



Assessing people with disabilities:

Guidelines on adapting and using psychometric assessments for people with disabilities



v1.0

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This guide has been compiled using information from a number of sources including:

- current UK legislation,
- guidance from organisations promoting the rights of disabled people and
- psychologists with extensive experience of assessment methodologies and assessment practice.

It reflects Team Focus' best understanding of current legislation and good practice, and our ongoing commitment to promoting psychometrics as a tool for inclusion in all areas of life. We hope that you find this guide of value in developing your skills as a practitioner in the challenging but rewarding area of making assessments accessible and of value to all.

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Introduction

Psychometric assessments are an increasingly popular tool for both the selection of new employees and the development of existing ones (e.g. CIPD, 2006¹). They are, however, frequently seen as a potential barrier to people with disabilities gaining employment. The purpose of this document is to help people understand how disability legislation relates to the use of psychometric assessments and how assessments can be used fairly and sensitively within this legal framework. Whilst based primarily on the legal requirements set out in the Disability Discrimination Act 1995 and 2005 (DDA), its broader aim is to help those administering and interpreting any type of psychometric or other assessment technique (e.g. role plays, group exercises) to develop their skills and confidence in making these processes accessible to people with disabilities and, through this, support them to unlock their potential.

Legislation and accessibility

The DDA made it unlawful to discriminate, intentionally or unintentionally, against a disabled person. The Act defines a disabled person as someone who has a 'physical or mental impairment which has a substantial, long-term adverse effect on their ability to carry out normal day-to-day activities'. 'Long-term' means that the impairment has lasted for at least 12 months or is expected to last for at least 12 months, or that it may recur. 'Substantial' is defined by the Act as being not minor or trivial. In addition to current disabilities the Act also covers disabilities that a person has previously suffered, even if they do not currently affect them.

Day-to-day activities covered by the Act are any of the following:

- mobility;
- manual dexterity;
- physical co-ordination;
- continence;
- ability to lift, carry or otherwise move objects;
- speech, hearing or eyesight;
- memory or ability to concentrate, learn or understand;
- perception of risk or physical danger.

The oft-quoted section of the DDA relating to employment states:

"It is unlawful for an employer to discriminate against a disabled person in the arrangements which he makes for the purpose of determining to whom he should offer employment" (pp10).

Once in employment:

"It is unlawful for an employer to discriminate against a disabled person whom he employs in the opportunities which he affords him for transfer, training or receiving any other benefit" (pp13-14).

Opportunities for personal development such as those based around psychometric assessments clearly fall under "training or receiving any other benefit". The DDA therefore relates to selection or recruitment – both when recruiting from external or internal candidates – and the use of psychometrics for activities like personal or team development. Areas such as careers guidance or coaching would also be covered by the DDA, whether offered by employers or as a service offered by external organisations.

The DDA differs from other legislation such as the Race Relations Act (1976) in introducing the concept of 'reasonable adjustment'. To ensure a disabled candidate is not disadvantaged relative to their non-disabled counterparts, employers are under the obligation to make 'reasonable adjustments' to the assessment process and materials, and also to consider what adjustments may be necessary to the work environment and work processes to allow a disabled person to perform in the role. Adjustments that may be made to the assessment process and job itself are considered in more detail below.

¹ CIPD (2006) *Recruitment, Retention and Turnover*. London: Institute of Personnel and Development

To summarise, there is a clear legal and moral obligation to make any selection or development process available and accessible to a disabled candidate. Regardless of the legal imperative, any such adjustments should be seen as part of the wider obligation to treat each person as an individual and be sensitive to their needs whether these are covered by specific legislation or not. Through ensuring disabled people are not excluded or disadvantaged but welcomed and treated as unique individuals, organisations have the potential to tap into a wide pool of talent that is currently under utilised.

Considerations when adapting assessment materials

The purpose of any psychometric assessment should be to provide information that is valuable to a decision-making process, whether a disabled candidate is involved or not. The value of psychometric assessments typically comes from their ability to indicate a person's likely future performance on significant aspects of a job or job-related training, through highlighting areas for further exploration (e.g. during an interview) or identifying strengths, areas for development or behaviours that relate to successful performance in a particular context (e.g. as part of a team). Psychometric assessments are of particular benefit when there is no prior evidence of a candidate's ability in a specific area, and so they indicate aptitude for acquiring job-related skills, or when they assess characteristics that are difficult to infer reliably from observed behaviour (e.g. personality, motivation or style). By using psychometric or other assessment methods that provide information relevant to the decision-making process, the validity, and therefore defensibility, of the assessment process is ensured.

There are many ways in which psychometric assessments can be adapted to make them accessible to people with disabilities. The majority of these adaptations are relatively easy to make and so clearly fall within the realm of 'reasonable adjustments'. It is all too easy when adapting assessments, however, to unintentionally make fundamental changes to the construct being measured. Even when adaptations are successfully made and the constructs being measured remain the same as a non-adapted version, the challenge is interpreting the meaning of a standardised psychometric instrument taken under non-standardised conditions. Interpretation is particularly challenging in the case of aptitude or ability tests, but also needs to be carefully considered when using personality measures or other assessment techniques.

In some cases it may not be possible to make adaptations to certain assessments in a way that retains their validity. Assessors may therefore need omit certain aspects of the assessment process for a disabled candidate and seek evidence from other sources (e.g. by placing greater emphasis on an interview). An alternative approach is for organisations to offer any candidates with disabilities a guaranteed interview.

Considering the context: selection, development and guidance

Psychometric assessments, particularly ability and aptitude tests, are most frequently used for recruitment. They also have a long history in areas such as development and guidance, and their use for these purposes is growing. The DDA has been most often interpreted from the perspective of organisations selecting people for employment, but it is important to consider some of the specific issues that relate to making assessments accessible in the context of development and guidance.

In selection situations, assessments typically indicate a candidate's potential for acquiring job-related skills or having the 'softer skills' (e.g. team working style, leadership potential) necessary for working effectively within the organisation. Psychometric assessments and other selection methods are designed to elicit evidence of these skills or abilities, with validity being determined by demonstrating their links between an assessment outcome and subsequent job or training performance. In relation to selection, the requirements of the DDA mean that employers must consider both their assessment methods and the ways that job tasks are carried out. Adjustments to either or both of these may be necessary so that a disabled candidate can show their suitability for a role and carry it out effectively.

In development and guidance contexts, assessments may be less closely tied to distinct job roles compared to when used for selection. This difference stems from development and guidance being more open-ended processes. If used for development within an organisation, there will typically be links between the assessments and generic organisational competencies, but these competencies may be related to a number of roles a candidate could potentially progress towards. Alternatively,

assessments may be used to set a development agenda for a candidate within their current role. In both cases, it will be important to make all reasonable adjustments to enable a disabled candidate to participate in the development process. If the process is not linked to specific job roles, however, it can be more challenging to link adapted assessments to any corresponding changes that a disabled candidate may need in the workplace. Assessors may therefore want to focus exploration on how a disabled candidate deals with generic workplace skills, rather than those related to specific roles.

Within a guidance context the focus of the assessments, particularly when looking at ability, will usually be more on generic workplace skills and how these relate to career options. Areas such as personality, interests and motivation will help provide an indication of 'fit' with possible areas of work and types of organisation. Being more exploratory than development situations, guidance assessors will be focusing on the needs of the client more than the adaptations specific organisations will be able to make. The validity of any adapted assessments in relation to specific positions therefore needs careful consideration and judgement. Disabled candidates may find the opportunity to experience adapted assessments in a supportive guidance context particularly beneficial, as it will allow them to explore what adaptations they find most helpful. This, in turn, can help inform any future dialogue with prospective employers about what adaptations they may need, and raise their confidence when attending future assessment events.

Tests of maximum and typical performance

The differences between assessments of maximum (e.g. ability or aptitude tests) and typical (e.g. personality, interests or motivation) performance must be considered when making any adaptations. Generally, tests of maximum performance are likely to be affected to a greater degree by making adaptations than those assessing typical performance, particularly when they involve a timed element as with the PFS Reasoning Tests.

When considering making adjustments to the PFS Reasoning Tests or other timed ability tests, it should be remembered that adjustments will affect the interpretation of test scores. As ability test scores result from the careful standardisation of testing conditions, instructions, test format and timing, altering any of these will impact on the normative interpretation of scores. This is particularly the case with the common adaptation of allowing extra time to complete the test, as timing is one of the major determinants of the score on tests of maximum performance. When considering allowing a candidate extra time, it is recommended that the paper-based versions of the PFS Reasoning Tests be used, although the online versions can also be configured to allow candidates 25 per cent extra time².

When completing the assessments, a disabled candidate may be somewhat slower than a non-disabled counterpart. For example, a person with a physical disability may take longer to turn the pages of the question booklet or to make a mark on an answer sheet. Test completion may also be slower in cases where questions are read aloud by a reader. If such a situation is anticipated it may be desirable to allow additional time to the candidate. If this additional time is limited (e.g. 1 or 2 minutes), the differences between scores under standard and extra time are also likely to be limited.

The paper-based tests are recommended whenever extra time is given to a candidate as they allow the number of questions answered during the standard test time to be recorded, before allowing the test taker to continue for the additional time that has been agreed. In practice, when completing a paper-based test, a candidate should use a different coloured pen for any answers given during the additional time. This process results in a candidate having two test scores that can be examined:

1. the total score under standard conditions and;
2. the total score after extra time.

In cases where a minimal amount of extra time is allowed, such as those outlined above, it is recommended that only a single score is obtained from the test as the effect of the additional time will be minimal.

² Facilities exist in the online PFS Reasoning Tests for extending the timed parts of the test. For details on how to do this please contact Team Focus.

Making adaptations

Whenever candidates are invited to an assessment event, they should be asked to indicate in advance if they have any disabilities that may affect their ability to participate fully. In order for candidates to make an informed judgement as to whether adaptations will be necessary, sufficient information about the nature of the assessment activities must be supplied in the invitation. It is important that organisations seek information about any possible adjustments they may need to make in advance, as this gives the opportunity to seek further details about adjustments from the candidate if necessary, and to make any changes to the physical arrangements and assessment materials.

The individual candidate is always the person best placed to understand their unique needs, and therefore what changes they need for the assessments to be accessible. It will be useful though, to have examples of the kinds of adaptations that can be made so these can be discussed with the candidate (see below for suggested adaptations). Even when two candidates have apparently similar disabilities it should not be assumed that an adaptation appropriate for one will also be suitable for another. Each person will have developed a unique way of dealing with their disability and this needs to be the central consideration when adapting assessment materials or making any subsequent changes to the workplace.

When seeking information from a candidate about their disability, it is important that they understand the purpose of the discussion and how any information they give about their disability and associated needs will be used. This will help make the discussion open and honest, and make the candidate feel valued and not disadvantaged. When seeking information about a candidate's disability, assessors need to be aware that disabilities may be of a sensitive or personal nature and manage the conversation appropriately. Particularly useful information to seek from the candidate includes what support they have previously found useful and what adaptations have been made for them before. The outcomes from any professionally conducted assessments of their disability could also provide valuable information about potential adaptations.

If a candidate has asked for a disability-related accommodation to be made but it is unclear whether they have a disability or not, an assessor is entitled to ask the candidate whether they have a disability that is covered by the DDA or, if necessary, ask for evidence of the disability. Such information should only be sought when the disability is not obvious and should be limited to information necessary to determine whether an adjustment is reasonable.

When considering making adjustments to assessment materials, the types of adjustments that can be made to paper-and-pencil and online or computer-based assessments need to be considered. A disabled candidate may use special equipment to make computer technology accessible to them, such as:

- screen enlargement
- voice recognition
- attached magnifying glass.

In these cases, the compatibility of the equipment with the assessment system needs to be ascertained. In general, however, online or computer-based assessments tend to be less adaptable than their paper-based equivalents. As research has shown that well developed assessment materials give equivalent results from paper-and-pencil or computer-based versions, assessors need to consider the adaptations required by a candidate and which version of the assessment materials will most readily meet the candidate's needs.

In a work context it is important for employers to remember that the requirement of 'reasonable adjustment' applies to both the workplace and assessment processes. When making adjustments to assessments, possible adjustments that may need to be made to the workplace, if the candidate is successful, should also be considered. Whilst it is unlikely that a full assessment of a disabled person's needs in relation to the workplace would be conducted before they were appointed, some consideration of possible workplace changes will help ensure that any adapted assessments remain valid. For example, if a person with a visual impairment uses a screen reader to access written information, it would be appropriate to provide access to a verbal reasoning test by providing a screen reader or having it read to the candidate. If, however, they were going to have verbal material

translated into braille in the workplace, using a screen reader or having the test read to them would be likely to reduce its validity substantially.

Guidance on making adaptations for specific conditions

This section gives suggestions for the modifications that may be made to assessment materials for people with different disabilities. The majority of these modifications will need to be made using the paper-based materials, though some suggestions also apply to the online assessments. It should be noted that the categories given here are intended to be only an organising framework. People may have multiple needs that do not fall clearly into any single category, so flexibility is needed when evaluating the most appropriate adaptations for each individual. As stressed above, before any modifications are made it is essential that the person is consulted if the modifications are to be effective and to be seen as taking into consideration the individual's specific needs.

Visual impairment

It is important to remember that candidates are likely to have different degrees of visual impairment, from low vision or partial sight through to blindness (only about 2 per cent of people on the 'blind' register are actually blind). Any adaptations that are made need to reflect the individual's degree of sightedness. Producing large-print versions of the assessments may be adequate for some, but remember that answer sheets also need to be enlarged. Alternatively, candidates may prefer to use magnifiers. Attention should also be given to the lighting in the room where the assessments are being completed.

Possible adjustments for those with visual impairment include:

- using large print;
- providing a reader;
- using taped or digitised audio presentation of questions;
- giving responses verbally;
- adjusting the lighting;
- ensuring adequate allowance is made for an assistance dog, if they have one.

Deaf or hard of hearing

As with visual impairment, hearing impairment can range from partial hearing to deafness. For many candidates hearing impairment may not provide a barrier to psychometric assessments and so they can complete them online under standard conditions. Paper versions of assessments with spoken instructions may be less appropriate. People who have had a hearing impairment from an early age or who have severe deafness may be fluent in British Sign Language, effectively making English their second language even when they can lip-read English well. This should be taken into consideration when interpreting assessments with a substantial verbal component.

Language development may have been affected in cases of severe hearing impairment. In such circumstances extra time may be offered, and scores interpreted under conditions of both standard and extra time.

Physical disability

Physical disabilities or motor impairment can affect fine and/or gross motor movement in the limbs, trunk or head and neck. Co-ordination may also be affected. For people with physical disabilities, the main concerns centre on physical access to the assessment area and the assessment materials. As reading ability is normally unaffected and many candidates with physical disabilities have adaptations that allow them to use computers effectively, it may be possible for them to take the online tests. If using paper versions, it must be ensured that candidates can turn the pages of the test booklets or questionnaires. Difficulties in recording responses on paper-based questionnaires or answer sheets can be overcome by using larger answer sheets, allowing answers to be recorded in a copy of the question booklet, or allowing candidates to indicate answers orally.

Possible adjustments for those with physical disability include:

- making physical adjustments to the assessment room;
- making assessment area accessible;
- using specially adapted computer equipment;
- providing large print answer sheets;
- providing a scribe;
- giving answers orally;
- recording answers on audiotape or digitally;
- giving additional time;
- allowing additional breaks.

Medical conditions

There are a wide range of medical conditions that may be a barrier to completing assessments including chronic pain, respiratory or heart conditions. The nature of a person's difficulties will depend on their specific condition, but may include difficulty remaining seated for the duration of the assessment due to pain, fatigue or discomfort leading to difficulties in concentrating. Appropriate adjustments are likely to focus around making the assessment process more comfortable for the person through providing breaks as necessary or appropriate physical equipment (e.g. special chairs).

Possible adjustments for those with medical conditions include:

- providing a scribe;
- giving answers orally;
- recording answers on audiotape or digitally;
- making physical adjustments to the assessment room;
- allowing additional breaks.

Mental illness

People with a mental illness may be nervous, anxious or depressed. Potentially stressful events such as completing psychometric assessments can exacerbate these conditions, though taking them in a supportive environment can provide a very valuable opportunity in itself. Additional support may be needed for these candidates before they complete the assessments and also afterwards when working through the outcomes.

Candidates with issues relating to mental illness are likely to be capable of completing the online assessments, though performance on assessments such as the PfS Reasoning Tests may be affected by severe anxiety and difficulty in concentrating. It may therefore be preferable to take paper versions of these tests, so allowing breaks in the timed part of the test if necessary. If a candidate appears very nervous about the possible assessment outcomes and to have low self-esteem, assessors should make it clear to candidates that they will have an opportunity to discuss the assessment results in a face-to-face review session.

Possible adjustments for those with mental illness include:

- face-to-face support before and after taking the assessments;
- allowing breaks during the assessment;
- using a quiet environment where distractions are minimal.

Learning disability

Candidates with learning disabilities may have a range of difficulties with receiving, processing, storing and retrieving information. Disabilities may be non-specific or one of the more prevalent syndromes of disabilities (e.g. dyslexia or dyscalculia discussed below, or attention deficit hyperactivity disorder (ADHD)). Many employers may choose not to test a person with non-specific learning disabilities as it can be difficult to determine to what extent a test is actually assessing an aspect of the disability, and so may be unlawful. When assessing a person with a learning disability it is important that they clearly understand the instructions and examples, and to ensure that the test is at the right level so as to avoid frustration and disengagement. This does not preclude the use of the online assessments, but it

is advisable to conduct the assessment individually in a supported environment where the person's understanding of the requirements and example and practice questions can be checked. Time should be given to recheck the instructions as necessary and, in the case of ability tests, it should be ensured that the need to work quickly is appreciated. With conditions such as ADHD, it is important to remember that the condition may have impacted on the person's early educational experiences and also make it difficult for them to focus on a timed test for extended periods.

Possible adjustments for those with learning disabilities include:

- giving additional support for instructions;
- providing a reader;
- giving answers orally;
- recording answers on audiotape or digitally;
- giving additional time;
- assessing individually in a quiet environment;
- allowing breaks during the assessment.

Dyslexia and dyscalculia

Dyslexia is an example of a specific learning difficulty but is covered separately due to its prevalence. The term dyslexia covers a cluster of difficulties around language, characterised by difficulties in reading and writing (particularly spelling) and can vary greatly in severity. Verbal reasoning tests or other tests containing a significant language component potentially present the greatest difficulties for people with dyslexia. The most common adjustment is to allow dyslexics extra time on timed tests. Usually around one quarter of the standard time is added to the timed part of the test, though candidates can also be asked about how much extra time they have been allowed during previous exams and use this as a guide. It is also important to check that people with dyslexia clearly understand any written instructions.

Possible adjustments for those with dyslexia include:

- allowing extra time;
- providing a reader.

Whereas dyslexia concerns difficulty with reading and writing, dyscalculia is a difficulty with numbers and basic mathematical concepts. Evidence of dyscalculia can include difficulties in understanding numerical operations, sequencing numbers, telling time or following directions. Some dyscalculics may experience very few difficulties whereas for others these may be more widespread and challenging. As with many 'learning difficulties', evidence suggests that pure dyscalculics or dyslexics are in the minority. For example, about 60% of dyslexics will also show evidence of dyscalculia.

Dyscalculia will obviously have most impact on numerical tests, though it is worth considering that, due to overlap in symptoms, dyscalculics may also have some difficulties with words. As with dyslexia, allowing extra time may help some dyscalculics, though it will be important to explore with the individual their specific difficulties.

The assessment process

An assessment process that includes a disabled candidate may not be any different from one with non-disabled candidates. In order for a disabled candidate to be fully included, however, this section offers some tips for assessors about particular areas that may need to be addressed. Designed to reflect the major stages of any assessment process, this section covers preparation and meeting the candidates, administration, scoring and interpretation, and finally review of the assessments.

Throughout the assessment process it is important that assessors are mindful of the needs of a disabled candidate, and that they bear in mind their duty to make reasonable adjustments where necessary to allow the disabled candidate to fully participate in the process.

Preparation and interacting with candidates

Any assessment process can be a potential source of anxiety to all candidates, particularly when it is 'high stakes' (e.g. for a job or promotion). Preparation material such as Test Takers Guides are designed to help candidates understand the nature of the assessments they will be undertaking and reduce anxiety, through increasing their understanding. Such material should be routinely sent to candidates, but this is particularly important with a disabled candidate who may have less experience of applying for jobs.

It is important that a disabled candidate does not experience undue difficulties in getting to the assessment venue or in navigating their way around it, as this could be an unnecessary source of anxiety. If the candidate is driving to the assessment venue a convenient parking space should be arranged, otherwise a taxi may need to be organised for them. Depending on the specific needs of a disabled person, it may also be necessary to make some adjustments to the assessment venue. For example, it will be necessary to check that a building is accessible if one of the candidates is a wheelchair user, and also to allow adequate space so that the candidate can move around the assessment area freely. Similarly, if a candidate has an assistance dog, appropriate allowance needs to be made.

When interacting with a disabled person it is important to see the person and not the disability. The person's disability should not be ignored, however, and all reasonable adjustments necessary for them to participate in the assessment session should be made. Always speak directly to the candidate, even if they have an assistant with them. The assistant will expect this and will not feel 'ignored'. If a candidate is a wheelchair user, it is advisable to try and position yourself at the same level as them (e.g. by sitting down) so that you are not physically above them.

For a person with a hearing impairment or a learning difficulty, it may be necessary to pay particular attention to your speech. Speak clearly and never cover your mouth. If you naturally speak very quickly it may be necessary to slow down, but do not slow down so much that you are effectively speaking one word at a time. If you are unsure whether you have been understood it is advisable to check with the candidate, and be willing to rephrase what you are saying if necessary. It may be necessary to move to a quieter area if there is a lot of background noise that is preventing either party being clearly understood.

A disabled candidate should always be asked if they require assistance before any assistance is given. For example, a candidate with a visual impairment may be asked 'Would you like me to guide you to the assessment area?' and assistance given if requested. It is not acceptable to touch or lead a candidate with a visual impairment without their requesting assistance, but do not be offended if they turn down an offer of assistance. Similarly, if a candidate is a wheelchair user, you should never push them or touch the wheelchair in any way unless asked to, as the wheelchair is part of their personal space.

To summarise, when communicating it is important to be patient at all times; check that you are understood and do not be afraid to ask a person to repeat what they said if you did not understand them. Clear and appropriate communication is essential to making a disabled candidate feel included in the assessment process.

Administering adapted assessments

If an organisation usually conducts assessments in groups, assessors need to decide whether a disabled candidate can take the assessments as part of the group or not. Wherever possible a disabled candidate should be included as part of the larger group of candidates, but for some adaptations this may be difficult because of the potential impact on others. For example, a candidate who has a physical disability that prevents her marking the answer sheet is offered a scribe so that she can read the answers aloud for the scribe to record. If conducted as part of a group session, the candidate speaking the answers to the scribe is likely to impact on other candidates. Testing the candidate separately would therefore be appropriate under these circumstances. If the same candidate used an adapted computer that allowed her to record the answers without further assistance, she could be tested as part of the group as this adaptation would be unlikely to disrupt other candidates.

The exact procedure for administering an assessment to a disabled candidate will depend on the nature of the adaptations that have been made. Discussing what adaptations are to be made with a candidate before the assessment session will help them understand what to expect, but full instructions should still be given as they are for non-disabled candidates. In cases where adaptations have no impact or only a minor impact on instructions (e.g. a large print version of the materials, using specially adapted computer equipment) the standard test instructions may be used. More substantial adaptations are likely to require some corresponding changes to the standard instructions (e.g. if presenting an assessment orally instead of on paper). If changes to the instructions for a disabled candidate are substantial, it may be preferable to administer the assessment separately. Regardless of what changes are made to the assessment materials and instructions, the standard instructions should always be followed as closely as possible.

Scoring and interpreting adapted assessments

Adaptations to assessments typically make little difference to the ways in which they are scored. With the Profiling for Success assessments, online assessments will be scored automatically and reports generated, as with any administration. If paper-based versions of the assessments are used, assessors have the option of using hand scoring or using the Profiling for Success online data entry facility to score the assessments and generate reports. Again, this process is the same as for non-adapted assessment materials.

Due to the standardised nature of psychometric assessments, whenever adaptations are made considerable care needs to be taken when interpreting the results. As each disabled candidate will have individual needs, it is inappropriate to compile norm groups for disabled candidates as a whole. Instead standard norm groups should be used (as they are with the Profiling for Success assessments), but scores interpreted with a greater degree of flexibility and due regard for the individual's specific circumstances. Because of this, it is strongly recommended that whenever possible a disabled candidate is offered a face-to-face review to discuss their assessment results (see below).

Ability and aptitude tests, such as the PfS Reasoning Tests, are particularly sensitive to adaptations. This sensitivity stems from the standardisation of instructions, item presentation, response format and the controlled test time that are characteristic of psychometric ability tests. When adaptations are made, one or more of these elements will be affected, so potentially invalidating the normative interpretation of scores that would have been collected under standardised conditions.

As mentioned previously, the strict timing of ability tests is one of the key factors in standardisation. Clear interpretations of tests taken under extra time are not possible, and it is for this reason the procedure of stopping the person after the standard time and then allowing them to continue but marking their answers in a different colour is strongly advised. The two scores generated from this process can be compared to the standard norm group. Providing no major adjustments have been made to the actual assessment materials, the first score represents performance under non-adjusted conditions. A comparison between this score and the score after extra time should be made and the difference between them evaluated.

Due to the highly individual nature of disabilities and how people adapt to them, this is likely to impact on a test's reliability. Though it is not possible to specify precisely the extent of this impact for each individual test, the overall effect is likely to increase the amount of error in a test score. It is therefore recommended that error bands of two standard errors of measurement (SEMs) are used when interpreting test scores.

Qualitative interpretation of ability tests can provide highly informative information on adapted test outcomes due to the difficulties of interpreting non-standardised tests. Examining the balance between speed (number of questions attempted) and accuracy (proportion of questions attempted that are answered correctly) shows a candidate's qualitative approach to a test and how they have balanced speed and accuracy aspects of their performance. A qualitative report based on speed and accuracy is automatically produced for the online or computer-scored PfS Reasoning Tests. Qualitative interpretations are particularly valuable when looking at the performance of a disabled candidate under standard time conditions, and for conditions such as dyslexia indicate performance at least as well as comparison with a norm group.

For most candidates with disabilities, any adaptations made to typical performance assessments such as the PfS Learning Styles Indicator or Type Dynamics Indicator should have a minimal effect on the validity of the results. This is true for assessments of personality, interests or motivation generally, but is still advisable to explore the results in detail with the candidate during a review session.

There are three points however, that should be considered when exploring personality and related assessments, such as the Type Dynamics Indicator, with a disabled candidate:

1. As with all personality assessments there is a need for validation of the reported profile. A candidate's specific difficulties or circumstances may have led them to adopt preferences or behaviours that are not their 'ideal'. This is true of people generally, but may be particularly the case with a disabled candidate. Exploration of the reported profile should take this into account, acknowledging the potential impact of circumstances on aspects such as behaviour and personality and allowing space to explore the implications of this with the candidate;
2. If a candidate has a mental illness, it should be recognised that some conditions or medication may affect decision-making. For some this may make it difficult for them to report clearly on their behaviours or preferences, which again should be explored during a review session. When working with a candidate who has mental illness, it must also be recognised that their condition may affect responses to scales assessing aspects of emotional stability and possibly how they interact with others;
3. If a respondent is giving their responses orally to another person to record, aspects of social desirability may lessen their likelihood of giving more extreme responses. Whilst this should have less effect on an instrument assessing preference such as the Type Dynamics Indicator, it can have a greater effect on normative instruments.

Reviewing assessments with a disabled candidate

Best practice advocates that everyone who completes a psychometric assessment, whether as part of a selection, development or guidance process, should receive some form of feedback. It is particularly important that disabled candidates have an opportunity to review the results of any assessment process and ideally, as with all reviews, this should be conducted face-to-face with a trained assessor.

There are a number of reasons to conduct a full review of assessment results with a disabled candidate. As previously discussed, any adaptations made to assessment materials or an assessment process can affect the interpretation of the results. It is therefore important that there is an opportunity for the results to be explored and validated in a review session. Related to the validity of the results is the question of how effective any adaptations have been in allowing the disabled candidate to access the assessment materials. The review process allows the success of adaptations to be explored and any unanticipated difficulties allowed for in the interpretation of the results. Finally, a disabled candidate may have less experience of applying for jobs, and so correspondingly less experience of psychometrics, than their non-disabled counterpart. The review is therefore an opportunity to explore perceptions of the assessment process, provide guidance for the candidate if they participate in any subsequent assessment procedures, and to ensure that they are able to take something positive from the experience, regardless of the outcome.

When planning and conducting a review session with a disabled candidate, it is again necessary to be mindful of what adjustments are likely to be needed as during the assessment process. If the review session is being conducted separately from the assessment event, suitable arrangements for travel and access to the premises need to be made. The structure of the review process should be broadly the same for all candidates, though with a disabled candidate additional time may need to be allowed so that the success of any adjustments and related issues can be explored.

Clear communication is central to a successful review session. Any communication issues that the candidate has therefore need to be recognised and appropriate accommodations made by the reviewer, as when meeting the candidate and conducting the assessment process. By the end of the review session ideally all candidates should feel comfortable with the assessment process and have gained something positive from the process.