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Guide to Virtual Assessment Centres



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Introduction

In 2015, the British Psychological Society released its Standard for the Design and Delivery of Assessment Centres (British Psychological Society, 2015). The Standard has been subsequently used extensively as a means of supporting practitioners in both the preparation and implementation of work-related assessment centres. While the original standard made some reference to virtual delivery, its primary focus was on the face-to-face delivery of assessment centres. Virtual assessment centres have been in existence for a while e.g. Lievens and Thornton discussed VAC in their 2005 review of new developments. However, the far-reaching extensive and unexpected changes to global working patterns which resulted from the Covid pandemic in 2020 required many organisations to rapidly review and adapt their delivery models to VACs. More generally practitioners may be considering the use of a VAC when cost, travel and geographic restrictions mean that it is impractical to run an in-person assessment centre. Additionally, the technological benefits of a virtual environment and or diversity considerations may make a VAC the preferred option.

Against this backdrop, the British Psychological Society working group that developed the Standard for the Design and Delivery of Assessment Centres recognised that practitioners were often having to attempt the transition with limited guidance or models for how this might be implemented. While the standard is as relevant to virtual as to face to face assessment and the extant literature gives some useful advice on the practicalities of incorporating technology into assessment centres (e.g. Guidelines and Ethical Considerations for Assessment Centre Operations, 2015), it was felt that further guidance would be advantageous for practitioners. This VAC Guide is a supplement to the Assessment Centre Standard and should be read and understood together with the Standard. This guide is intended to supplement the limited body of published evidence around the use of virtual assessment centres (e.g. Howland et al, 2015; Guidry, 2016; Lara-Prieto & Niño-Juárez, 2021). This body of evidence was used to inform this guide, and there was an open consultation on the draft guide before it was finalised. Practitioners should follow the developments in the scientific literature as it develops to ensure that they keep up to date in their practices.

For the purposes of this document, we will use the term Virtual Assessment Centres (VACs). While the guide, like the original standard, is focused on the design and delivery of Assessment Centres, much will be relevant to Development Centre practice as well.

The guide discusses considerations in five key areas:

- Technical
- Validity
- Design
- Assessors and other VAC staff
- Participants

Technical considerations

The success of any VAC will depend on the suitability, reliability and effectiveness of the technology platform(s) used for delivery. The functionality of the chosen technology will provide both constraints and opportunities for the design and implementation of the VAC. As well as allowing assessment without bringing participants onto a single site, the virtual environment also encourages the use of automation. This section outlines some considerations the designers and administrators of VACs will need to consider. Appendix 6 of the 2015 BPS standard provides further reference to technical considerations.

The use of VAC can offer a range of potential benefits:

- Allowing a broader range of exercises and measurement opportunities to enhance validity
- The creation of more immersive exercises (e.g. dynamic and interactive simulated inboxes, high fidelity immersive video presentation, use of virtual reality)
- Automated scoring and collation of assessors' scores.
- Easy recording of sessions (subject to agreement of all parties) can facilitate scoring protocols and assessor training.
- Highly scalable formats, with no physical constraints on the number of 'rooms' operating
- Greater opportunities for including participants across different countries and regions.
- Cost, time and resource savings (e.g. physical accommodation, travel time for candidates and assessors)

However, a number of barriers and potential risks also exist:

- Virtual exercises may be lower fidelity than face-to-face (e.g. difficulty capturing non-verbal behaviours)
- Participants and assessors may not have access to suitable technology
- Participants and assessors may not be skilled in using the technology.
- Interruptions due to technology reliability issues (e.g. internet outages, hardware and software compatibility)

a. Selection of the VAC administration software

The selection of the required technology platforms should be guided by the requirements of the VAC. The functionality areas to be considered include:

- The type and format of the exercises to be used
- The logistical management of the VAC (e.g. enabling participants to move between different exercises)
- The presentation of assessment materials to candidates (e.g. documents, video etc.)
- The means of interacting with candidates (e.g. video-link for interactive exercises)
- The type of hardware and software which participants will be able to access

It may be necessary to use multiple platforms / software packages in combination to achieve all of the above aims. Some organisations may choose to use or develop specialist software which is tailored to their assessment requirements. It is valuable to take time to specify the technological requirements and evaluate how well different packages meet these.

b. Specific factors to consider in planning the technical solution

The following factors should be considered when assessing the type and format of the IT platform to be used:

- Whether breakout rooms are required, and how these will be managed.
- What environment will be used for briefing / debriefing participants?
- Will there be any requirement for language interpretation?
- Whether the systems will need to interface with wider organisational resources (e.g. Applicant Tracking System)
- Whether the system will need to interface with other assessment platforms (e.g. psychometric test administration systems).
- How scores and performance data are captured and securely stored.
- The functionality to maintain the security of exercise materials (e.g. disabling copy and paste functions, remote proctoring)
- Whether corporate branding is available/important.
- Administrator functionality requirements (e.g. assigning participants to rooms, instant messaging)
- Whether separate 'rooms' (without participant access) will be available for assessors to confer, complete scoring etc.
- Browser compatibility

An effectively designed IT platform for VAC delivery will have clear and accessible functionality for all those involved – e.g. each staff role being able to access their own dashboard to control their involvement. Participants should know what they should be doing and when, and have easy and quick access to all relevant materials. Assessors should have a clear dashboard with access to exercise and participant scoring information to make their work more efficient and effective. The administrator can use the platform to monitor and manage the VAC and the system will manage, compute and display results. Some platforms may even generate participant reports.

c. Preparing the technological aspects of VAC delivery

The smooth running of the VAC will be dependent on effective planning and preparation which must include the use of the technology. The following section lists a number of considerations:

i. Piloting: Testing and rehearsing

- The system(s) should be fully tested before live assessments, with particular attention to how to manage potential issues such as slow internet speeds, unanticipated interruptions, software compatibility etc.
- Access to a sample platform should be provided for candidates and assessors to allow them to check the compatibility of their hardware and software and resolve issues in advance of the VAC.

ii. Technical support

What technical support is available for all in the event of problems – e.g. if the participant or assessor has problems with their own IT equipment, how and to whom should they report this? Who will be on hand to assist with such problems? Does the platform supplier provide support?

iii. Technological policy

- Policy & Guidance should be in place for handling unexpected events – e.g. how any internet outages (individual or general) will be dealt with. There should be clear policy/guidance around when exercises might be restarted or the whole VAC is aborted.

iv. Data Protection Policy

- This should outline the policies that are in place for the collection of data/ recording of performances. Advanced consideration of how the virtual environment may affect stakeholders' access to personal data and its security is important.
- Advanced notice to participants should be provided on data to be collected, right of access to data etc.

d. Technological requirements for participants and assessors

The success of the VAC will be contingent on both participants and assessors having access to suitable technology. Marked differences in the equipment that participants can access may lead to unintended advantage / disadvantage for participants.

All participants and assessors should be given clear guidance on the following points:

- screen size requirements,
- software/browser requirements
- internet bandwidth requirements
- whether headsets are recommended
- whether or not mobile devices can be used

e. Access and Internet connection

It is particularly important for everyone to have reliable internet connection to participate effectively in the VAC. Therefore, as outlined above, clear policy will be needed for situations in which participants' performance is affected by poor internet connection.

Validity considerations

The validity of an assessment refers to the extent that it is fit for purpose and measures what it claims to measure, so is therefore fundamental to effective design and implementation of VACs. The area of assessment centre exercises and criterion validity has been the subject of extensive research in recent decades, although in the main this research has focussed on assessment centres delivered in face-to-face context. The 2015 BPS standard references validity throughout with particular discussion in sections 4 and 9.

As the requirements of employees' roles adapt and evolve with much greater use of virtual environments operationally, VACs need to adapt to reflect these new work demands within the selection and development context. With technology comes the ability to apply tools such as artificial intelligence and big data with immense potential for measurement, but it is important to understand how measures using advanced technology actually relate to participant performance (Davenport 2021; Guidry 2016). The modular approach suggested by Lievens and Sackett (2017) is useful in integrating new approaches into a VAC.

Many of the factors covered elsewhere in this guide will influence the validity of a VAC. The following factors should be considered in both the design and implementation of the assessment centre.

The degree of validity of the VAC will be influenced by the extent to which the exercises used provide a genuine and accurate reflection of the requirements of the role. The VAC designers will need to evaluate the extent to which the exercises meet this requirement, and the methods outlined within the BPS 2015 standards are still suitable for achieving this. Particularly if exercises are being converted from a face-to-face format, the designers will need to assess the extent to which the exercise content and scoring criteria still reflect the requirements of the role. For example, where exercises within a VAC primarily involve meetings held over video-conference, is this reflective of the reality of the role for which participants are being assessed? The closer the alignment between the exercise content and delivery and the actual day-to-day requirements of the role, the more valid the VAC is likely to be.

Certain forms of exercises (e.g. those requiring interaction between a number of group members) are likely to be subject to greater change in the interpersonal dynamics through the shift to an online format. This is simply due to the increased complexity of the social interaction, and the greater requirements for using social cues to inform basic interaction elements such as turn-taking, interjection etc. Again, in such instances the designers should consider the extent to which the online exercise provides a legitimate and credible simulation of a real working environment, and the extent to which it affords assessors the opportunity to gather suitable evidence around each participant's performance. As outlined within the 2015 BPS standard, trialling and piloting the exercises within the online format will help to identify any unintended consequences that might arise through the use of the online delivery medium.

Design

The 2015 BPS standard reviews the design of assessment centres in some detail in section 4. The points below focus on issues of particular relevance to VAC design.

a. Potential design benefits with VACs

From a design perspective relating to VACs there are two key aspects:

1. **Automation:** *The use of computers to deliver exercises, collect responses and even score the results.*

Exercises can be fully automated – where the candidate interacts directly with the computer interface and no human intervention is required – or semi-automated – where some intervention is required to take the candidate through the exercise e.g. a role-player interrupting a candidate working on an exercise with a phone call. When done well automation provides a number of potential benefits over a more traditional approach in several areas. These include more efficient use of time, consistency in administration, security of materials, ease of update of materials, reduction in the need for paper and other materials. Where automation extends to scoring of exercises, it can lead to greater efficiency, objectivity and consistency in scoring and recording of scores. Indeed, it is even possible to have a fully automated exercise that does not require an assessor, i.e., automatically and objectively scored. At the moment these are likely to be written exercises. It can be argued that automated assessors are superior to assessors who always bring an element of subjectivity, are costly, and not 100% reliable. Even when assessors score the exercise, digital support can improve the accuracy in ratings. However the validity of automated scoring and its freedom from bias needs to be verified. AC platforms often offer dashboards for participants, assessors and AC Administrators to better manage their work and report on the results. Automation can reduce the use of paper with attendant environmental benefits.

2. **Migration:** *Where existing exercises are adapted for use in a virtual environment.*

There are benefits of replacing a face-to-face interactive environment with a virtual (video-based) interactive environment. These include benefits on time and money spent on travelling; ease of recording the session (with the participants consent); using technologies to score some of the participant interaction without assessor input. A well-designed automated approach can improve the impression of the assessment process on stakeholders and candidates.

b. Virtual Exercise Design Challenges

Impact on validity of working in virtual environment: Consider what you are measuring...

1. *Does the competency model reflect the current working environment*

Exercises should be designed around the current working environment, recognising that this may have changed considerably over recent years. If the role is now virtual home working, then that is what the exercises should reflect. So, conducting a job analysis and updating the requirements, as although the job title is still the same, the way the job is now done may have changed dramatically. Exercise designers need to understand this.

2. *Do the virtual exercises measure the competencies effectively?*

Converting face-to-face exercises into virtual reality does not necessarily guarantee the same thing is measured. Group exercises are potentially the most difficult to convert because the format change has a lot of impact even though virtual meetings might replicate how meetings are now run. For example, face-to-face we can make direct eye contact with a chosen individual and direct our communication to just that individual, or we can share our paperwork and work on a task with chosen individuals only. Such an approach cannot be done easily in a video meeting. Therefore, we cannot assume that existing interactive exercises now run with video technology work in exactly the same way.

Items in the following checklist should be considered in designing VACs. As well as having design implications, many will be relevant when developing technology specifications as well as participant and assessor briefings.

Design Checklist

- Design should take into account how easily the candidate can access and work with documents
- How easy is it to move around the documentation, find and reorder parts?
- Establish whether the briefing information will be accessible in the digital environment – e.g. are documents and tables easy to read using technology?
- What facility will the participant have to scan backwards and forwards through the different information?
- Can candidates annotate the briefing information e.g. to highlight points they want to address in their responses?
- Accessibility – can any documentation be viewed at different magnification, accessed by a screen reader etc?

- Will participants have appropriate technology to engage with the exercise – e.g. a large enough screen to read documents or see all meeting participants?
- How much time will participants need to familiarise themselves with the brief and documentation as presented in the virtual environment?
- Consider the participant experience in working through the exercises e.g. How might participants feel about being interviewed by a robot?
- Ensure that there are appropriate behaviourally anchored rating descriptions for assessors to use that work well for both the virtual work and virtual assessment environment.

Assessors and other VAC staff

Assessor training is a key factor underlying effective assessment centre practice. The main skills are observing and interpreting data in an objective and unbiased manner. The role of assessors is referenced throughout the BPS standard sections, but particularly in sections 4 and 5 and appendix 2. Assessor skills are just as relevant in a virtual environment as for an in-person assessment centre. Other VAC staff will also need appropriate training for their roles.

There are some areas where there are different or additional training needs when working in a virtual environment. The most obvious is the need to be able to use the technology. In addition, assessors need to be able to recognise and code behaviours from the information available in the virtual environment. As with any assessment centre, assessors need to be familiar with the exercises being used and where familiar exercises are moved to a virtual platform, how this might impact scoring protocols.

There are some benefits of working in a virtual environment with respect to assessor training and performance. For example:

- The ease with which participant performance can be recorded provides scope for developing realistic assessor training exercises
- A new assessor can shadow an experienced assessor until their scoring reaches the required criterion – there is no issue with a large number of assessors being overwhelming for participants or difficult to accommodate in the space available.
- It is possible for new assessors to take their time in making the assessments, if this is being done through recordings of the participant's performance. Video can be stopped and restarted, so the inexperienced assessor does not need to worry about missing information as can happen when assessing in real time.

There are also difficulties working in a virtual environment. These can include aspects of the assessor experience, such as fatigue from long periods of concentration on screens, and discomfort from wearing headphones for long periods. Assessors may feel more isolated in a VAC where they have less incidental contact with other assessors. The needs of assessors and other staff should be taken into account in the operational design. For example, it is important to ensure timetables allow assessors sufficient breaks.

Some critical issues in assessing behaviour in an online environment need to be covered in assessor training for VACs. In particular, it should include additional support and guidance on assessing behaviours which may be challenging to pick-up in the virtual environment.

Some issues may be specific to the environment used. Examples include:

- The difference between video and non-video interactions,
- The impact of the participant seeing their own image during interactions
- Interpreting a different range of social cues e.g., absence of eye contact, different ways of signalling turn taking in conversations
- Identifying the influence of technology glitches and not assigning significance to their behavioural impact– for example signal delays can lead to people speaking over each other.
- How exercise instructions may differ.

Lastly, training for all staff should cover the technology being used for the VAC. This would include:

- Basic operational skills
- Moving between “rooms” and “sessions”
- Troubleshooting common problems

The VAC administrators in particular should be expert users of the software platform, to ensure they’re fully able to navigate participants around rooms, and take appropriate action in the event of technological problems.

Consideration should be given on how to ensure that assessors and other staff have sufficient expertise and confidence in using the technology in advance of the VAC (e.g. through conducting a pilot or dummy-run of the VAC in advance of the live event).

Given that VAC staff are likely to be operating remotely, it is particularly important that they have easy access to guidance on their role.

Factors for consideration within this guidance include:

- How to deal with IT issues during a live event – e.g. whether business operations or IT skilled person/help desk is available to support assessors on the day.
- Pre VAC virtual planning – creating an IT handbook including key hints, tips and FAQs for each role.
- Contingency planning or disaster recovery on issues relating to timetable adjustments as a result of IT failure, outage or natural disaster etc.
- How to access tech support on the day and hours of operation – e.g. according to start time and end time.

Participant considerations

Participant rights and needs are discussed in various places in the BPS standard, particularly sections 5 and 8 and appendix 5. From the participant's perspective a VAC may have some advantages. There is no need to travel, participation is in the familiar surroundings of their own home or other chosen place. There is no stressful journey to undertake requiring an early start or late finish. This may be a particular benefit for participants with mobility issues. Potential disadvantages include participants needing to manage their own technology, participants finding it harder to ask questions if they are uncertain what they are meant to do, and participants missing out on the opportunity to gain an impression of their potential new workplace culture.

A critical issue is to make sure the participant is fully briefed regarding the requirements of the VAC in advance of the event. For example, they will need to ensure that they have set aside an adequate amount of time, that they have a place to participate where they will not be interrupted, have a good reliable internet connection and appropriate technology. The more participants understand about what will happen at the VAC the more likely they are to make appropriate arrangements. Consideration should be given to how participants who might struggle to meet the requirements will be supported. In particular participants should have a clear contact address for questions. Access to a practice site where participants can check that their technology works and see what will be required of them during the VAC will help participants prepare effectively, raise issues in advance and avoid difficulties during the VAC.

Some particular concerns that participants may have are listed below. Many of these concerns can be allayed with good communication with participants in advance of the assessment event. Providing good information will reassure participants that the assessment has been well thought through and is being professionally run.

- **Accessibility.** The design of the virtual assessment needs to take account of the resources that are likely to be available to participants. For example exercises should be designed to require minimum bandwidth for participants with poor connections. It may be appropriate to offer to reimburse participants for an additional data package so they can be sure they have enough data available to participate in all exercises.
- **Reasonable adjustments.** There is the same need for reasonable adjustments for those participants who need them as for any assessment. The nature of the assessments are likely to be different. Participants can use their own technology which is likely to be well adapted to their needs. However it is important that the assessment design is as inclusive as possible and is compatible with typical adaptations such as screen readers.

- **Time and space.** Not all participants will have access to a quiet, private space for long periods of time. Employers should work with participants to help them find an appropriate solution. This might include flexibility around timing of the assessment; offering space in a local office or branch or offering to reimburse the hire of a temporary office or hotel room in the participant's locality.
- **Recording.** The potential to record the participant's performance is one of the benefits of virtual assessment. However if this is done, the participants should be informed in advance that this will happen and should be aware when they are being recorded and when not. Participants should also be told what will happen to the recordings, who will see them and how long they will be kept (as with any other personal data).
- **Knowing what to do when.** At a face to face event, it can be easier to find someone to ask a question. In designing a virtual assessment, participants should be provided with a dedicated contact where they can ask questions or raise issues. Someone should be available to respond immediately at any time.
- **Participant wellbeing.** Steps should be taken to ensure that support is available for participants should they become distressed during the VAC.

There are also issues relating to participants that will be of concern to employers:

- **Identity.** It is more difficult to verify the identity of participants remotely. Employers may want to ask participants to show some ID to the camera.
- **Assistance.** In remote assessment there may be opportunities for candidates to receive assistance from other parties. There are sophisticated technologies for monitoring people remotely, but much can be done through the design of an assessment. For example active interaction with the participant makes receiving aid harder.
- **Security of materials.** With remote assessment participants may need to download materials to use locally. This provides opportunities for copying. Again assessment design can reduce the impact of this. For example, background materials can be downloaded, but actual tasks can be provided orally as the assessment proper starts.
- **Managing participants.** It is important to have a sufficient team of assessors and support staff for the number of participants. This will mean there are enough people to monitor participants for security if needed, to answer questions and deal with any technical issues should they arise.

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