

# **Intellectual Characteristics**

#### What is intellectual disability?

The term 'intellectual disability' is used when a person has difficulties with both cognitive (intellectual) functioning and adaptive behaviour (everyday practical and social skills) in comparison to other individuals of the same age. For a person to receive a diagnosis of an intellectual disability these difficulties had to arise before the age of 18.

'Intellectual disability' is also referred to as developmental disability or learning disability, and in some cultures mental retardation.

Sometimes intellectual disability is described as mild, moderate, severe or profound. This indicates the degree of disability and is based on the impact the intellectual disability has on the person's day to day functioning. In addition, individuals with intellectual disability will have an IQ score below 70 on assessments of cognitive ability (average IQ of typically developing individuals is between 90 and 109). Not all professionals agree that these categories are helpful as a single 'category' may not fully represent someone's abilities. However, the categories are a useful way to communicate an estimate of someone's general level of functioning.

#### Overall, what is the level of intellectual functioning inSmith-Magenis syndrome?

Studies of cognitive functioning in Smith-Magenis syndrome indicate that the majority of individuals have a moderate intellectual disability (35-50 IQ points).

## What are the particular strengths of individuals with Smith-Magenis syndrome?

At least one research study has suggested that individuals with Smith-Magenis syndrome may have relative strengths in long term memory, visual attention and reading; however, strengths in reading have not been supported by all research studies. A study conducted by Udwin, Webber and Horn in 2001 found that adults with Smith-Magenis syndrome failed to progress beyond six to seven year-old level in reading on a reading test.

## What do individuals with Smith-Magenis syndrome find particularly difficult?

Compared to other abilities, individuals with Smith-Magenis syndrome are reported to have particular weaknesses in short term memory and sequential information processing.

## Does everyone with Smith-Magenis syndrome have a moderate intellectual disability?

A small number of individuals with SMS without intellectual disability or with borderline intellectual disabilities have been described in the research literature. Children and adults who have borderline or no intellectual disability may still show the characteristic behaviour patterns associated with Smith-Magenis syndrome. It is likely that with increasing professional awareness and improved testing, less severely affected individuals with Smith-Magenis syndrome will be increasingly identified.

## Does cognitive ability change as individuals with Smith-Magenis syndrome get older?

It is unclear whether IQ remains stable or declines with age. Only a small number of studies have explored this issue and the results have been inconsistent, therefore, further research is needed, but currently there is no convincing evidence to indicate a decline in IQ.