

**The British
Psychological Society**
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Visual impairment and psychometric testing

Practical advice for test users managing the testing
of people who have sight disabilities



www.psychtesting.org.uk



**The British
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Psychological Testing Centre

The purpose of these guidelines

These guidelines are to help holders of the BPS Qualifications in Test Use in Occupational, Educational or Forensic Contexts, who are required to test someone who has a visual impairment.

Visual impairments and the law

A person who is registered or certified blind or partially sighted was automatically regarded as disabled under the Disability Discrimination Act (DDA) (1995) and remains so, under the Equality Act 2010, which has replaced the DDA. The Equality Act legally protects people from discrimination in the workplace and in wider society. Under the Equality Act, an individual is disabled if they have a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on their ability to carry out normal daily activities. Therefore, even without registration, it is likely that a person with significantly limited vision which is not easily corrected using glasses or contact lenses will be considered disabled under the provisions of the Equality Act. The Act makes it unlawful for an employer to treat a disabled person less favourably than a non-disabled person, and those who provide services must make them accessible to clients with disabilities. When tests are being used in connection with employment (e.g. in making selection decisions), employers have a duty to make reasonable adjustments so that disabled persons are not placed at a substantial disadvantage. In educational, clinical or other contexts, disabled people have the right to expect the same quality of service, including accuracy of diagnostics and assessment as other users of the service.

In 2003, another new Act came into force, the Copyright (Visually Impaired Persons) Act 2002. Under this Act, (which enables single or multiple copies to be made of information), a visually impaired person is defined broadly, as a person:

- who is blind;
- who has an impairment of visual function, which cannot be improved, by the use of corrective lenses, to a level that would normally be acceptable for reading without a special level or kind of light;
- who is unable, through physical disability, to hold or manipulate a book, or
- who is unable, through physical disability, to focus or move his eyes to the extent that would normally be acceptable for reading.
- This definition, differing from that used by 'Articles for the Blind' and many organisations' eligibility criteria, does not in any way affect any other definition. It does however, go beyond 'blind and partially sighted' people as commonly understood. It is therefore useful to be aware of generally. (The above definition is taken from the RNIB website www.rnib.org.uk)

About visual impairments

Visual impairment covers a wide range of conditions. Even a person who is registered blind may have some residual vision, e.g. the ability to discern light from dark, or even quite good acuity within a severely limited field of vision. Partial sight also covers many different types of conditions. These can range from very blurred vision to loss of some areas of the field of vision. For some people the act of focusing can be difficult, which can mean that reading is arduous as it is necessary to constantly refocus on the next portion of text. (It is perhaps useful therefore to be mindful of the broader definition used in the Copyright Act 2002).

A visual impairment may occur alone or in combination with other conditions. Where a visual impairment is combined with a hearing impairment, communication may be via hand spelling or other code, requiring a skilled interpreter. (Guidelines on psychometric testing for people with hearing impairment are available from the BPS Psychological Testing Centre (PTC) website www.psychtesting.org.uk).

Some people are born with visual impairments, or have lived with the disability for a long time and have been taught or developed their own strategies for coping with both the practical difficulties of living and dealing with information usually presented in text form. For instance, those with very restricted vision may be skilled and comfortable with Braille texts. However, those who lost their sight in later life often have not learned Braille. Moon, an alternative to Braille, is sometimes used, especially by older people, but modern technology offers many alternative solutions to tactile scripts. Audio tapes, digital recordings and telephones can easily replace Braille for reading and writing, and computers with screen magnification, speech synthesis or voice-activated commands allow access both to modern technology and communication via e-mail. Information technology can enable individuals with certain visual impairments to adjust the style, size or colour of the font, or the contrast and brightness of the screen, in order to best suit their needs. Alternatively, voice activated technology may be more appropriate for some individuals. A talking calculator could also be useful to some individuals. It is always advisable to ask the individual what works best for them and how they prefer to access information technology.

For those with more residual vision, texts are typically accessed using large print and/or various magnification and lighting aids. Aids can include powerful spectacle lenses, freestanding magnifiers placed on top of a text, often with an integral light source, or more powerful magnification via a CCTV. These are machines rather like microfiche readers which produce a highly magnified version of a text on screen when the page or book is inserted. They often have variable magnification and display controls. With high magnification only a small part of the text fits on the screen at any one time and the user has navigation controls to move across and down the page. It is important to remember that this can slow down the reading process, so extra time may be required.

Impact on testing

Any task where materials are presented visually, whether on paper, computer screen or as objects to be manipulated, will cause difficulty for a visually impaired person. This will include the vast majority of psychometric tests. In order to assess a person with a visual disability, it is likely to be necessary to make adjustments to standardised test administration procedures, use alternative forms of materials, or both. However, such changes to a test cannot be made without affecting its reliability and validity. Advice should therefore be sought from the test publisher or a Chartered psychologist with suitable expertise in assessing people with visual impairments before any changes are made. Publishers may be able to supply materials in alternative formats as well as providing advice on appropriate adjustments to administration procedures.

Speak also to the individual about what works best for them, including how they best access visual or written material and what adjustments they use in everyday situations. Finding out from an individual how a disability affects them functionally is always informative and may provide useful information in respect of reasonable adjustments in a testing situation.

Practical advice in advance of the testing session

- Try to choose tests where alternative forms of materials are available. Check how you could access special materials and advice on how to use them should these be needed. Test Publishers can provide guidance and may have their own guidance leaflets.
- If you are using computerised test administration or are accessing tests via the internet, consider how you will deal with someone with a visual impairment or other disability. This might include using different onscreen forms, or making arrangements to test people individually with alternative materials. Again, discuss with the individual how they prefer to access IT.
- When inviting people to a testing session, ask them to inform you prior to the test if they have a disability or any condition that might affect their performance on the tests. This allows the test user / administrator to seek advice and prepare for any special needs.
- Provide any practice materials that are supplied with the tests well in advance of the testing session so test takers can check if they would have difficulty with any of the tasks. If possible, ensure a range of alternative forms of practice materials are available, so that the most appropriate can be used.
- If a visual impairment is reported, ask, 'How does it affect you?' Enquire how the person prefers to access written materials. Does a blind person read Braille or prefer to have texts read out? Does a partially sighted person need large print or special lighting conditions? How does the impairment affect the person's reading speed? Are there difficulties scanning a text, moving focus? Where a young child is to be tested, check with carers and educators what would be appropriate.

Individuals may be able to tell you about aids, equipment, lighting levels or the nature of any information technology adjustments. They may also be able to tell you about any provisions required in exam conditions, for example, use of a scribe, reader, extra time or transcription requirements, (braille, moon, thermoform, audio-transcription or large print size requirement etc.).

- As well as discussing the test itself, consider any other equipment or processes involved. Will the test taker be able to use a standard or modified answer sheet? How does the person usually use a calculator if one is needed for a test? Is there a requirement for a talking calculator?
- Consider the relevance of the test or questionnaire being used for the assessment purpose. Would the test be as relevant to a visually impaired person? For instance, in adjusting a job for a visually impaired person some tasks may be passed on to other staff (e.g. filing, proof-reading), making some skills unnecessary; similarly, using pictures to assess vocabulary in a young child may be inappropriate. Try to find alternative tests which are less dependent on visual materials (e.g. a vocabulary test using physical objects).
- Think also about the room and location in which testing is being carried out. This is not only in terms of lighting levels in that room, but also wider access issues in terms of the venue or building. Likewise, prior to the testing session, ensuring that joining letters, practice materials and/or instructions are provided in appropriate formats is also a requirement and this too may provide useful information in support of the testing session itself. Advice on such issues can be accessed via the RNIB.

Making adjustments to tests

The standardised nature of psychometric tests is one of the main contributors to their effectiveness and objectivity, and arbitrary modifications to the test or administration procedure are likely to invalidate the results and render standard norm groups and score interpretations meaningless. Changing the way a test is administered can alter what is being measured. For instance, when a test is read out, memory may become a more important factor in responding. Professional advice will be needed to ensure that adaptations are appropriate and to advise how changes might affect interpretation of scores and appropriateness of standard norm groups.

Therefore, where a modification is required, advice should be taken from a Chartered psychologist with expertise in this area or from the test author, distributor or publisher. They will have knowledge of the type and degree of modification that might be needed.

The way the person accesses the test will affect the timing where tests have a fixed time limit. For instance, reading Braille is slower than ordinary text reading. Where the test taker needs to refer between different parts of the text (e.g. from a question to the relevant part of a passage in a reading comprehension test) this will be particularly slow. People using a large print test version together with a high

degree of magnification may only be able to see a few words in focus at a time and therefore will find reading slower and scanning difficult. A time modification will be needed for these test takers.

The amount of extra time required will depend on the person's disability, the tests being used, the way they are to be administered and their relationship to the characteristic being measured. Only a relevant professional can determine what is appropriate. An arbitrary decision should never be made.

Some test takers may want to bring along special equipment or may ask for specific lighting conditions. For other test takers the best way to administer the test may be using a reader and / or a scribe. This may be particularly appropriate for test takers who usually access text via an audio tape or speech synthesizer, as these types of technology can be quite difficult to use when there is a need to refer backwards and forwards in the text.

Consider whether the person can indicate responses in the standard manner. A modified answer sheet may be required, or it may be appropriate for the test administrator to note down the responses even when this is not the normal procedure. Where test takers are providing quite personal information, e.g. by answering a personality questionnaire, make sure that the administration method does not require greater disclosure than the standard procedure. For instance, reading with oral answers to a checklist means that the administrator is aware of individual answers, whereas this is not so when the test taker is filling in their responses themselves, such as for a paper and pencil administration. This can affect the way a person responds.

Whilst not about the use of psychometric tests *per se*, it is important to remember that other aspects of selection and recruitment processes may need consideration, for example at Assessment or Development Centres. Certain assessment tasks or some group-based activities may also disadvantage an individual with a visual impairment. Individuals may not, for example, be able to easily pick up on visual or facial cues in interactional situations; may experience some anxiety in a group discussion situation; may not be able to see a DVD clip easily; or may be slower to read task instructions. Again, such issues need consideration and sensitivity when considering the adjustments that may be needed to accommodate an individual's needs.

Practical advice during the testing session

Whether adjustments have been made to standard test procedures or not, careful administration can help ensure that the test results for someone with a visual impairment remain valid.

- A calm and understanding approach on the part of the administrator is important. A one-to-one administration can be helpful as it allows a less formal approach. Test takers may feel more able to take their time to become familiar with the task and materials and to ask any questions. Where questions or answers are read out, a one-to-one administration will be necessary in order not to disturb others being assessed. Likewise, this would support a reader and / or scribe scenario, accommodate voice activated systems or allow an individual to dictate their own answers if necessary.
- Make sure there is a large clear surface to work on. Special format materials can be quite large and a person with a visual impairment will prefer to be able to lay things out in an organised way in order to easily know where everything is.
- If test administration times are greatly extended, consider whether breaks are needed to prevent the test taker from becoming overtired. Where testing is part of a larger assessment process, it may be better to schedule the tests on another day. This will help avoid fatigue and also can make timetabling easier.
- Give consideration to lighting levels in the testing room. For many individuals this can be really important.
- Note down in the test log any adjustments made, comments by the test taker, as well as any other non-standard occurrences.
- If further advice is required in interpreting the results, test users may wish to contact the test publisher or consult with a Chartered psychologist with expertise in visual impairment.

Much of the advice provided here is just good testing practice and is contained within the BPS test user qualification competencies on which test users have been assessed. It requires the test user to proceed in a way that is fair and at the same time makes adjustment for a disability.

Useful contacts

Royal National Institute of the Blind (RNIB)

Publishes guidelines on using tests with visually impaired individuals.

105 Judd Street
London WC1H 9NE

t: 020 7388 1266

Helpline: 0303 123 9999

e: helpline@rnib.org.uk

w: www.rnib.org.uk

Blind in Business

4th Floor
1 London Wall Buildings
London EC2M 5PG

t: 020 7588 1885

e: info@blindinbusiness.org.uk

w: www.blindinbusiness.org.uk

Action for Blind People

53 Sandgate Street
London SE15 1LE

t: 020 7635 4800

Or via RNIB Helpline Services

w: www.actionforblindpeople.org.uk

Equality and Human Rights Commission

Fleetbank House
2–6 Salisbury Square
London EC4Y 8JX

t: 0207 8327800

w: www.equalityhumanrights.com

Equality Advisory and Support Service (EASS)

t: 0808 800 0082

Textphone: 0808 800 0084

w: www.equalityadvisoryservice.com

Useful documentation

- RNIB Guidelines on psychometric tests for blind and partially sighted people.
- Test publisher guidelines on testing individuals with visual impairment or testing individuals with a disability. These are available from individual test publishers.

For further information on the work of the Society and to download a copy of our annual report, please visit our website or contact us at:

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