .17 (.13) .23 (.19) .18 (.14) .19 (.18) .27 (.25) SBAC .20 (.16) .17 (.13) .22 (.19) .18 (.14) .20 (.18) .25 (.23) **HSGPA & SAT** .22 (.18) .26 (.22) .29 (.27) .21 (.17) .20 (.16) .21 (.19) **HSGPA & SBAC** .22 (.18) .26 (.21) .28 (.25) .21 (.16) .21 (.16) .21 (.19) HSGPA, SAT, & SBAC .22 (.18) .27 (.23) .22 (.19) .21 (.17) .21 (.17) .30 (.27)

Notes: This table updates Table 6 in the original report. The sample size is smaller relative to tables in the original report because this sample includes only students who participated in the redesigned SAT. All correlation coefficients presented include UC campus differences (fixed effects), high school CCI levels, and a socioeconomic disadvantage (SED) indicator. Panel A does not include UC Riverside due to data availability.

Table S3. Multiple Correlation Coefficients, Adjusted (Raw) for UC Analysis, bySocioeconomic Disadvantage

	All	Socioeconomic Disadvantaged Status				
	(N = 18,156)	NOT SED (N = 9,575)	SED (N = 8,581)			
HSGPA	.54 (.45)	.52 (.42)	.46 (.35)			
SAT	.54 (.47)	.52 (.45)	.45 (.37)			
SBAC	.51 (.44)	.47 (.40)	.43 (.35)			
HSGPA & SAT	.61 (.52)	.59 (.50)	.53 (.43)			
HSGPA & SBAC	.59 (.49)	.56 (.46)	.52 (.42)			
HSGPA, SAT, & SBAC	.61 (.52)	.59 (.50)	.54 (.44)			

Panel A: First-Year GPA

Panel B: Persistence to Second Year

	All	Socioeconomic Disadvantaged Status				
	(N = 21,755)	NOT SED (N =11,196)	SED (N =10,559)			
HSGPA	.20 (.16)	.17 (.15)	.21 (.16)			
SAT	.19 (.16)	.17 (.15)	.20 (.16)			
SBAC	.20 (.16)	.17 (.15)	.20 (.16)			
HSGPA & SAT	.22 (.18)	.19 (.16)	.23 (.18)			
HSGPA & SBAC	.22 (.18)	.19 (.16)	.23 (.18)			
HS GPA, SAT, & SBAC	.22 (.18)	.19 (.17)	.24 (.19)			

Notes: This table updates Table 7 in the original report. The sample size is smaller relative to tables in the original report because this sample includes only students who participated in the redesigned SAT. All correlation coefficients presented include UC campus differences (fixed effects), high school CCI levels, and a socioeconomic disadvantage (SED) indicator. Panel A does not include UC Riverside due to data availability.

Table S4. Multiple Correlation Coefficients, Adjusted (Raw) for UC Analysis, by High SchoolCCI Levels

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	A II	School CCI Levels					
	(N = 18,156)	Very	Low	Medium	High	Very High	
		Low*	(N = 3,155)	(N = 8,279)	(N=4,442)	(N = 2,231)	
HSGPA	.54 (.45)		.47 (.34)	.50 (.39)	.52 (.43)	.55 (.49)	
SAT	.54 (.47)		.46 (.36)	.50 (.42)	.52 (.44)	.56 (.52)	
SBAC	.51 (.44)		.45 (.36)	.46 (.37)	.49 (.42)	.51 (.47)	
HSGPA & SAT	.61 (.52)		.54 (.43)	.57 (.47)	.59 (.50)	.61 (.55)	
HSGPA & SBAC	.59 (.49)		.54 (.42)	.55 (.44)	.57 (.48)	.58 (.52)	
HSGPA, SAT, & SBAC	.61 (.52)		.55 (.44)	.57 (.47)	.59 (.51)	.61 (.55)	

Panel A: First-Year GPA

Panel B: Persistence to Second Year

	All (N = 21,755)	School CCI Levels					
		Very	Low	Medium	High	Very High	
		Low*	(N = 3,812)	(N=9,868)	(N = 5,328)	(N = 2,694)	
HSGPA	.20 (.16)		.20 (.15)	.19 (.14)	.19 (.17)	.17 (.15)	
SAT	.19 (.16)		.17 (.13)	.18 (.15)	.19 (.17)	.19 (.16)	
SBAC	.20 (.16)		.17 (.13)	.18 (.15)	.19 (.17)	.19 (.16)	
HSGPA & SAT	.22 (.18)		.22 (.17)	.21 (.17)	.21 (.18)	.20 (.17)	
HSGPA & SBAC	.22 (.18)		.22 (.17)	.21 (.17)	.21 (.19)	.20 (.17)	
HSGPA, SAT, & SBAC	.22 (.18)		.22 (.17)	.22 (.17)	.21 (.19)	.21 (.19)	

Notes: This table updates Table 8 in the original report. The sample size is smaller relative to tables in the original report because this sample includes only students who participated in the redesigned SAT. All correlation coefficients presented include UC campus differences (fixed effects), high school CCI levels, and a socioeconomic disadvantage (SED) indicator. Panel A does not include UC Riverside due to data availability. *Insufficient sample size to compute for Very Low CCI schools.