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>
<thead>
<tr>
<th>Criteria</th>
<th>N</th>
<th>k</th>
<th>r_{obs}</th>
<th>SD_{obs}</th>
<th>SD_{p}</th>
<th>90% cred.</th>
</tr>
</thead>
<tbody>
<tr>
<td>College performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA in college</td>
<td>5,155</td>
<td>6</td>
<td>.05</td>
<td>.04</td>
<td>.23 to 34</td>
<td></td>
</tr>
<tr>
<td>Graduate school performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA in graduate school</td>
<td>489</td>
<td>7</td>
<td>.13</td>
<td>.19</td>
<td>-11 to 38</td>
<td></td>
</tr>
<tr>
<td>Student rated by reader</td>
<td>315</td>
<td>5</td>
<td>.11</td>
<td>.24</td>
<td>-.15 to .36</td>
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<tr>
<td>Student rated by writer</td>
<td>174</td>
<td>2</td>
<td>.15</td>
<td>.08</td>
<td>.05 to .25</td>
<td></td>
</tr>
<tr>
<td>Faculty performance rating</td>
<td>1,930</td>
<td>16</td>
<td>.25</td>
<td>.12</td>
<td>.14 to .36</td>
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<tr>
<td>Research productivity</td>
<td>376</td>
<td>7</td>
<td>.10</td>
<td>.09</td>
<td>-.02 to 22</td>
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<tr>
<td>Medical school performance</td>
<td>1,615</td>
<td>10</td>
<td>.28</td>
<td>.07</td>
<td>.27 to .29</td>
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<tr>
<td>GPA in medical school</td>
<td>5,679</td>
<td>15</td>
<td>.19</td>
<td>.06</td>
<td>.14 to .24</td>
<td></td>
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<tr>
<td>Clinical and internship performance</td>
<td>394</td>
<td>3</td>
<td>.10</td>
<td>.00</td>
<td>.10 to .10</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Personal Statement</th>
<th>Number of...</th>
<th>r-Ob</th>
<th>Standard Deviation</th>
<th>80% CI</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Postsecondary Grade Point Average</td>
<td>4,161, 10</td>
<td>0.13</td>
<td>0.05, 0.02</td>
<td>0.10 to 0.15</td>
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</tr>
<tr>
<td>Presecondary Faculty Performance Rating</td>
<td>850, 8</td>
<td>0.09</td>
<td>0.05, 0.00</td>
<td>0.09 to 0.09</td>
<td></td>
</tr>
</tbody>
</table>

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

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### Admissions Interview: Results

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>k</th>
<th>r_m</th>
<th>Std.</th>
<th>SD</th>
<th>80% cred.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Point Average in Graduate/Medical School</td>
<td>3540</td>
<td>37</td>
<td>0.12</td>
<td>0.11</td>
<td>0.04</td>
<td>.06 to .17</td>
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<tr>
<td>Internship Performance Rating</td>
<td>2641</td>
<td>23</td>
<td>0.15</td>
<td>0.1</td>
<td>0.04</td>
<td>.10 to .21</td>
</tr>
<tr>
<td>Performance Rating (non Medical)</td>
<td>262</td>
<td>5</td>
<td>0.24</td>
<td>0.25</td>
<td>0.21</td>
<td>-.03 to .51</td>
</tr>
<tr>
<td>Medical Board Examinations</td>
<td>231</td>
<td>3</td>
<td>0.13</td>
<td>0.07</td>
<td>0</td>
<td>.13 to .13</td>
</tr>
</tbody>
</table>
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 Author (1994)

Interview Predictive Power

Low Structure

High Structure

Interview Reliability

Low Structure

High Structure

Huffcutt and Author (1994)

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