

Intellectual Characteristics in Angelman Syndrome

Everyone with Angelman syndrome is an individual

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 difficulties to be understood as an intellectual disability these difficulties must be present before adulthood.

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 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.

What is the degree of intellectual disability in Angelman syndrome?

Almost all children and adults with Angelman syndrome have a severe to profound intellectual disability when abilities are measured on standard tests. To date, there is limited research examining cognition in detail in Angelman syndrome. Informant report with parents or teachers has often been relied upon when assessing ability level and these assessments may not always be suitable for individuals with Angelman syndrome.

Does degree of disability vary between genetic subtypes?

Only a few research studies have investigated differences in intellectual disability amongst the [genetic subtypes](#) in Angelman syndrome. Although there is mixed evidence, and there is a great deal of overlap between groups, it seems consistent that those individuals with the deletion genetic subtype (the most common genetic mechanism) tend to have a more severe developmental delay.

Does the size of the deletion matter?

There is also evidence that Class I deletions (larger amount of information missing) are associated with lower levels of adaptive and cognitive functioning, including expressive language, although this has not been found consistently, and the differences are relatively minor.

Why do research studies get conflicting results?

Conflicting results may reflect difficulties in selecting appropriate measures to assess intellectual ability in individuals with severe to profound intellectual disability and limited expressive language.