

Educational Psychology

Overview Guide

Cognitive Assessments

Cognition refers to the mental process of acquiring and understanding information from your senses. It involves thinking, understanding language, expressing language, memory and attention. It is vital to children and young people's development and learning in school.

What is a cognitive assessment?

Children/young people's cognitive strengths and needs can be assessed in a variety of ways including through informal play, completing curriculum-based tasks, using dynamic assessment methods or undertaking a standardised psychometric test.

A standardised cognitive assessment is a formal, comprehensive assessment conducted by a Clinical or Educational Psychologist to assess a child/young person's cognitive abilities, including their overall IQ, verbal and visual spatial skills, processing speed, memory, attention and executive functioning.

Why might a cognitive assessment be undertaken?

There are lots of different reasons why someone might be asked to do a cognitive assessment. It is usually when the child/young person is finding some aspects of their education difficult. A cognitive assessment can help identify cognitive strengths and weaknesses in order to provide information about how they can be best supported in the classroom.

When is it not appropriate to complete a cognitive assessment?

Assessment choice is always informed by the 'least intrusive, most effective' principle. Cognitive testing would not be undertaken where there are no significant concerns about a child/young person's academic progress or where information about the child's learning needs can be obtained in other ways. This form of assessment would also not be completed when:

- A child cannot attend to an adult-led activity for the required amount of time;
- They have English as an Additional Language or identified communication needs which would impact their ability to understand the instructions or tasks;
- A child is presenting with high levels of anxiety which would impact their performance and the experience could be detrimental to them; or
- This form of assessment has been completed within the last 1-2 years (as there can be practice effects which may lead to inflated scores).

What happens during a cognitive assessment?

The child/young person will work with the psychologist in a room which is quiet so they can concentrate. Skills are assessed using a range of different visual, written and spoke activities. Each activity is generally quite short in duration (around 5-10 minutes) and a full cognitive assessment typically takes between 60 minutes to several hours depending on the age of the child/young person. Concentration breaks between activities will be given if the child/young person needs them and sometimes the psychologist will decide to do the assessment over two sessions to help with attention or motivation.

What are the cognitive skills investigated?

Skills across a range of areas are assessed. Typically these include verbal skills, memory skills, non-verbal and/or spatial problem solving skills. For example a common cognitive assessment test (Weschler Intelligence Scale for Children – WISC) assesses skills across 5 domains:

- **Verbal Comprehension** which investigates an individual's ability to process, assess, and apply word, or verbal, knowledge.
- **Visual Spatial** which investigates an individual's ability to assess visual details and identify visual spatial relationships or patterns.
- **Fluid Reasoning** which investigates an individual's ability to identify relationships among visual objects and apply existing knowledge to new problems.
- **Working Memory** which investigates an individual's ability to register, maintain, recall, and manipulate both visual and auditory information during a short period of time.
- **Processing Speed** which investigates how quickly an individual processes new information
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What are the limitations to cognitive assessments?

Cognitive assessments provide a 'snapshot' of a child's performance on one day and may not be representative of true ability. Factors such as the child/young person becoming distracted or feeling unmotivated, ill or anxious will influence findings. Cognitive assessments also only investigate how a child/young person performs in a 1:1 assessment situation rather than how they work and learn in the classroom context. Other supporting information (for example, teacher assessments of curriculum attainments) is often needed for the psychologist to have a view about what support a child might need and what progress they might make.

What happens next?

Usually, a cognitive assessment is completed as part of a cycle of 'assess, plan, do, review' intervention where the psychologist also meets with the parent/carer and teaching staff to think together about how best to support the child/young person based on all the information available.

The psychologist will also write a report which will provide the findings of the cognitive assessment and will include some recommendations about how best to support the child/young person to achieve good outcomes.

