Predicting Student Professionalism in Medical School: A Situational Judgment Test

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The AAMC SJT:

- Customized for US medical schools
- Developed with input from medical school faculty and staff
- Easy-to-use in screening applications
- Is reliable and valid
- Predicts medical student performance
- Demonstrates small to no group differences
- Signals the importance of pre-professional competencies
What we’re hearing from the medical school community…
Applicants need more than academics to be ready for medical school

- Medical school curricula include instruction and training about academics, interpersonal skills, clinical care, and professionalism
- Medical school and practice “derailers” are often related to a lack of professionalism
- It’s harder to remediate students with professionalism issues than academic issues
Medical schools want to identify students who are prepared to:

- Work in a diverse learning environment
- Serve the health needs of underserved populations
- Serve the health needs of local communities
- Serve as next generation of medical leaders
- Demonstrate pre-professional competencies
Pre-professional competency information should be available earlier in the process

- Application pre-screening traditionally relies on academic metrics
- Most information about applicants’ pre-professional competencies comes from interviews (after a large percentage of applicants have been screened out)
- Current information about pre-professional competencies is hard to use and interpret
What is AAMC doing to help?
Explored new tools for use in admissions

- Tools that allow applicants to demonstrate pre-professional competencies and provide information that is:
  - Reliable and accurate
  - Easy to understand and use
  - Available for use in pre-interview screening
  - Equivalent across different medical schools
  - Minimally burdensome on applicants
Identified a Situational Judgment Test

Explored if it is possible to develop SJTs that:

• Can be administered on a large pool of applicants
• Predict important behaviors and outcomes
• Have much smaller group differences than achievement tests
AAMC Situational Judgment Test
What is the AAMC situational judgment test (SJT)?

- A tool that can be used to assess a variety of attributes
- Presents a hypothetical dilemma and asks examinees to rate the effectiveness of various approaches to resolving the dilemma
- Results in a score that can offer a complement to academic scores
The AAMC SJT is designed to measure

Examinees’ understanding of effective pre-professional behaviors across eight core competencies
Sample SJT Scenario Set

While you are on Facebook, you notice that one of your classmates posts that she is disgusted by her experiences in medicine and describes one patient’s condition in detail.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ineffective</td>
<td>Somewhat Ineffective</td>
<td>Neither Effective nor Ineffective</td>
<td>Somewhat Effective</td>
<td>Effective</td>
</tr>
</tbody>
</table>

*Please rate the effectiveness of each response to this situation.*

1. Ask your classmate to take down the post.
2. Do nothing. It is not your job to monitor other students.
3. Ask your classmate why she felt the need to openly post about her experiences.
4. Report your classmate to your professor.
Evaluating the AAMC SJT
Four Critical Evaluation Areas

- Psychometrics
- Fairness
- Predicting medical student performance
- Community Reactions
Four Critical Evaluation Areas

- Psychometrics
- Predicting medical student performance
- Fairness
- Community Reactions
AAMC SJT is a reliable test.

- Reliability coefficients of .78 - .85
- Created multiple SJT test forms in terms of content and difficulty
- Confirmed scores across SJT forms have the same meaning
Interpreting correlations

Why do these correlations get smaller?
- Hard to measure/less reliable variables
- Complex outcomes

We expect SJT-performance correlations will be in the small range.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height and shoe size</td>
<td>r=.621</td>
</tr>
<tr>
<td>SAT and GPA</td>
<td>r=.532</td>
</tr>
<tr>
<td>Structured interviews and work performance</td>
<td>r=.443</td>
</tr>
<tr>
<td>SJT and work performance</td>
<td>r=.264</td>
</tr>
<tr>
<td>Conscientiousness and work performance</td>
<td>r=.245</td>
</tr>
</tbody>
</table>

AAMC SJT correlates with personality variables.
AAMC SJT correlates with in-person interview scores.
Four Critical Evaluation Areas

- Psychometrics
- Fairness
- Predicting medical student performance
- Community Reactions
AAMC SJT predicts performance in medical school.
Psychometrics

Predicting medical student performance

Fairness

Community Reactions
AAMC SJT has smaller group differences than achievement tests.

- Small to no group differences for Race/Ethnicity
  - White – Black: No difference
  - White – Hispanic: Small difference
  - White – Asian: Small difference
- Small group differences for Gender
- Small group differences for Fee Assistance and English Proficiency
- No group difference for SES (EO-indicator), U.S. Citizenship
Four Critical Evaluation Areas

- Psychometrics
- Fairness
- Predicting medical student performance
- Community Reactions
Market research

- 3 focus groups with admissions officers representing 21 schools

Hardest thing to remediate is professionalism

SJT scores could be used to:
- Expand the applicant pool in pre-screening
- Evaluate applicants in the “gray zone”
- Help sift through high application volumes
- Compare with in-person interview evaluations

Desire for evidence:
- Reliability, validity
- Coaching effects
- Outcomes
- No disadvantage to under-represented applicants

Schools are using or pursuing assessments to evaluate pre-professional competencies

Schools prefer the SJT be proctored, but taking the SJT should be convenient, comfortable, and low cost to applicants
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Upcoming evaluation and planning

• Continue collecting medical student performance outcomes
• Study the effects of coaching and faking on SJT performance
• Operational planning, e.g., test delivery modes, length of exam
Thank you!

- If you have any questions or comments, please feel free to reach out to the SJT research team at sjt@aamc.org.