Exploring a Situational Judgment Test for Use in Medical School Admissions

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What we’re hearing from you…
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
Admissions officers want more information about personal competencies

Admissions officers consistently rate personal competences as important for students to demonstrate when they enter medical school

- 2008
- 2010
- 2013
- 2015

98% of admissions officers rated personal competencies as “Important” or “Very Important” information in deciding whom to accept into medical school
...and they want it earlier in the process

- Most information about applicants’ personal competencies comes from interviews (after a large percentage of applicants have been screened out)

- Current information about personal competencies is hard to use and interpret
Many schools are looking for alternative tools to measure personal competencies

- Multiple-Mini Interview (MMI)
- Computer-based Assessment for Sampling Personal Characteristics (CASPer)
- Locally-developed Situational Judgment Tests (SJTs)
What can AAMC do to help?
What is a 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
How can an SJT help?

An SJT can help achieve balance by providing information that is:

• Reliable and accurate
• Easy to understand and use
• Available for use in pre-interview screening
AAMC Situational Judgment Test
The AAMC SJT is designed to measure

Examinees’ understanding of effective pre-professional behaviors across eight core competencies
The AAMC SJT is intended to predict:

- Medical school grades in courses related to interpersonal and clinical skills and professionalism

- For example:
  - Grades in Introduction to Clinical Medicine courses
  - Clerkship performance ratings
  - OSCE scores
What does the literature and practice tell us about the use of SJTs?
Used widely in employment contexts

It is possible to develop SJTs:

- that can be administered on a large pool of applicants
- predict important behaviors and outcomes
- are viewed positively by test takers
- have much smaller group differences than achievement tests
Used internationally in UME admissions and GME selection

Research suggests SJTs predict clinical, interpersonal, and professional behavior

- United Kingdom: Supervisor Ratings, Assessment Center Performance
- Belgium: Interpersonal GPA, OSCE Scores, Internship / Physician Performance
- Canada: MCC Qualifying Exam Scores
Group differences

- Literature on SJTs suggest that there are smaller group differences than observed on achievement tests

- Steps to minimize group differences
  - Item writing guidelines
  - Bias and sensitivity review
  - Prior healthcare experience review

- Ongoing research to investigate group differences
Will the SJT change who’s selected?

Introducing assessments of personal characteristics changed the composition of the matriculating class at the Sackler SOM by 18%
How will we know if the AAMC SJT will work?
SJT research plan

**Phase I**
(2013-2016)
- Answer **basic** questions
- “Can we create **good** SJT forms?”
- “What do SJT scores mean?”
- “How do applicants react to the SJT?”

**Phase II**
(2016-2018)
- Answer **more nuanced** questions
- Predict medical student performance
- Effects of faking and coaching
- Cost

**Phase III**
(2019 or later)
- Build on earlier research
- Medical school outcome data become available
- Study consequences

**Constituent input**
What have we accomplished in Phase I?

- Over 400 medical school faculty, staff and students provided about 800 critical incidents
- 50 medical school subject matter experts participated in reviewing items and 7 participated in an SJT item writing workshop
- Developed 700+ items
What do SJT scenarios and items look like?
SJT Scenario Set: Sample #1

You have created a study group. One day, a male group member takes you aside and tells you that, due to his religion, he is uncomfortable with how one of the female group members dresses. He asks you to stop inviting her to the study group.

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Please rate the effectiveness of each response to this situation.

1. Help the male group member find a different study group where he may feel more comfortable.
Sample Set 1.1

You have created a study group. One day, a male group member takes you aside and tells you that, due to his religion, he is uncomfortable with how one of the female group members dresses. He asks you to stop inviting her to the study group.

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Please rate the effectiveness of each response to this situation.

1. Help the male group member find a different study group where he may feel more comfortable.
Sample Set 1.2

You have created a study group. One day, a male group member takes you aside and tells you that, due to his religion, he is uncomfortable with how one of the female group members dresses. He asks you to stop inviting her to the study group.

Please rate the effectiveness of each response to this situation.

2. Ask your professor about the best way to handle this situation.
Sample Set 1.3

You have created a study group. One day, a male group member takes you aside and tells you that, due to his religion, he is uncomfortable with how one of the female group members dresses. He asks you to stop inviting her to the study group.

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Please rate the effectiveness of each response to this situation.

3. Tell the male group member that you will not ask the female group member to change her dress as it would be unfair.
Sample Set 1.4

You have created a study group. One day, a male group member takes you aside and tells you that, due to his religion, he is uncomfortable with how one of the female group members dresses. He asks you to stop inviting her to the study group.

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Please rate the effectiveness of each response to this situation.

4. Ask the female member to find a different study group.
Sample Scenario Set 2

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.

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Please rate the effectiveness of each response to this situation.
Sample Scenario Set 2.1

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.

Please rate the effectiveness of each response to this situation.

1. Ask your classmate to take down the post.
Sample Set 2.2

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.

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Please rate the effectiveness of each response to this situation.

2. Do nothing, it is not your job to monitor other students.
Sample Set 2.3

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.

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

3. Ask your classmate why she felt the need to openly post about her experiences.
Sample Set 2.4

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.

Please rate the effectiveness of each response to this situation.

4. Report your classmate to your professor.
What are the results of the 2016 SJT Field Test?
2016 SJT Field Test -- Purpose

• Are SJT scores reliable?
• Do scores from different SJT forms have the same meaning?
• Do SJT scores correlate in expected ways with other admissions data?
• Are there group differences on the SJT?
  o Race/ethnicity, gender
  o Socio-economic status, prior healthcare experience
2016 SJT field test -- Method

• Invited MCAT examinees who tested on January 22, 23, and April 1, 2016

• Online, unproctored

• Included three parts:
  o SJT
  o Personality inventory
  o Applicant reactions survey

• Received $25 gift card code to Amazon.com
2016 SJT field test -- Sample

- 2,362 MCAT examinees participated
- Median time spent = 29 minutes
- Mean age: 23, SD = 3 years

### Percentage of Participants by Race and Ethnicity
- White, 50%
- Asian, 28%
- Hispanic, 10%
- Black, 9%
- Other, 3%

### Percentage of Participants by Gender
- Male, 42%
- Female, 58%
SJT field test – Applicant reactions

Content relevance

The actual content of the items in this instrument are related to the types of activities required of medical students

I can see a clear connection between this instrument and the activities required of medical school students

I am confident that this instrument can predict how well a medical school applicant will perform as a medical...

1 = Strongly Disagree to 5 = Strongly Agree
SJT Field Test – Applicant Reactions

Fairness of the SJT

The questions in this assessment did not require healthcare knowledge and/or experience to complete

Some assessment-takers would have an unfair advantage on this assessment

Overall, I would be satisfied with the use of instrument for selecting medical school students

1 = Strongly Disagree to 5 = Strongly Agree
Sample responses from applicants

• “I want to be a doctor but my MCAT score were really low. I won’t give up on my goal. I’ll find another way. This assessment reminded me that I like to help others and that is what I am going to do.”

• “The idea behind this is outstanding but I don’t know how reliable it would be for selecting medical students.”

• “I am excited to see an assessment that can give an indication into the character of a student instead of focusing solely on the scores and grades of that person.”

• “I do not feel that this alone is sufficient to determine which applicants would perform best in medical school; However I do feel that it is a fair assessment that would be beneficial if coupled with other admissions tests.”
What’s next?
Next steps: 2016-2017

• Review field test results with constituent advisory committees and external Technical Advisory Committee

• Pilot test with 4-5 medical schools (research only)

• Study the effects of coaching and faking

• Continue item development efforts

• Market research
Conclusion

• Admissions officers want reliable, standardized information on applicants’ personal competencies

• The SJT holds promise, but more information is needed to judge its appropriateness for use in medical school admissions

• AAMC will seek constituent input about the SJT through surveys, interviews, and meetings

• If data are positive, the SJT would be released no earlier than 2019