



About Autism Spectrum Disorders (ASDs)

What is autism?

- Autism is a disability. People who have autism have difficulties in understanding social information (everyday conversations, facial expressions, body language). To a person with autism, the world can be a strange and confusing place without meaning or order;
- Autism affects the development and functioning of the brain, including a person's ability to communicate with other people and relate to their surroundings;
- Autism encompasses a range of conditions including Autism Disorder, Asperger's Syndrome and Pervasive Development Disorder-Not Otherwise Specified (a condition in which a person has some, but not all, symptoms of autism). These can be classified along a spectrum, known as 'Autism Spectrum Disorders', which range from mild to severe impairments in a person's social and communication abilities.

What are the characteristics of a person who has autism?

- Autism has the following types of symptoms: impairments in social interaction, impairments in communication, restricted interests and repetitive behaviour;
- Autism has diverse symptoms that vary in severity from one individual to another. Some people with autism are very independent with normal or high intellectual capacities, while others may be unable to speak and need a high level of assistance with everyday tasks. One person's symptoms and behaviours may even change significantly over time;
- People who have autism often prefer routine and sameness, and can behave in unusual ways or become distressed by everyday situations or small changes in their ordinary routine or surroundings;
- Many people with autism over or under-react to tactile, auditory and visual stimuli. They may also have unusual responses to heat, cold and or pain.
- Contrary to popular belief, autism is not always like the condition of the main character of the film, *Rain Man*;
- Autism does not affect a person's physical appearance. People who have autism look just like other people;
- Autism is usually identifiable in very early childhood.

What causes autism?

- Autism's exact causes are not yet known. It is known that genetic factors are a major part of the cause, while other factors remain unclear.
- Autism is not caused by parents or by vaccinations.

Who can get autism?

- Autism is very common. Approximately 1 in 150 children are diagnosed with autism in Europe. That means there are around 3.3 million people in the European Union who have autism;

- Autism is being diagnosed in an increasing number of people. This likely to be a result of increased awareness among the general public and health practitioners;
- Autism can affect anyone, regardless of race, ethnicity or social class;
- Autism is not contagious;
- Autism is four times more frequent in males than in females.

Is there a cure for autism?

- There is no known cure for autism. However, evidence-based therapies can assist people with autism to develop to their full potential.

About reading difficulties for people with autism

As a result of their condition, people with autism experience difficulties in:

- Comprehending speech and writing;
- Interpreting figurative / non-literal language;
- Understanding long and complicated sentences;
- Deriving the meaning or gist of written documents.

People with autism have varying degrees of difficulty in reading; one person with autism may experience only minor difficulties, while another may experience very significant difficulties.

These difficulties often present a significant barrier to the participation and inclusion of people with autism in all aspects of society, including education, employment, health care and social activities.

About the FIRST Project

The FIRST project is developing a tool to assist people with autism spectrum disorders to adapt written documents into a format that is easier for them to read and understand.

It will empower people with autism to read documents with confidence and autonomy. As a result, their social inclusion will be increased as they gain better access to educational, vocational, cultural and social opportunities in Europe.

The tool is being developed by a team of computer programmers who specialise in language technology and professionals in the field of autism. The team comes from universities and non-profit organisations for people who have autism across Europe.

The team will work with a large sample of people who have autism to research and evaluate how the software can effectively assist people with a range of reading and comprehension abilities.

About Open Book

The tool, called Open Book, will adapt the language used in written documents for people with autism by reducing complexity, removing ambiguity and improving readability.

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The tool is designed for people with autism who experience difficulties in understanding written texts, but do not have an intellectual disability.

This process includes:

1. Replacement of:

- long complex sentences with several short, simple sentences;
- long / technical words with short, simple words;
- non-literal language with literal translations.

2. Provision of definitions for words and expressions that are:

- long/technical;
- ambiguous;
- non-literal (eg. metaphors);
- related to emotions.

3. Addition of:

- images;
- concise summaries;
- document navigation tools for long documents.

As people with autism can have a wide range of abilities in understanding text, the tool will enable users to personalise settings to meet their own needs.

Where necessary, carers of people with autism will also be able to use the tool to ensure that the simplified documents meet the needs of the users.

Try Open Book: www.openbooktool.net

More information: www.first-asd.eu

Facts about autism provided in this backgunder are sourced from: Autism Europe, 2011, *Persons with Autism Spectrum Disorders – Identification, Understanding, Intervention*. This publication is available at:

<http://www.autismeurope.org/publications/documents-on-autism/>



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