

The A&DC Thought Leadership Series

Tough Decisions:

Using Situational Judgement Tests in Assessment



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Good judgement is a critical skill for effective performance across a range of jobs. While some decisions are simply a matter of following formal procedures, employees will often be called upon to use their own judgement to deal with difficult and challenging situations. For example, they may be required to deal with an unhelpful colleague, balance competing priorities or respond to unexpected setbacks.

Situational Judgement Tests (SJTs) provide an effective and efficient method for assessing the judgement of applicants and employees. Their popularity is increasing and numerous organisations have now adopted this assessment method within their selection and development processes, alongside traditional psychometric measures such as Cognitive Ability Tests or Personality Questionnaires.

So what are SJTs? What are the benefits of using them? How are they developed? This paper describes the key features and background of SJTs, sets out five key practical benefits of using them in assessment and explains how they are developed.

What is a Situational Judgement Test?

An SJT presents participants with a number of hypothetical scenarios, reflecting realistic and challenging situations that they may face in the job. For each scenario, participants are presented with a number of different actions that they could take in response to the scenario. Participants are asked to make judgements about the effectiveness of the responses using a multiple choice format, typically by rating the effectiveness of each action or ranking the actions in order of effectiveness.

An example of a SJT scenario is shown below. Four different actions are presented which could be taken in response to the scenario.

You have just attended an internal training course delivered by your manager. While talking to the other delegates privately after the course, several of them were critical of how your manager delivered the course. Your manager is unaware of this feedback and you felt the course delivery was adequate.

Rate the effectiveness of each of the actions below on the following scale:
1 = Very Ineffective, 2 = Ineffective, 3 = Effective, 4 = Very Effective.

- a. Tell your manager that you personally think the course went well and don't mention the feedback from the other delegates.
- b. Tell the other delegates that they should communicate their feedback to your manager if they feel strongly about it.
- c. Tell your manager about the feedback from the other delegates, without mentioning them by name.
- d. Don't mention any feedback about the course to your manager.

While SJTs may seem a relatively new concept in assessment, the approach has in fact been used since the early part of the last century (one of the earliest examples was from a test published in 1926). Interest in SJTs was renewed in the 1990s, when a number of new research studies demonstrated the effectiveness of SJTs as an assessment method. An article summarising this research by McDaniel, Morgeson, Finnegan, Campion and Braverman (2001) concluded that SJTs are “good predictors of performance”.

The format of SJTs can vary in a number of different ways. Firstly, the type of scenario can differ between SJTs. Many SJTs present short scenarios (two to four sentences in length), while other SJTs present longer scenarios, where more in-depth information about the situation is provided. Secondly, the scenarios in a SJT can differ in their level of complexity. Some scenarios present quite simple challenges and other scenarios require the participant to deal with a number of complex competing demands.

SJTs can also differ in terms of how realistic the presentation format is (fidelity). Written SJTs are most common and consist of textual descriptions of scenarios. A higher degree of realism can be achieved by presenting SJTs in video format, where participants can see the scenario unfold and the behaviour of the individuals involved as if they were observing it in real life. Another approach which increases realism is to present scenarios as emails in an inbox simulation exercise, so that the participant can read an actual message that requires a response. Presentation formats with greater realism are more reflective of actual job experiences, and are therefore likely to be more predictive of on-the-job behaviour. For example, a SJT presented in video format had higher predictive validity than the same SJT presented in written format (Lievens & Sackett, 2006).

Another variation in SJTs is the response instructions – what a participant is asked to do. Participants can be asked to decide how effective the actions are in response to a scenario (knowledge instructions). This requires the Participant to demonstrate knowledge of the likely impact of different actions. Alternatively, Participants can be asked to indicate how likely they would be to take each action (behavioural tendency instructions). This requires the Participant to indicate how they would be likely to behave typically in a situation. Response instructions have been proven to affect the type of individual characteristics assessed by a SJT (McDaniel, Hartman, Whetzel & Grubb, 2007). Their research found that SJTs with behavioural tendency instructions tend to correlate more strongly with personality preferences, while SJTs with knowledge instructions tend to correlate more strongly with cognitive ability. Due to concerns about faking, knowledge instructions should generally be used for high stakes testing (eg recruitment or promotion) and behavioural tendency instructions should be used for low stakes testing (eg personal development).

Five Key Benefits of SJTs

1. Job Relevance

SJTs present realistic scenarios that employees would be likely to face in the job. Typically, SJT scenarios are generated by interviewing existing job incumbents or line managers to ensure that the scenarios reflect the demands of the job. This means that participants immediately recognise the job-relevance of SJTs and why they are being used in the assessment process. In selection, this encourages buy-in from candidates and will help to provide a positive perception of the organisation.

A second advantage of the job-relevance of SJTs is that they can provide a realistic job preview for candidates. This helps to present the assessment process as a two-way learning process. Organisations can obtain useful information about candidates' judgement and decision-making skills based on their performance on the SJT. From the candidates' perspective, they obtain useful information about the situations and challenges which they may face in the role.

SJTs are sometimes used as a self-selection tool which can be completed before applying, rather than as a tool in the selection process itself. In this case, the SJT is made available on the organisation's website for candidates to complete and instant feedback about their responses is provided at the end of the test. This allows candidates to decide whether the job is in line with their expectations and if they wish to continue with the application process. Using an SJT as a self-selection tool can help to reduce the number of unsuitable candidates entering the application process, allowing organisations to concentrate on the candidates who are motivated by the challenges of the role.

2. Ease of Administration

SJTs use a multiple choice response format. Participants are typically asked to indicate the effectiveness of each action in response to a scenario on a rating scale (4, 5 and 6 point rating scales are commonly used). Alternatively, the participant may be asked to rank the actions in order of effectiveness.

Participants' responses are compared to a pre-defined scoring key to determine their score on the test. This score is then standardised using a norm group (a large representative sample of participants) to identify how the participant has performed relative to others. The multiple choice format means that SJTs can be scored automatically by computer, leading to significant time savings for administrators.

The format of SJTs also lends itself well to online administration. SJTs are frequently used as online sifting tools to help select out unsuitable candidates at an early stage, before inviting successful candidates to a face-to-face assessment stage (eg an Assessment Centre). While SJTs that are administered unsupervised to candidates over the Internet are open to the risk of cheating, they do not have clear right and wrong answers. Therefore, it is not possible for a candidate to obtain the exact scoring key for the test and pass this on to others. The judgement of successful candidates measured by the SJT can also be re-assessed in greater depth under supervised conditions, by using behavioural simulations that reflect the same competencies.

3. Flexibility

Although there has been some debate about what SJTs measure, the consensus is that SJTs are best considered to be a *measurement method*. This means that SJTs are a method of assessment, in the same way as simulation exercises such as Group Discussions, In-baskets or Analysis Exercises. Other researchers (eg Stemler & Sternberg, 2006) have suggested that SJTs measure an overall "Practical Intelligence" construct, but existing research evidence does not support this view. The constructs measured by a SJT depends on the content of the test.

This means that SJTs are flexible and can be designed to assess a broad range of characteristics, depending on the specific content of the test. For example, a SJT could be designed to measure interpersonal competencies such as teamwork, interpersonal sensitivity or conflict management, by presenting scenarios relating to these competencies. Alternatively, a SJT could be designed to measure achievement focused competencies such as drive, tenacity and initiative. SJTs are often designed to reflect the breadth of competencies identified as critical for effective performance in the chosen job.

While verbal and numerical reasoning tests are often used as sifting tools and can be an excellent predictor of future job performance, they only focus on a candidate's cognitive ability and problem solving skills. By incorporating an SJT at the sifting stage, a broader range of competencies can be assessed early on in the selection process. This can help to improve the success ratio of candidates who then go on to attend an Assessment Centre, if the same competencies covered in the SJT scenarios are measured in the Centre.

4. Validity

The main purpose of using selection tools is that they help to predict how an individual will perform in the job. To be an effective selection tool, SJTs must therefore demonstrate a statistical correlation with measures of job performance (criterion-related validity).

Two articles have collated the results from numerous research studies looking at the criterion-related validity of SJTs (McDaniel et al 2007, McDaniel et al 2001). The findings from these articles indicate that SJTs are useful predictors of job performance. It is likely that the validity of SJTs will improve as research into their development continues to identify ways of enhancing validity (eg test fidelity, response instructions and development process).

Another important issue in assessing criterion-related validity is that SJTs can demonstrate validity gains (incremental validity) when used alongside traditional psychometric methods, such as cognitive ability tests and personality questionnaires. McDaniel et al (2007) found that SJTs provide meaningful incremental prediction over personality factors and modest incremental prediction over cognitive ability.

5. Fairness

The issue of fairness to minority groups has been one of the major reasons for the renewed interest in SJTs. Although cognitive ability tests are established as one of the best single predictors of job performance, applicants from ethnic minority groups tend to achieve significantly lower test scores on average compared to White applicants. In practice, when cognitive ability tests are used as sifting tools this can lead to adverse impact against ethnic minorities (where there are substantially different pass rates for ethnic minority applicants compared to White applicants).

Research indicates that SJTs tend to demonstrate lower levels of adverse impact compared to cognitive ability tests (Nguyen, McDaniel and Whetzel, 2005). Alongside this, there is a minimal difference between males and females in performance on SJTs.

The lower levels of adverse impact are a major benefit of SJTs. SJTs are now being used in combination with cognitive ability tests for sifting, as a way of reducing adverse impact while also increasing the validity and the breadth of competencies assessed at the sifting stage.

How are Situational Judgement Tests Developed?

While there is some variation in the methods used by different test developers to create SJTs, there are usually four key stages in the design process.

1. Generating Scenarios

To develop the scenario descriptions for the SJT, individual interviews or focus groups are conducted with job incumbents and line managers to collect examples of critical incidents – specific situations that have occurred in the job role where an individual's behaviour was effective or ineffective. This ensures the test content reflects the important situations for success in the role. McDaniel et al (2001) reported that SJTs created using job analysis had higher validity than those created without job analysis.

Based on the critical incident information collected, test developers then write the scenarios for the test. The scenarios are designed to be clear, unambiguous and to use appropriate language to ensure there are no diversity issues. A greater number of scenarios are usually written than will be required for the final test, so that the best performing scenarios can be selected after trialling.

2. Generating Responses

For each scenario, job incumbents and line managers are asked to generate a number of alternative actions that could be taken in response to it. Actions can be generated by asking experts to generate responses individually or by conducting a focus group. If a focus group approach is used, this can be combined with the previous step of generating scenarios.

The actions generated by experts are then refined by the test developers to ensure clarity and that there are a range of different strategies presented. Usually, more actions will be written than are needed for the final test, so that some actions can be dropped at the next stage if necessary.

3. Defining the Scoring Key

Once the scenarios and actions have been written, line managers or high performing job incumbents are used to set the scoring key. They complete the test individually and rate or rank each action for a scenario in terms of how effective it would be in dealing with the situation.

The expert responses are then analysed to identify the ideal rating/ranking for each action. Actions which show a lack of consensus between experts are removed from the test so that only actions which have acceptable levels of agreement are included.

4. Trialling the Test

The SJT is then trialled on a large sample that is as representative as possible of the applicant pool. Their responses can be used to assess the difficulty of each scenario and action, so that scenarios and actions which are too easy or difficult can be removed. If a job incumbent sample and job performance data is available, they can be used to assess the validity of the test.

The data collected at the trialling stage is also used to create an initial 'norm group'. When scoring an individual's responses to the test, his/her score is interpreted by comparing it to the scores achieved by the norm group sample to determine how well he/she has performed.

Summary

SJTs provide a quick and efficient method of assessing an individual's judgement and are proven predictors of job performance. They can be used to measure a range of job-related competencies and "soft" skills important for effective performance in the job. The use of job incumbents and line managers in the development process ensures that an SJT reflects the demands and challenges of the job and offers applicants a realistic job preview. Additionally, they also tend to be fairer to minority groups than cognitive ability tests.

These benefits have been recognised by many organisations and the use of SJTs in assessment is gaining popularity. SJTs can add particular value as part of an online sifting stage in a selection process, where they can complement the use of cognitive ability tests by helping to reduce adverse impact as well as increasing validity.

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Assessment & Development Consultants Ltd

3 Lammas Gate, Meadow, Godalming, Surrey GU7 3HT UK

Telephone: +44 (0) 845 6888782 Email: info@adc.uk.com Web: www.adc.uk.com

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