

Medical students' perceptions of the situational judgement test: a mixed methods study

The situational judgement test is a UK-based assessment tool for determining job allocation for exiting medical students which has been shown to be reliable and valid. This study assessed medical students' perceptions of the situational judgement test, having undergone the assessment, and reviewed the findings.

Introduction

The situational judgement test was introduced in 2013 as a platform to assist in UK foundation programme allocation following medical student graduation. Acceptance to a UK foundation programme relies on scores obtained from the situational judgement test in addition to an educational performance measure comprising medical school performance to date as a decile ranking, additional degrees and academic achievements.

In essence the situational judgement test presents applicants with an array of hypothetical work-related scenarios in order to accurately assess attributes and behaviours (Patterson et al, 2013). Evidence suggests that the situational judgement test format is typically well accepted and received in a positive light as well as offering a realistic job preview (Weekley and Ployhart, 2005; Lievens and Sackett, 2007). Further evidence has shown that situational judgement tests are typically reliable and valid assessment tools (McDaniel et al, 2001; Patterson et al, 2009). In addition, applicants perceive situational judgement tests to be fairer than interviews as applicants undertake the same questions, hence increasing standardization and eliminating bias (Banki and Latham, 2009).

One of the pivotal factors leading to the introduction of the situational judgement test was concerns regarding previous selection methods. Before 2013, a 'white space' application form was used with concerns that this format gave opportunities for plagiarism. In addition, hand marking the white space form required significant clinician input, making this expensive.

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The situational judgement test is designed to measure the professional attributes associated with being a foundation year one doctor (Patterson et al, 2013) (Table 1). These attributes were determined following a multi-method analysis of doctors in a range of clinical settings.

The current study assessed medical students' perception of the situational judgement test. It aimed to:

1. Quantitatively assess whether students, having taken the situational judgement test, felt that it in fact was a worthwhile measure of these five attributes
2. Qualitatively gauge medical students' opinions of the situational judgement test following completion.

Methods

Final year medical students across the UK were invited to complete a survey online to gather their opinion of the situational judgement test after they had completed it. The survey was distributed to a student database in association with the *BMJ*. The survey was delivered 3 weeks after the final assessment date and remained active for 4 months in total. Quantitative scoring of student perception was performed using a 1–5 Likert scale (1 = strongly disagree to 5 = strongly agree). Descriptive analysis was performed using GraphPad version 3.10.

Qualitative assessment of students' perceptions was collated and thematically analysed.

Table 1. Professional attributes measured in the situational judgement test

Commitment to professionalism	Dealing with issues of confidentiality, e.g. hearing a colleague talking about a patient outside of work
	Challenging inappropriate behaviour, e.g. consultant speaking to a colleague or patient in an inappropriate way
	Commitment to learning, e.g. need to go to teaching while also being needed on the ward
Coping with pressure	Knowing how to respond when you make a mistake, e.g. providing wrong medication to patient
	Dealing with confrontation, e.g. with an angry relative
	Seeking help when not sure of the correct procedure or best way of doing things
Effective communication	Gathering information and communicating your intentions to nursing staff or other colleagues
	Negotiating, e.g. for a scan from radiology
	Listening and effectively communicating, e.g. with an unhappy patient or relative
Patient focus	Identifying that a patient's views and concerns are important and that he/she should have input into his/her care
	Considering that a patient may have different needs from others around him/her
	Spending time trying to understand a patient's concerns and empathizing with him/her
Working effectively as part of a team	Recognizing and valuing the skills and knowledge of nursing staff, when faced with a disagreement about a patient's care
	Consulting with colleagues about how to share workload fairly
	Offering assistance and support to colleagues when they are not able to handle their workload

Results

A total of 100 final year UK medical students were invited to take part in the study with a 51% response rate. Students' perceptions as to whether the situational judgement test was a worthwhile method of assessing the five attributes following completion of the exam are detailed in Table 2.

Qualitative analysis following completion of the situational judgement test demonstrated the following positive themes:

Positive responses

Old vs new

'It is a fair way of ranking students based on their performance.'

'Less time consuming than white space questions, tests aspects that white space questions did not test.'

'It is probably better than white space questions in terms of being less open to coaching and it assesses some core aspects of FY1 (foundation year one) work.'

Duties of a Doctor and measurement of professional attributes

'A way of evaluating situational judgement of medical students in situations that could arise in practice.'

'I learnt a lot about the politics of working in a team/the NHS. It brought up several things that my medical school training had missed. Made it more clear when to seek help.'

'One possible positive is that it may help to weed out the most concerning students, if their exam answers are completely morally and ethically wrong.'

'I do feel the test differentiates people who have been on the wards.'

'I think it is a good exam to assess

personal attributes required to be a doctor.'

'Teaches you how to prioritise your workload and emphasises importance of patient safety above all else.'

'Studying for it is helpful as you learn guidelines.'

'Everyone is on an even footing, promotes doctors with good qualities and understanding rather than good written English and lots of coaching.'

'Provides ideas of how to deal with situations that may arise as a doctor.'

'Revision of GMC (General Medical Council) guidelines and best practice for difficult ethical and moral circumstances.'

'Made me aware of how to act in certain situations.'

Areas of concern

Thematic areas of concern were:

Old vs new

'White space questions/interview is a much better judge of character and professionalism than a situational judgement test paper.'

'I believe the situational judgement test should be abandoned and replaced by an interview or portfolio review system which would be a far more honest and just way to allocate jobs.'

Duties of a Doctor and measurement of professional attributes

'I think the situational judgement test is not a good measure of the qualities needed to be a doctor.... It is a very subjective test and therefore it seems to be a lot of it is weighted on opinions.'

'Some of the answers seemed very similar and difficult to distinguish.'

Some answers you would do three of

the steps all at the same time so it's hard to know which order you would put them in in this kind of exam situation.'

'The exam assumes a finite and at best limited view of how any particular situation should/can be addressed.'

Furthermore, it asks many questions, the responses to which are in great contention, thus penalising those with greater study of medical ethics. It also places fluctuating emphasis on a small number of considerations in many scenarios, leading to a polarised view of medicine and ethical decision making, which I personally believe is deeply damaging to the curriculum and ideals of effective professional development.'

'The situational judgement test does not help you achieve any of these things [professional attributes]. It merely assesses that you can learn what boxes the GMC expect you to tick. Being on placement, on the ward day in day out teaches you these things; encountering them for real. The situational judgement test just assesses, it does not teach.'

'It is a test of the above [professional attributes] rather than, for me, a means of improving in the different categories.'

'Answers' are debatable and subjective.

May disadvantage candidates that do not score as highly in the exam but have better academic and clinical skills.'

'Ranking answers that you know are "wrong" (and therefore wouldn't do in professional career) in order of how bad they are doesn't make sense.'

Also, some of the actions you would do within 10 seconds of each other, again making ranking difficult – for instance, when encountering a crying child, you would both ask its name and reassure that its mother would be found – difficult to rank one ahead of the other.'

'Ranking between two awful options can be frustrating when you feel you would clearly do neither.'

'Too focused on "shoulds" and not "woulds". Should incorporate some questions of core and clinical knowledge.'

'It successfully ordered all the candidates. Unfortunately that order

Table 2. Quantitative analysis of student perception

Statement	Mean	SD	SEM	Lower 95% CL	Upper 95% CL	Median
Commitment to professionalism	2.59	1.34	0.19	2.21	2.97	2.00
Coping with pressure	2.24	1.14	0.16	1.91	2.56	2.00
Effective communication	2.29	1.15	0.16	1.97	2.62	2.00
Patient focus	2.61	1.39	0.19	2.22	3.00	2.00
Working effectively as part of a team	2.49	1.24	0.17	2.14	2.84	2.00

CL = confidence level; SD = standard deviation; SEM = standard error of mean

was pretty much random and not based on anything meaningful.’

‘This is supposedly an exam that you cannot prepare for, however I feel you can coach yourself with practice questions to think about “what you should do” in certain situations in order to answer the questions correctly and therefore is not necessarily a reliable reflection on “what somebody would do”, therefore not assessing the judgement or integrity of those sitting the exam.’

‘I don’t feel the situational judgement test in itself helps to measure any of the above [professional attributes]. One improves in these areas by being on the wards and seeing good and poor practice in action.’

‘I believe that this test is only an assessment of your ability to take a situational judgement test; the reason for which I think might be demonstrated by my experience as follows. I had to repeat my final year at medical school and have therefore been required to sit the situational judgement test for two consecutive years. My first sitting, at which point I understood that you could not study for the test, gained me my 118th choice of job. By studying some text books on the subject, my second sitting gained me my 2nd choice of job (in the same deanery with virtually the same selections as the previous year).’

‘Can be artificial, scores can be improved with practice, some questions expecting FY1 level knowledge, when still only in final year.’

‘It was a terrible exam that poorly reflected the situations a person would actually face in real life and limited the responses to a handful of a thousand possibilities. It’s a poor way to judge an individual’s situational judgment and seems to have been developed more for ease of marking and categorisation than for accurately assessing the decision making skills of the participants.’

‘I don’t see that this test in any way helps us to develop, practice or demonstrate these skills [professional attributes]. At best it provides motivation to read GMC guidelines, at worst it’s simply an exercise in “knowing which box to tick”.’

‘Involves arbitrarily ranking bad options and is not especially effective as a discriminator.’

‘Can answering an MCQ (multiple choice question) ever really demonstrate courtesy, empathy and even compassion? I remain unconvinced.’

‘I highly doubt that the results correlate with our actual situational judgement abilities in real life.’

‘Real life is much more complex and emotional. People try to cram for it and miss the bigger picture.’

‘Too random and impersonal. I cannot see how it in any way differentiated between those who will be better doctors and those who will be worse.’

‘The situational judgement test has no reliable evidence base. It’s an assessment of your ability to guess what an examiner thinks is right.’

‘The situational judgement test is an extremely poor test of what is required to be a doctor. The situations are exaggerated and highly artificial and there is almost no consensus amongst practicing doctors over the correct ranking of the options listed. The test does not reward those with any particular skills other than those who have had most practice at situational judgement test style questions. Often ranking five options is a completely inappropriate way to approach a difficult situation. Identifying the option that you would consider would be a relevant skill but ranking the second, third and fourth best responses to the question in the correct order seems utterly arbitrary and irrelevant to situations encountered in reality. Furthermore there is very little established consensus over the purportedly correct answers.’

‘I don’t think that you can legitimately test a candidate’s professionalism by making them rank five options in response to a given scenario, as personally I would do one or two of the options, and I wouldn’t do the other three options.’

‘I genuinely thought I performed well in the exam and was destined for a good mark. I also got around 80–85% in the official practice papers. Turns

out I did rather poorly in the actual situational judgement test. Clearly there is a great deal of ambiguity.’

‘I agree that we all need to be professional and show respect for our patients and colleagues, but I would hope that all of us would know how to do this at the age of 23 plus anyway; the message I got from the situational judgement test was that there is a very narrowly defined “right” and “wrong” way to think, and I don’t think that that is the message we should be giving students.’

‘I resent that the situational judgement test examines our reactions as a FY1 doctor, when we have absolutely no experience as such.’

Score weighting

‘I think too much weighting is put on it. I think it would be better if the test counted for less and the educational performance measures counted for more as it is not fair to distribute them equally, especially when your entire future could end up being decided for you by this test.’

‘Since it is a new test it makes me worried that so much of the real mark is focused on it.’

‘Not entirely sure it is worth more marks than the medical school decile.’

‘The weighting of the situational judgement test of 50% in calculating the final score for FPAS (Foundation Programme Application System) is way too disproportionate. It should be closer to 20% in fact and the achievements at medical school should be the more discriminatory factor instead.’

‘Theoretically students could work really hard throughout medical school, be excellent academically and in the clinical setting, however could then fall at this situational judgement test hurdle when in fact it bears little resemblance in my opinion on their judgement or abilities as a doctor. Or oppositely as I’ve seen happen the worst students in the year group who have put in the least work and commitment to their clinical attachments can score high in the situational judgement test and get their first choice deanery. My unease about how I may do in this

exam meant I ranked my deaneries strategically, this was frustrating and made me feel as though all my hard work at medical school was devalued and I felt like a guinea pig in this process. The exam is a big wild card in the most important job application many of us have ever made, it not only controls our choice of job but where we get sent to in the UK.'

'The decision to weight this exam as heavily in the foundation programme application process as a 4–5-year degree plus an additional PhD plus any presentations or publications one may have done is an idiotic error of judgement in itself.'

'It seems frustrating that the entire of our efforts studying at medical school and trying to academically achieve, and the variety and breadth of life and community engagement that many medical students are involved in, are reduced to the (points) equivalent of a fairly arbitrary exam.'

'It is far too heavily weighted. It is tempting to tell first year medics to forget about 5 years at medical school – better revising for the situational judgement test. It seems unfair that a hard working student in the top 10% in their year can end up being in the bottom 10% applying to the foundation programme because they did not fare well in the situational judgement test. We don't get specific help or training for the situational judgement test except a practice paper online so having a weighting of 50% is truly unfair.'

'I cannot believe how much weight is placed in a glorified internet personality test. We've spent 5 years learning how to practice medicine, how about placing more weight on that? It's a complete joke.'

Exam day

'It is too time pressured.'

'Insufficient time to complete the situational judgement test, questions can be very long and bulky, needs to be more concise.'

Feedback

'No opportunity to qualify answers with explanations/justifications.'

Discussion

Quantitative analysis of this study has shown that overall students felt that the situational judgement test was not a worthwhile method of assessing the five professional attributes of commitment to professionalism, coping with pressure, effective communication, patient focus and working effectively as part of a team.

The professional attributes of the situational judgement test were determined following a literature review, interviews, observation and survey of 294 individuals working as or with FY1s in a range of clinical settings (Medical Schools Council, 2011). In terms of items included, initial workshops involved an array of writers from several clinical backgrounds working in pairs or small groups to construct items. The workshops were led by facilitators trained in item writing as well as a member of the Improving Selection to the Foundation Programme Project Group.

The review process was led by psychologists and lead item reviewers who were clinicians identified during situational judgement test writing workshops deemed to have understood the writing principles involved in order to ensure validity and realism (Medical Schools Council, 2011). Taking into consideration the structured process of item design, students in this study held an opposing view with regards to the validity of the items included.

Qualitatively, positive comments included the fact that the situational judgement test was fairer than the previous system, but these were few in number. Issues around white space questions have included the fact that an individual's answers may not be solely his/hers leading to an unfit measure of reliability and validity (Medical Schools Council, 2011). In addition, a minority of students noted that the test was a useful method of being in tune with various aspects of the duties of a doctor and that it could help to distinguish those who may be unfit to practice. Evidence suggests that situational judgement tests are better predictors of subsequent job performance (Lievens et al, 2005; McDaniel et al, 2007). When considering whether the results of the test would help differentiate between strong and weak participants, previous data have shown that 42% neither agreed nor disagreed (Medical Schools Council, 2011).

There were a large proportion of negative themes. These included issues around subjectivity and hence issues around accurate measurement of professional attributes. This goes against evidence of the situational judgement test as a reliable and valid assessment tool when designed appropriately (McDaniel et al, 2001; Patterson et al, 2009). Candidates also felt that the item ranking system in reality is unfair as it may be difficult to rank options accurately in all cases, when some may be equally appropriate or inappropriate, and that real life encounters on the ward are a more accurate way of learning than a test. Ranking and multiple choice based options are included in the situational judgement test in order to allow for a fuller range of scenarios to be used with the ranking system, allowing for greater granularity in the data (Medical Schools Council, 2011). However, students commented that scenarios in the situational judgement test were not entirely in synch with ward-based events and appeared artificial at times.

A greater proportion of students stated that the test can be achieved favourably through coaching or practice specifically designed for the exam which in itself would lead to an inaccurate way of measuring one's professional demeanour. However, this goes against evidence which demonstrates that the knowledge-based instructions used, i.e. what should you do, are more appropriate where coaching is a potential threat (Medical Schools Council, 2011).

Additional areas of concern included score weighting. A proportion of students felt that the 50% score allocated to the foundation job application from the situational judgement test was excessive. They felt that more weighting should be placed on academic achievements throughout medical school in addition to other aspects of the educational performance measure. There were also concerns that candidates may perform badly during this one aspect of assessment despite performing well throughout medical school and that this could unfairly impact on their final job allocation.

Concerns were also raised about time pressures and lack of feedback for learning. With regards to the former, it has been recommended that candidates spend 2 minutes per item as the vast majority

complete the test within this time schedule (Patterson et al, 2013). Feedback wise the Improving Selection to the Foundation Programme Project Group has commented that specific feedback about how one does on each item cannot be provided as this would require providing information about items which may be used in future years (The Foundation Programme, 2014).

Conclusions

To the best of the author's knowledge this is the first study analysing students' perceptions of the situational judgement test. It demonstrates that the majority of students did not feel the situational judgement test accurately measured the domains it is designed to measure. Concerns were raised about the score weighting, ranking format and subjective

of the assessment. Although the study sample is small, the data obtained should provide impetus to enhance various aspects of the test design in addition to appropriate scoring allocation. **BJHM**

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Conflict of interest: none.

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KEY POINTS

- The situational judgement test is a written test taken by all UK final year medical students. Scores obtained determine job allocation.
- Quantitative analysis of situational judgement test professional attributes demonstrated below neutral scores.
- In this study of final year medical students, concerns were raised about the score weighting, ranking format and subjectivity of the assessment.

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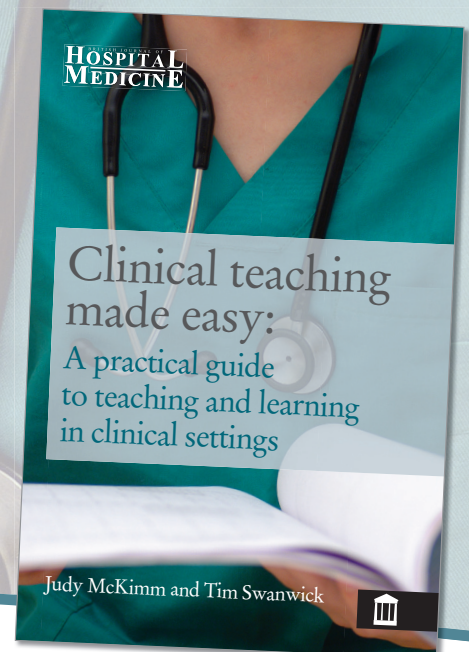
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