

# **Conceptual Knowledge and Sensitization on Asperger's Syndrome based on the Constructivist Approach through Virtual Reality**

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## **Supplementary Material**

### **Text material provided to the control group**

*in direct English translation*

#### **Text 1:**

##### **Asperger Syndrome: What are the symptoms?**

Asperger's Syndrome is a disorder of the autistic spectrum. It is one of the most complex neurodevelopmental disorders characterized by significant impairment of social skills, a lack of communication skills and restrictive, repetitive, stereotypical patterns of behavior.

Experts estimate that autistic spectrum disorders accompany the individual from the first years of life. The early diagnosis of up to 2 years is the ideal goal, but several autistic spectrum disorders are diagnosed several years later.

According to the American Institute of Neurological Disorders (NINDS), the level of communication and behavioral deficits in autistic spectrum disorders varies from person to person, as some individuals require daily support to perform even simple activities. Asperger's Syndrome is considered by many to be the mildest form of autistic spectrum disorders, as sufferers have increased functionality.

Common signs and symptoms:

- Speech characterized by lack of rhythm, strange tonality or monotony
- Failure to adjust the volume according to the circumstances (eg the person speaking loud at the cinema)
- Isolation due to lack of communication skills or lack of interest
- Persistence on a specific topic and endless talk about it, presenting data and statistics with no beginning, middle and conclusion
- Incomplete motor development, poor motor coordination, clumsy movements

The underlying causes of Asperger's Syndrome, as well as autistic spectrum disorders in general, remain unknown.

## **Text 2:**

### **Asperger Syndrome: What it is and why it is difficult to diagnose**

Asperger's syndrome is a disorder of the autistic spectrum. Often, adults and especially women are misdiagnosed.

People with the syndrome have more advanced skills than those with autism. They also usually have higher IQs and satisfactory linguistic abilities but have difficulties in their social contacts.

Unfortunately, there is no cure for the syndrome. It affects one's understanding of the world, the interpretation of the information he/she receives, and relationships with people.

Symptoms may be mild or more severe. They include difficulties in managing interpersonal relationships and difficulties in understanding and interpreting. The result is increased stress and heightened anxiety.

People with Asperger Syndrome have difficulty decoding gestures, facial expressions, and tone of voice. Also, they cannot figure out when to start or stop a conversation and what topic to talk about. They use complex words and expressions without fully understanding what they mean and always express themselves in literal terms. Thus, they cannot understand the concept of humor, metaphor, and sarcasm.

But why is it so difficult to diagnose the syndrome?

According to experts, unlike autism, Asperger's is usually detected when a child starts school or much later. This happens because the person has a "hidden disability". This means that people with Asperger's have the ability to conceal their impairments.

Diagnosis is even more difficult in adults, as the diagnosis depends on the early stages of a person's development. For a person 50 or 60 years old, the remaining family members may not be able to provide sufficient guidance on the matter.

Diagnosis is even more difficult for women. Women manifest autism differently than men and conceal their impairments while being able to "copy" other people's reactions and behaviors better than men.

Although the syndrome is without cure, proper support and treatment can help a person with Asperger's have an independent and normal life.