Health Education England

CASE STUDY: SITUATIONAL JUDGEMENT TESTS FOR SELECTION TO THE FOUNDATION PROGRAMME

Project background

From 2006, annual selection to the Foundation Programme (FP) was based on an academic quartile rank (40%) and answers to open-ended 'white-space' questions (60%). The need to improve the selection process was motivated by issues relating to its reliability, validity, comparability and longevity, as well as risk of plagiarism and NHS consultant time required, as outlined in the Department of Health report 'The Next Stage Review: A High Quality Workforce' (2008). To address these concerns, in October 2009 the Department of Health (England, on behalf of the four UK Health Departments) commissioned the Medical Schools Council (MSC) to carry out a review of the selection methods.

A Situational Judgement Test (SJT), developed to assess the professional attributes required of a Foundation Year 1 doctor (i.e. patient focus, team working, effective communication), in combination with an Educational Performance Measure (EPM), was recommended following a thorough options appraisal as the most effective, fair, valid, reliable, transparent and cost effective option. Applicants would receive a single combined application score, which would be used along with their preferences to allocate them to foundation schools in score order.

The SJT was piloted in 2010 and 2011, and implemented for the first time in 2012 (selection to FP 2013).

Project aims

The SJT, in combination with an EPM, needed to:

- Ensure that all applicants for the FP are fit for purpose, and, in scenarios of over-subscription, the most appropriate applicants are selected;
- Provide a single score to rank c. 8,000 applicants;
- Be valid – it needed to measure how well an applicant met the person specification through demonstrating the key attributes (patient-centred care, team working, leadership, decision making);
- Be fair, reliable and reduce the risk of plagiarism;
- Be logistically simple and practical to implement; and
- Effectively use resources (both cost effective and also to reduce the consultant input).

Process

1. Job Analysis and defining the SJT specification – in accordance with best practice, the SJT must be evidence based. An extensive job analysis, which encompassed shadowing in a range of rural and city locations, interviews, literature review, public consultation and mapping of the grey literature, identified 108 positive attributes. Involved: patients, nurses and other ward staff, foundation doctors, senior doctors, general public plus academic research.

2. SJT item development (continuous cycle) – Items are generated through telephone interviews with clinicians, reviewed in small group workshops, and then included in a test paper taken by a Concordance Panel. In between each stage, the item is reviewed by psychologists in collaboration with SJT-trained clinicians, proof read, and checked for Equality and Diversity. Involves: clinicians working with or as foundation doctors, psychologists, copy editors, Equality and Diversity experts. Additional considerations: security and item banking.

3. Delivery – the test papers are compiled centrally, and delivered in paper copy to 30+ medical schools for delivery on two national dates and times. National rules for administration but managed locally: invigilation procedures, approval of reasonable adjustments/extenuating circumstances, contingency planning. Involves: medical schools, printers, scanners, courier company. Considerations: security, timescale to know reasonable adjustments before centralised printing and delivery.

4. Communications – key to stakeholder acceptability, and important to give confidence in the system. Full applicant and administrative guide, published by UK Foundation Programme Office (UKFPO), as to the role of the SJT within the overall selection process; practice paper and worked answer rationales; ‘monograph’ exploring the research evidence and how to approach the SJT; technical evaluations of the performance data; targeted stakeholder presentations to address concerns regarding the scoring of the SJT and weighting of SJT scores.

Key challenges

- Timetabling the SJT on national dates/times – consultation with medical schools and consideration of how to minimise the impact on student learning/disruption for those travelling abroad by running on Friday afternoons/Monday mornings. Consideration of religious festivals, and the time between dates to allow for recovery from extenuating circumstances.

- Clinician involvement on a volunteer basis – item writing is resource intensive, with clinicians involved throughout the item development and review. Invitations for clinicians circulated through the foundation school with MSC/UKFPO/Work Psychology Group logos to provide credibility, inviting back interested/effective volunteers, locating workshops/concordance panels in localities where the foundation school manager/director could help motivate more volunteers locally. Workshops structured to include training, which allows for Continuing Professional Development accreditation. Travel expenses reimbursed. Clinician involvement remains an ongoing challenge and risk to the development of new items.

- Scaling the SJT score to be combined with the EPM – policy decision regarding the weighting of the two components, and statistical advice regarding the different ways of scaling and combining the scores. Scaling method takes account of the mean and standard deviation of the EPM in order to ensure the desired 50:50 weighting between the two components.

- Extreme low-scorers/outliers – the SJT is designed to rank applicants, but works on the basis that they have all met the minimum standard for the person specification – therefore it has not been designed to select 'out'. Applicant performance was clustered around the mean, however a very small number of applicants failed to demonstrate through the SJT that they met the person specification (between 4 and 12 SDs below the mean). A working group was managed by the UKFPO which looked at how these applicants should be considered, and how to interpret an extremely low SJT score.

Impact

- Logistically the SJT delivers a score which could be used for allocation to Foundation Schools.

- SJT test performance data – the performance data demonstrates the validity and reliability. However, the reliability decreased slightly from FP 2013 to FP 2014. This will be monitored each year and any remedial action taken as required.

- Stakeholder feedback – applicant acceptability and acceptance amongst employers and the academic community. All applicants complete a feedback questionnaire in order to receive their scores – applicant feedback indicates a mixed response to the SJT; 40% of applicants agree that the content of the SJT appeared fair for selection to the Foundation Programme with 30% neither agreeing or disagreeing with this statement. The majority of applicants (57%) agree that the content of the test is relevant to the role of a Foundation Doctor. Anecdotal feedback indicates some concerns regarding the relative weighting of the SJT versus medical school performance. Feedback from medical schools and foundation schools is sought at stakeholder events, with a mostly positive response.

Example materials

- SJT Practice Paper: a full 70 item practice paper with worked answer rationales.
- SJT Monograph: explores the attributes in the FY1 person specification, research evidence for SJTs, scoring criteria and hints and tips on how to approach the test.
- FAQs

Next steps and sustainability

- On-going item development (n.b. this is resource intensive) – to continually refresh the item bank, to test a wider range of scenarios, and to future proof the item bank. Investigate alternative methods for utilising subject matter experts and producing new items. Long term, if there are enough items in the bank, the SJT could be delivered on more than two sittings.
- Study of predictive validity – tracking trainees into the Foundation Programme, and using performance information to evaluate the predictive validity of the SJT/SJT + EPM.
- Item security – on-going investment in secure storage (item banking, test creation).
- Continued communication – further communication with applicants and other key stakeholders to share the results of the predictive validity study, and convince them of the validity and appropriateness of the SJT.

Key Tips

- A thorough job analysis of the target role to inform the test specification – this is an absolute necessity to ensure the validity – and credibility – of the SJT.
- Additional to detail on the logistics – no matter how fair, reliable, valid, and appropriate the SJT – every detail must be thought about when preparing and running the SJT.

This case study has been produced by the UK Foundation Programme Office and Medical Schools Council, for further information please contact:

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Or please see here for further information on this project or here for more information on the Foundation Programme.