STUDENTS WITH ASPERGER SYNDROME AND HIGH-FUNCTIONING AUTISM

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Abstract: This paper focuses on students with Asperger syndrome and Highfunctioning autism. Their intelligence level is in the average range, they should be educated in mainstream schools although it might not always be easy. The process of integration/inclusion depends on many factors. The social skills of these students are often weak and may cause difficulties in educational settings. Many teachers are not sufficiently prepared to meet the special needs of these students.

Keywords: Asperger syndrome, High-functioning autism, students, education, integration, inclusion.

1 Asperger syndrome and High-functioning autism means special educational needs

Asperger syndrome (AS, also Asperger's syndrome) is one of the autism spectrum disorders (ASD) and belongs to pervasive developmental disorders (PDD). It is a type of autism at the less severe end of that spectrum. It is a developmental disability that influences *social communication*, *social interaction and social imagination*. Disturbances in these three areas are reflected in the learning process of each student in various ways and to varying degrees because Asperger syndrome affects people differently. Students with Asperger syndrome can find it harder to read the social signals that are clear to most people. This means they find it difficult to communicate and interact with other people, which can lead to high levels of anxiety and confusion

There is also a category called High-functioning autism (HFA). It is often understood to be the same as Asperger syndrome. In my view, these are two different categories. I assume people with Asperger syndrome usually have fewer problems and a higher level of intellectual ability then people with high functioning autism which we can consider a more serious variation and a variation of Childhood autism divided according to functioning in the society. Different authors describe these two categories differently (comp. Asperger, H. 1944, Attwood, T. 1998, 2005, Thorová, K. 2006). The main difference between the two is in language development. The National Autistic Society in Great Britain states that people with Asperger syndrome will not have had delayed language development when younger (The National Autistic Society [online]).

It is necessary to clarify that many people with the above mentioned syndromes lead productive lives. People with Asperger syndrome are often experts in various specialised fields. Some examples are music, history, mathematics, public transport, meteorology, poetry, etc.

1.1 Intelligence of Students with AS and HFA

People with autism also often have learning disabilities and other impairments, while people with Asperger syndrome or Highfunctioning autism are likely to have the same range of intellectual skills as the general population, though they may have a number of other characteristics that make life difficult for them. Students with AS and HFA manifest average or often above average intelligence but face problems in social lives. It is important to know that the intelligence level in the average range does not mean that people with Asperger syndrome (mainly AS, not HFA) manage their lives perfectely; they are usually seriously disabled in above mentioned social interactions. Some of them even have exceptional abilities, this feature is called savant syndrome. There are excellent works on this feature by Treffert, D. A. (see resources). The normal intellectual skills plus poor social skills can be confusing for their peers and even teachers. They usually have few friends at school and in life.

They can be intelligent in an abstract way, as measured by tests, but not in a functional way and may need support in life skills (Powell, A. 2002).

1.2 Social Interactions and Verbal Skills

Another feature of AS is the tendency to stick to inflexible behavioural routines, such as wishing to sit in the same seat at school and becoming upset if they cannot, or always wearing the same clothes, walking the same way, eating the same food, etc. Another feature of this disorder is also egocentrism. They seem to be interested in themselves only. They usually don't find other people interesting enough and keep taking about their own topics. Their general motor activity can also be affected; the individuals are motor clumsy, they have difficulties in sports such as problems learning to ski, skate, ride a bike, etc. People around them often don't understand them, which can lead to a state of depression and even to suicides.

Students with Asperger syndrome often have above average verbal skills, but in some cases the voice appears to be flat and lacking in emotion, speech can be stilted and repetitive, and conversations tend to revolve around the self rather than others (Bazalová, B. 2009, p. 94). It is typical to express themselves in details when they desire to talk only about their field of interest. Consistent truthfulness, shocking remarks, which children or adults may address to unknown people, are characteristic features of Asperger syndrome and are an obstacle for integrating into society.

Students with this syndrome struggle to read social signals or understand jokes, metaphor or sarcasm. This is a great problem because we tend to use metaphors in everyday life. When you ask someone with Asperger, "Could you help me?" you get the answer "Yes" but nothing else. He/she answered your question but did not understand you wanted help from him/her. They simply do not understand the implications of the question.

2 Integration/inclusion versus special schools

Students with Asperger syndrome and High-functioning autism need special support at school as they have special educational needs. For some students with Asperger syndrome, it is optimal to complete compulsory education through individual integration in primary school, for others it is preferable to attend a special school. I would suggest that a special school should be for children with other types of autism spectrum disorder and that we should provide sufficient support in mainstream schools for children with Asperger syndrome or High-functioning autism. Integration is not suitable for every child with a disability and there is not an effort to integrate all children into mainstream schools but I think that students with AS can succeed in regular schools when offered support and proper conditions. Integration does not mean just placing a child with a disability into a regular school. Integration involves many factors, which should be taken into account. A lack of any of them can cause more negative than positive effects in an integrated educational setting (Bazalová, B., Vlčková, R. 2010, p. 103).

According to counselling centres and teachers our research team cooperate with, there is a high increase in students with Asperger syndrome in mainstream primary schools in the Czech Republic (although there were not so many in our research group). We have been focusing on features that affect success of compulsory education of pupils with Asperger syndrome. Social factors play a crucial role as was mentioned above. These students may often be outsiders in a class or within a group of peers as AS students have certain peculiarities in the behaviour. They however intellectually cope with their peers, even often exceed both them and teachers, especially in the area of their interests (mathematics, astrology, time-tables, drawings, etc.).

In some cases, people with Asperger syndrome may not be diagnosed until they reach secondary or higher education. They may benefit at some universities from having access to someone helping them with their studies. The person will be identified by student support disability staff (e.g. Cambridge, Birmingham, Newcastle, Keele, Masaryk University, Palacky University, etc.) (comp. HEAG project, European Agency for Development in Special Needs Education).

It is necessary to raise awareness of students and teachers of particular needs of the students with Asperger syndrome. Teachers of mainstream school usually don't understand the impact of the disorder upon the thinking of their students and their learning styles. Teachers should consider a range of strategies for enabling participation and access.

2.1 Analysis of Conditions of the Process of Inclusion

We are carrying out research at the Faculty of Education, Masaryk University (Special Needs of Pupils in the Context of the Framework Educational Programme for Basic Education, MSM 0021622443, prof. PhDr. Marie Vítková, CSc.). There are several research teams focusing on various topics. Our team focuses on primary education of pupils with Autism Spectrum Disorders and possibilities for their further educational process and work.

The following diagram shows the internal and external determinants involved in the integration process of students with Asperger syndrome in primary schools, thus analyzing the factors contributing to the quality of social inclusion of pupils in the context of integrative/inclusive education.

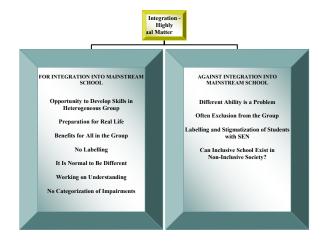


Fig. 1: Analysis of conditions and effects on the process of inclusion (comp. Vlčková, R. 2010, Bazalová, B., Vlčková, R. 2010)

Parents' approach and family environment of a child with AS is very important in the process of integration/inclusion. Parents-school cooperation significantly affects this process. Some parental attitudes may hinder or even jeopardize it.

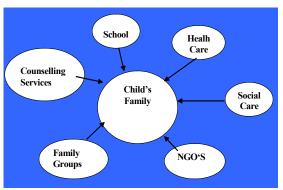


Fig. 2: Areas of support and cooperation in families with children with AS (Vlčková, R. 2010)

It is possible to conclude from our observations of integration process that there are four main factors that play a role in the process of integrating pupils with special educational needs (SEN) into mainstream school in the South Moravian Region. These are:

- Positive attitudes of regional offices towards integration/inclusion of students with SEN.
- Financial support of integration/inclusion by regional offices.
- Schools willing to integrate students with SEN.
- Counselling services for pupils, schools, and parents.

There are some factors that make integration difficult in mainstream primary schools we were observing. These are:

- Insufficient information for teachers and assistant teachers about specifics of Asperger syndrome.
- Lack of financial support.
- Not enough counselling centres (the number of students with autism spectrum disorders is rapidly growing according to our findings).
- Lack of support for families in the area of family therapy.
- Lack of social skills training for students with Asperger syndrome and autism spectrum disorders.
- In the whole country, there is insufficient cooperation among various agencies (school, health care, social care, etc.).
- Not enough personal assistants for time after school outside of urban areas.

3 Research in parents of children with autism spectrum disorders

The research sample consisted of 237 parents of children with autism spectrum disorders, 234 from the Czech Republic and 3 families from the Slovak Republic. Our aim was to analyse the process of diagnosis of children with autism spectrum disorders, we focused on at what age the child was diagnosed, where they were diagnosed, who were the specialists, etc. Our main aim was to focus on educational process. We wanted to find out whether children were educated in mainstream or segregated schools, we also focused on evaluation of educational programmes, personal organization, position of the child within the group, cooperation between parents and school and other factors. The third area of our interest was the provision of support by social services. We are still working with this research sample; the research project is still running so we present here only the data we have obtained so far. Below are the specifications of the focus group. There were mainly boys in our sample which is common in autism spectrum disorders.

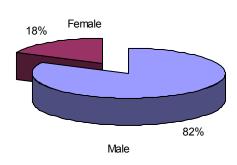


Chart 1: Representation of children and adults with ASD by gender (%)

The following chart shows the age of our respondents. Most children with ASD are aged 7-10 years. This fact is considered as random. The data in the chart can be viewed from the perspective of diagnosis. Age representation of respondents may be completely random, but we can say that the low number of children with ASD at an early age may indicate a difficult diagnosis at an early age, although children with ASD can be diagnosed as young as 18 month old (Thorová, K. 2006, p. 238). Thorová, K. (2006, p. 231) also states that it is currently not possible in the first year of life to reliably diagnose this disorder. There was a relatively large number of young people with ASD aged 16-20 years and adults aged 21-37 years, which can be considered as positive, because this means that they were diagnosed either in childhood 30 years ago when it was very difficult to diagnose ASD, or they were rediagnosed in adulthood, which is not always easy, because ASD are often confused with schizophrenia or other similar disorders. We consider it positive that these respondents are already diagnosed and therefore can get support suitable for ASD.

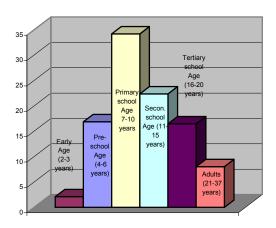


Chart 2: Age distribution of children and adults with ASD in the research sample (%)

We focused on the specific diagnosis of the person with ASD. We assumed the greatest incidence of childhood autism which was verified. Our second assumption, that the Asperger syndrome will be very common, was not verified; we expected a greater percentage in the research group. Asperger syndrome has been diagnosed quite often recently in the Czech Republic at schools so that is why we had expected a higher percentage of occurrence. It is necessary to point out that our conclusion is not possible to generalize; it applies to our research sample only.

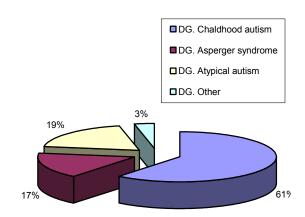


Chart 3: Representation of diagnosis form ASD in the research sample (%)

We also monitored the incidence of learning disability (intellectual disability, mental retardation) in combination with ASD. The result was very interesting, this occurrence was exactly 50%. But we must consider the fact that the developmental profiles of children with autism keep changing and that in some children, where the diagnosis is currently associated with a learning disability, there may not be any incidence of this disability in a year or two.

Another item we focused on was the incidence of epilepsy. Epilepsy is often associated with many other disabilities, autism spectrum disorders are no exception. Dr. Ošlejšková, H. (2004, 2007) conducts research in this field in the Czech Republic. In our research sample, there was only a statistically insignificant percentage (5.1) of individuals with epilepsy in combination with ASD. Almost 30% of individuals had multiple disabilities, mostly cerebral palsy or ADHD/ADD.

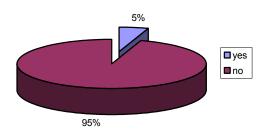


Chart 4: Representation of epilepsy in the research sample (%)

Conclusions

In this paper, we wanted to point out that students with AS and HFA are students with special educational needs and need support at schools like other students with different impairments. Although the intelligence is in the average range, the social skills are often seriously affected and may cause difficulties in an educational setting. Many teachers are not sufficiently informed about these diagnoses and do not know how to support these students. We stressed that these students should be educated in mainstream schools although it requires support. We tried to point out that AS and HFA are not the same but this is a subject of ongoing discussion among experts and professionals. We also introduced a research sample from our research project.

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Primary Paper Section: A

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