

Modernizing Admissions

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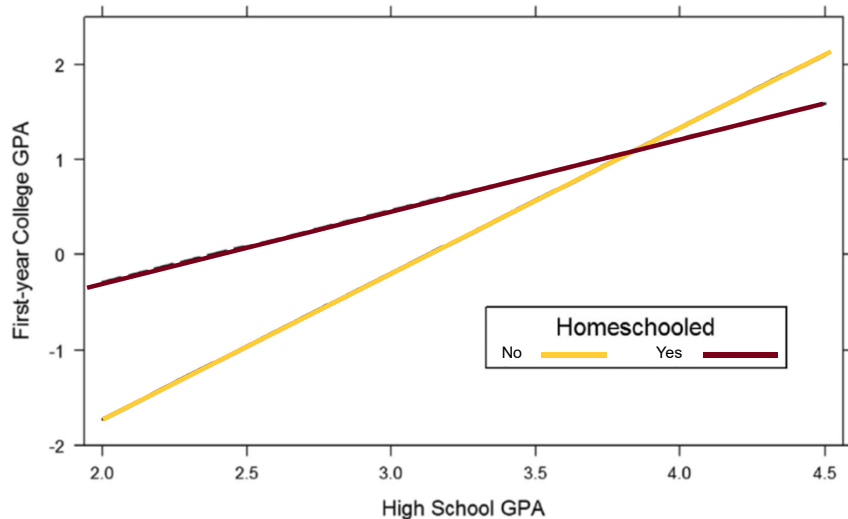



What we are dealing with

- Performance in college is complex and multi-dimensional.
- Multiple attributes are needed to predict these outcomes.
- All of the predictors commonly used in admissions have strengths and weaknesses.
- These need to be recognized and addressed if we want to modernize admissions.

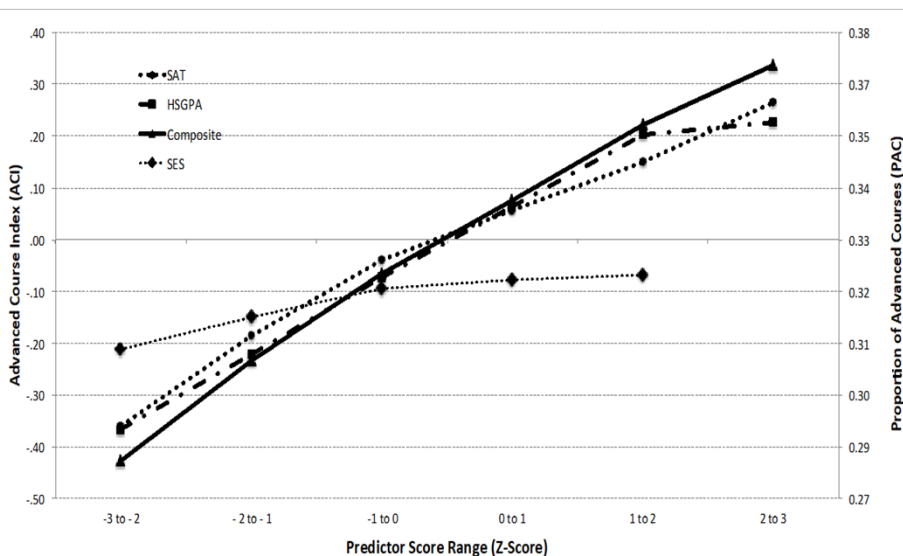


Homeschooled vs. Traditional Students



Yu, Sackett, & Kuncel, 2016 N=732, homeschooled students 

Predicting College Rigor: Advanced Courses



Shewach, McNeal, Kuncel, & Sackett, 2018 

Moving Beyond Simple GPA Is an Important Goal

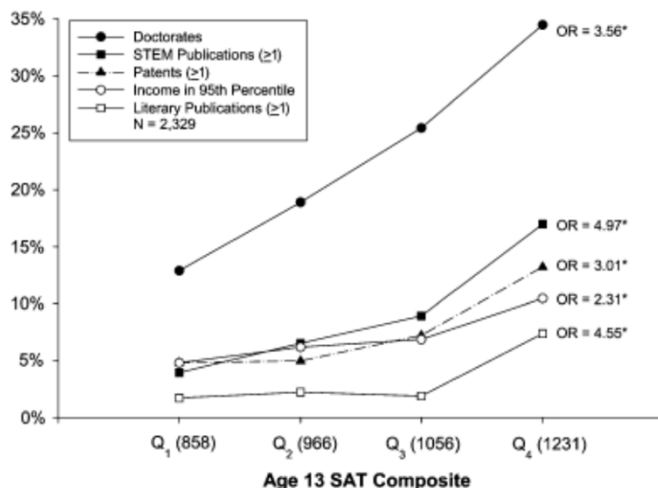
- Simple: Women earn better grades in college.
- Deeper: Women with stronger SAT/Grades generally take more advanced courses than comparable men and earn better grades in college unless they are in STEM fields. In STEM fields they take fewer advanced courses than men. This difference is not fully attributable to differences in quantitative reasoning, AP credits, degree goals, or other background variables.

Success is more than simple GPA in school.

Shewach, McNeal, Kuncel, & Sackett, 2018



Accomplishments Across Individual Differences within the Top 1% of General Cognitive Ability: 25+ Years After Identification at Age 13



Lubinski, 2009



But A Lot of Other Things Matter

How About Non-Cognitive?



Letters of Recommendation

Table 1. Meta-analysis of letters of recommendation predicting academic performance

Criteria	N	k	r_{obs}	SD_{obs}	SD_p	90% cred.
College performance						
GPA in college	5,155	6	.28	.05	.04	.23 to .34
Graduate school performance						
GPA in graduate school	489	7	.13	.23	.19	-.11 to .38
Student rated by reader	315	5	.11	.24	.20	-.15 to .36
Student rated by writer	174	2	.15	.13	.08	.05 to .25
Faculty performance rating	1,930	16	.25	.12	.08	.14 to .36
Student rated by reader	376	7	.10	.17	.09	-.02 to .22
Student rated by writer	1,615	10	.28	.07	.01	.27 to .29
Attainment of the Ph.D.	5,679	15	.19	.06	.04	.14 to .24
Research productivity	394	3	.10	.03	.00	.10 to .10
Medical school performance						
GPA in medical school	916	5	.13	.08	.02	.10 to .15
Clinical and internship performance	1,120	6	.12	.08	.03	.07 to .16

Letters Typically Don't Add Additional Information

They Can be Upgraded.

Kuncel, Kochevar, & Ones (2014)



Essays/Personal Statements

Table 1.
Meta-Analysis of Personal Statements Predicting Academic Performance

Personal Statement	Number of...		r-Obs ¹	Standard Deviation		80% CI ³
	Subjects	Studies		Observed	Validity ²	
Postsecondary Grade Point Average	4,161	10	0.13	0.05	0.02	0.10-0.15
Postsecondary Faculty Performance Rating	850	8	0.09	0.05	0.00	0.09-0.09

¹ Sample size weighted mean observed correlation
² Standard deviation of true validity
³ Credibility Interval

Murphy, Klieger, Borneman, & Kuncel, 2009



Admissions Interview: Results

	N	k	r _{obs}	SD _{obs}	SD _v	80% cred.
Grade Point Average in Graduate/Medical School	3540	37	0.12	0.11	0.04	.06 to .17
Internship Performance Rating	2641	23	0.15	0.1	0.04	.10 to .21
Performance Rating (non Medical)	262	5	0.24	0.25	0.21	-.03 to .51
Medical Board Examinations	231	3	0.13	0.07	0	.13 to .13



Interview Research in College is Depressing

- Shahani et al. “No evidence was found, however, that interviewer judgments contribute incremental variance....”
- Gehrlein et al. → $r = .06$ with Overall GPA
- Shehane et al. “The interview process was not a significant indicator...”
- Hell et al. → traditional interview, $r = .08$
 - BUT structured interviews are better predictors



Unreliable Interviews and Information Voids

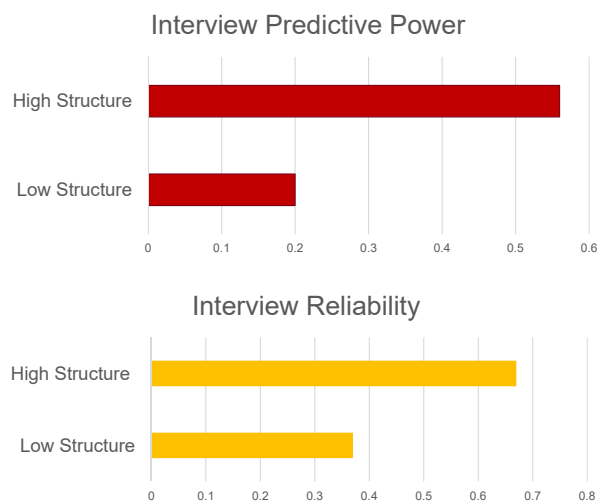
Boy Scout tee-shirt



Deck edited to remove family photos



We Can Do Better



Huffcutt and Authur (1994)



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