

THE EDUCATION OF STUDENTS WITH AUTISM SPECTRUM DISORDERS FROM THE TEACHER'S VIEWPOINT – A CZECH/POLISH COMPARATIVE STUDY AT THE SECONDARY EDUCATION LEVEL

Eva Urbanovská

Jiří Kantor

Michal Růžička

Palacky University, Czech Republic

Abstract. *ASD are a widely discussed and topical area in the forefront of the interest of professionals from a number of scientific fields. The following paper approaches the issue from the viewpoint of special education and focuses on the area of educating students with autism spectrum disorders at the secondary education level. The topic was addressed under a quantitative investigation undertaken at Czech and Polish schools. The paper presents a part of the results obtained from the investigation. We focus special attention to the issue of raising awareness on the part of secondary school teachers. Further factors will be outlined, such as: factors determining instruction, factors evaluated as the most demanding by teachers while working with students with ASD and action proposed to optimise vocational training of students with ASD.*

Keywords: *Autism spectrum disorders (ASD), awareness, behaviour, communication, education, individual approach, secondary education level.*

Introduction

The issues faced by students with ASD continues to be topical and widely discussed. This is related to the severity of this particular disability and its effects on the entire human personality. It results in major limitations in a number of socially significant activities, one of them being education. Educators have a range of conservative and alternative methods to choose from in education (Thorová, 2006). The intervention approaches and their combinations are relatively widely used at the pre-school and primary education levels. After completion of compulsory school attendance, further education becomes ever more complicated and the array of options more restricted.

The characteristic features of adolescence in persons with autism spectrum disorders and the issue of therapy and vocational training of persons with ASD is professionally dealt with by such experts as Valenti et al. (2010); Freeman, Robinson, Smith (2010); Hendricks, Wehman (2009); Camarena, Sarigiani (2009); Kurth, Mastergeorge (2010) and others.

As noted by Howlin (2009) and Wlazlo (2009), a large proportion of students with ASD do not advance to further education levels after completing primary education. Consequently, they face complications in looking for jobs. As a result they remain dependent on their families or are forced into residential facilities. Unfortunately, it is not unusual for students with autism spectrum disorders who succeed at the entrance examination and actually start their study at a secondary

school to eventually drop out. Premature drop-out restricts their chances of job placement (Howlin, 2009). According to Howlin (2009) the possible causes of the increased drop-out rate among students with autism spectrum disorders in secondary education include, in particular, poor awareness of autism spectrum disorders among teachers and the resultant non-adaptation of the environment and conditions to the needs of educating students with such disabilities. This topic was addressed in a quantitative investigation, the results of which will be presented in the following parts of the paper.

The Educational System for Students with ASD in the Czech Republic

The possibilities of educating autistic students in the Czech Republic are regulated by Act No 472/2011 Coll. (Zákon 561/ 2004) concerning pre-school, primary, secondary, higher vocational and other education, as well as by Decree No 147/2011 Coll. (Vyhláška 73/2005) concerning the education of children, students and students with special educational needs and extraordinarily gifted children, students and students, and Decree No 116/2011 Coll. (Vyhláška 72/2005) concerning consultancy services at schools and educational consultancy establishments.

Students with ASD are eligible for the highest level of support. This calls for the 'use of special educational methods, techniques, forms and means, compensatory, rehabilitative and learning aids, special textbooks and methodological materials, the inclusion of objects of special educational care, the provision of educational and psychological services, the provision of teacher-assistants, classrooms or study groups with a lower number of students or similar adjustments to the manner of instruction respecting the students' special educational needs. (§ 1, Vyhláška 147/2011)'

The Decree further defines the forms of educating students with disabilities: 'individual integration, group integration, within a school established for students with disabilities and a combination of all of the above forms (§ 3, Vyhláška 147/2011)'

'Individual integration denotes educating students at regular schools or, where the students require special attention, in special schools dedicated to students with other types of disabilities. Group integration denotes educating students in a classroom, section or study group dedicated to students with disabilities within a regular school or a special school intended for students with other types of disabilities. (§ 3, Vyhláška 147/2011)'

The Educational System for Students with ASD in Poland

The Polish educational system for students with ASD may be divided into three types - segregation (special schools), integration (integration schools) and inclusion (regular schools).

Special schools and classrooms (segregation) are established for students with mental, hearing and visual impairments and for students with limited mobility. The aim is to promote complex development of the students, prepare them for their respective occupations and integrate them into society (Wyczesany, 2002). **Integration schools or classrooms (integration)** apply a common education process for students with varying development possibilities. Integration requires adaptation not only of the specific workplace but also the social environment surrounding the workplace (Wyczesany, 2002). **Inclusion (education at regular schools)** is regarded as the highest, full-fledged form of integration. The process of educating students with disabilities takes place at regular schools. The educational process hardly differs from the regular model, with standard methods applied (Gajdzica 2008).

This implies that students with ASD, too, benefit from a broad range of options to complete their compulsory school attendance and advance to further educational levels. Practical experience shows that the educational process for this particular target group predominantly takes place in special educational and therapeutic centres. As noted by Wlazlo (2009), the situation in Poland keeps evolving and the offer of educational opportunities for students with ASD is expanding. Comparing results of research surveys conducted in 2004 and 2007/2008, Wlazlo infers that additions are being made to the range of study opportunities available to persons with autism spectrum disorders over the age of sixteen. This conclusion, however, cannot be applied generally since the research survey undertaken in 2007/2008 only concerned a single region. Still, the data imply a positive trend in the area under consideration.

Methods and procedures

As part of the project Leonardo DaVinci „VESTA - Vocational Education with Embedded Social inclusion Tactics for Autistic people (LdV agreement 2012-1-PL1-LEO04-28080, LdV 99412221/19)“ we completed a quantitative study in which the objective was to map the views and needs of teachers at Czech secondary schools that educate students with ASD. A similar study, albeit on a smaller scale, was also conducted on a sample of Polish schools in the Lesser Poland Voivodeship, and the results were subsequently compared. The specific aims of the study were as follows:

- To analyse the need for raising awareness among teachers of students with ASD in relation to several variables (age, length of teaching experience and type of school), and the effects of pupil disabilities on the teacher's preparation and organisation of the instruction.
- To identify factors that determine the education of students with ASD.
- To identify the most demanding factors identified by teachers in working with students with ASD.

- To collect suggestions from the teachers for optimising the situation in the area of vocational training of students with ASD.

The principal aim of the study was to analyse the need to raise awareness among teachers and therefore, in the following chapters, this topic is devoted the most attention, including the hypotheses postulated and their analyses by statistical methods. For other specific aims, we will content ourselves with a simple quantification of the answers and a logical analysis of the data.

Research Sample and Data Collection *Characterisation of the Research Sample*

The research sample consisted of 4 groups of respondents: secondary school teachers who work (or worked) with students with ASD and the parents of the students. The basic research was conducted in the Czech Republic, and, for the sake of comparison, in Poland, namely in the Lesser Poland Voivodeship (with the focal point in Cracow).

Within the Czech Republic, we consulted all secondary schools with at least one pupil with ASD (59 schools). Based on past experience obtained from the preliminary research conducted, we dropped email communication as the initial contact vehicle. By means of phone conversations with school administration, we obtained responses from 68% of the schools (40 schools). The teachers' questionnaires were distributed to the schools, as agreed, either in person, by mail or email. The questionnaires for the parents were distributed through the teachers.

In Poland, special educational and therapeutic centres for individuals with ASD in the Lesser Poland Voivodeship (with the focal point in Cracow) were consulted through Dr. Joanna Kossewski. The questionnaires for teachers and parents were also distributed in cooperation with Dr. Kossewski.

The research sample was therefore composed of teachers from the Czech Republic (97 respondents), parents from the Czech Republic (23 respondents), teachers from Poland (25 respondents) and parents from Poland (25 respondents).

Research Implementation

The research was designed as a questionnaire survey with the aim of analysing the current state-of-affairs in vocational training of persons with ASD. In the areas under consideration, the views and positions of the two groups of respondents, i.e. that of the teachers and the parents, were compared. The Czech/Polish comparison also yielded useful information.

For the purposes of our research, we created four types of questionnaires. The questionnaires were intended for both teachers and parents. Considering the fact that we conducted a part of the research in Poland, a Polish version of the questionnaires had to be produced. The questionnaires were modified to suit the

different system of educating students with ASD in Poland, rather than simply being translated from the Czech version.

The teachers' questionnaires contained items related to the demographic features of the respondents. We also focused on experience working with students with ASD, on the teachers' awareness of the issues under consideration, on situations and factors, which, in the opinion of the teachers, affect the process of vocational training as well as factors that could have the effect of making the process more efficient.

We paid attention to the demographic data for parents as well. In the following items, the questionnaires focused on the use of intervention methods in domestic and school settings and on the teachers' awareness of the issues concerned. As regards the parents, similar to the case with teachers, we were interested in the determinants in the process of vocational training as well as the factors that could make the process more efficient.

The data obtained were subsequently analysed using the SPSS 12.0 Windows-based software.

Data Analysis

The need for raising awareness among the teachers of ASD

In order to analyse the need for raising awareness among teachers, we postulated hypotheses related to the effects of the teachers' age, educational experience and type of school on the need for raising awareness.

With a view toward determining the relationship between the need for raising awareness of ASD among teachers and their age, we postulated Hypothesis H1:

H1₀: No statistically significant differences were observed between younger and older teachers as regards their subjective satisfaction with the level of awareness of ASD.

H1_A: A statistically significant difference was observed between younger and older teachers as regards their subjective satisfaction with the level of awareness of ASD.

The hypothesis was validated using a two-choice t-test and, alternatively, using Mann-Whitney's U-test. The null H1₀ hypothesis was confirmed.

Table 1

Supporting documents for Hypothesis H1

| | Satisfaction with awareness | Dissatisfaction with awareness |
|------------------|-----------------------------|--------------------------------|
| Aged 25 and less | 2 | 1 |
| Aged 26 – 30 | 9 | 4 |
| Aged 31 – 35 | 3 | 5 |
| Aged 36 – 40 | 2 | 13 |
| Aged 41 – 45 | 6 | 2 |
| Aged 46 – 50 | 12 | 6 |
| Aged 51 – 55 | 3 | 4 |
| Aged 56 – 60 | 2 | 1 |
| Aged 61 – 65 | 1 | 1 |

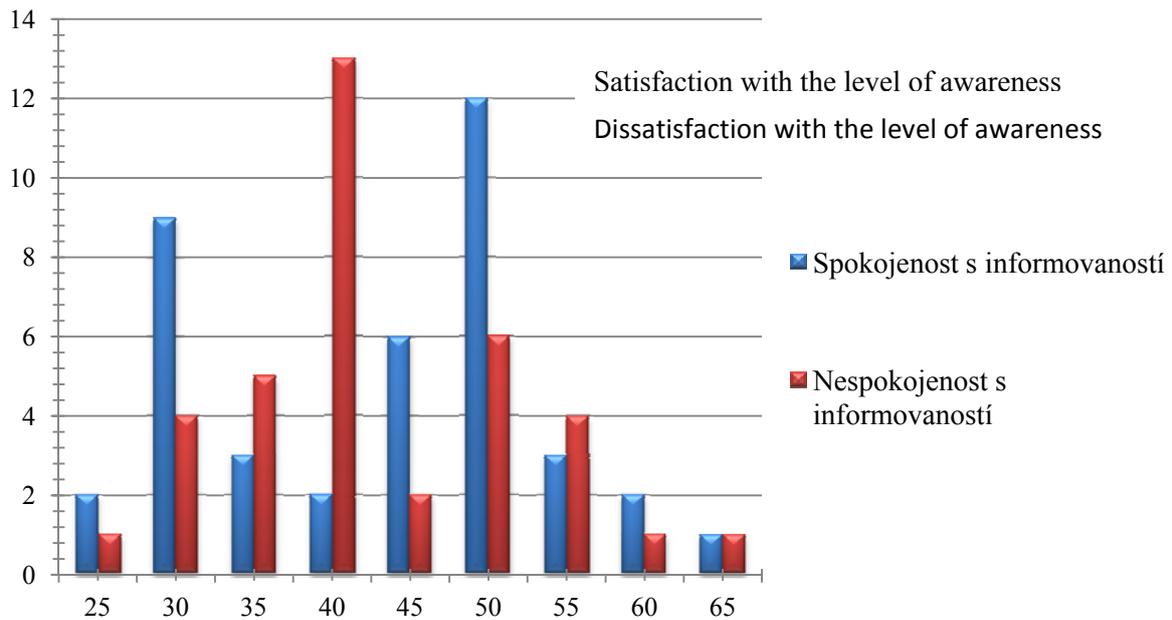


Figure 1 Supporting documents for Hypothesis H1

With a view toward determining the relationship between the need for raising awareness of ASD and the length of teaching experience, we postulated Hypothesis H2:

H2₀: No statistically significant differences were observed between teachers with shorter and longer teaching experience as regards their subjective satisfaction with the level of awareness of ASD.

H2_A: A statistically significant difference was observed between teachers with shorter and longer teaching experience as regards their subjective satisfaction with the level of awareness of ASD.

The hypothesis was validated using a two-choice t-test and, alternatively, using Mann-Whitney's U-test. The null H2₀ hypothesis was confirmed.

Table 2

Support documents underlying Hypothesis H2

| | Satisfaction with awareness | Dissatisfaction with awareness |
|-----------------|-----------------------------|--------------------------------|
| Aged 5 and less | 8 | 7 |
| Aged 6 – 10 | 6 | 13 |
| Aged 11 – 15 | 5 | 1 |
| Aged 16 – 20 | 4 | 7 |
| Aged 21 – 25 | 1 | 3 |
| Aged 26 – 30 | 8 | 6 |
| Aged 31 – 35 | 2 | 1 |
| Aged 36 – 40 | 2 | 0 |
| Aged 41 – 45 | 0 | 1 |

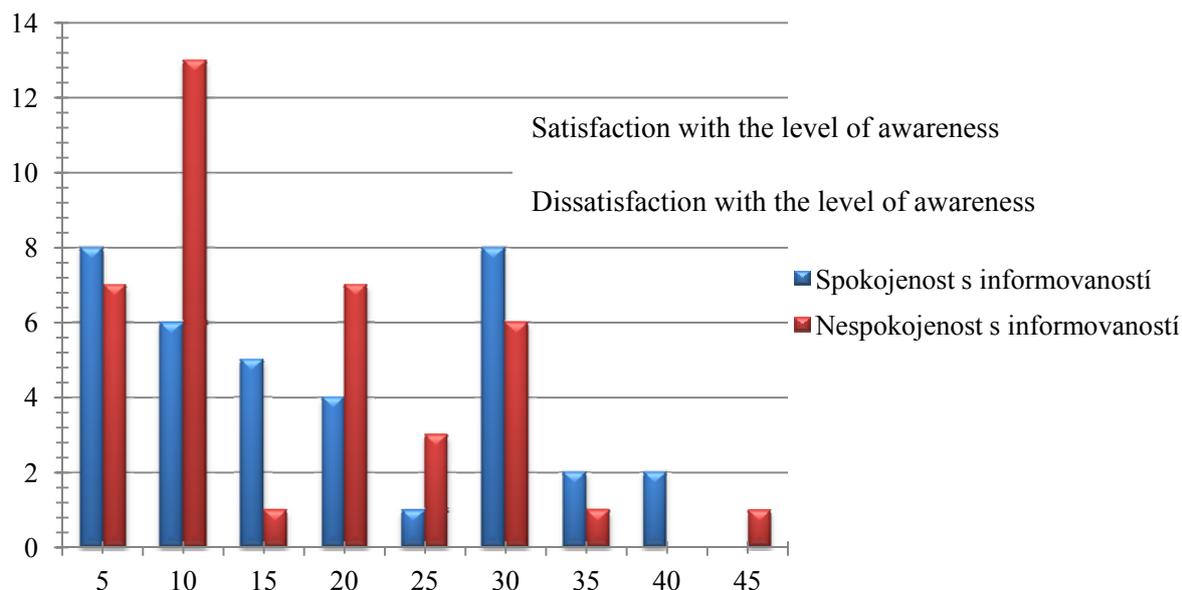


Figure 2 Support documents underlying Hypothesis H2

With a view toward determining the relation between the need for raising awareness regarding ASD and the type of secondary school, we postulated Hypothesis H3:

H3₀: No statistically significant differences were observed between teachers from various types of secondary schools as regards their subjective satisfaction with the level of awareness of ASD.

H3_A: A statistically significant difference was observed between teachers coming from various types of secondary schools as regards their subjective satisfaction with the level of awareness of ASD.

The hypothesis was validated using Pearson's χ^2 test. The null H3₀ hypothesis was confirmed.

Table 3

Supporting documents for Hypothesis H3 – schools with or without the school-leaving exam

| | Teachers satisfied with awareness | Teachers not satisfied with awareness |
|---|-----------------------------------|---------------------------------------|
| Schools without the school-leaving exam | 14 | 18 |
| Schools with the school-leaving exam | 31 | 31 |

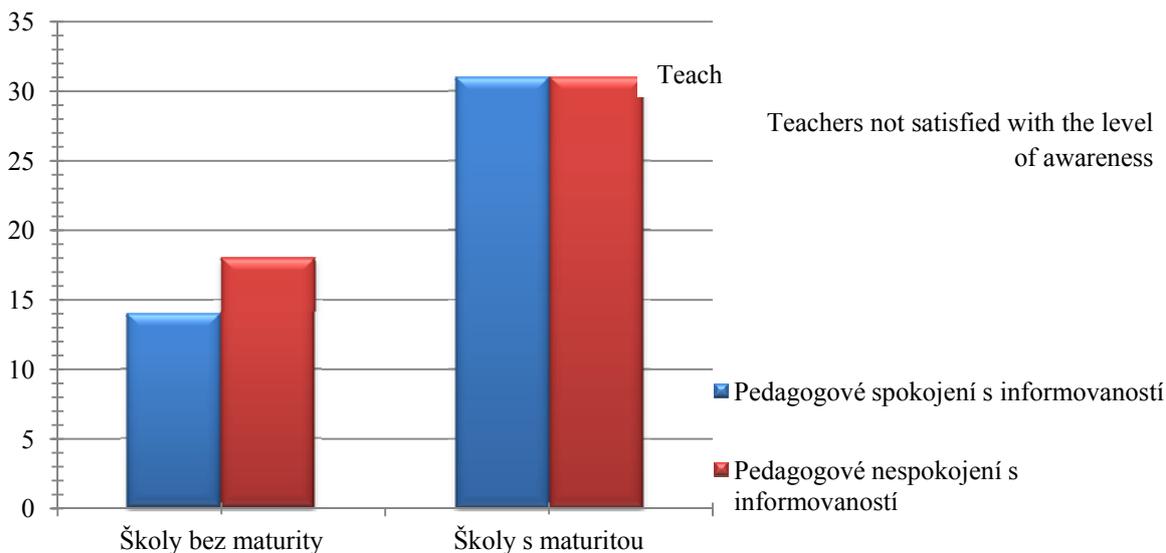


Figure 3 Supporting documents for Hypothesis H3 – schools with or without the school-leaving exam

Factors determining the tuition of students with ASD

A total of 49 teachers (50.5%) admitted that the presence of a pupil with ASD in the classroom had a determining effect on instruction. A closer reading of the responses received clearly reveals the need for the application of an individual approach (confirmed by 17 teachers, i.e. 17.4% of the respondents). A total of 20 teachers (20.5%) reported their preparation for classes attended by students with ASD is more demanding in terms of time and material and is more logistically complicated. These facts do not necessarily have to be perceived negatively. This naturally follows from the personality of a student with ASD, which a sufficiently informed and knowledgeable teacher should be able to respond to.

Table 4

Assessment of the effects of the classroom presence of a student with ASD on the course of the instruction (views of Czech teachers)

| | Frequency | Percentage |
|---------------------------|-----------|------------|
| Yes | 49 | 50.5 |
| No | 44 | 45.4 |
| Total number of responses | 93 | 95.9 |
| Did not respond | 4 | 4.1 |
| Total | 97 | 100 |

Table 5

Specific manifestations of the determining effects of the classroom presence of a student with ASD on the course of instruction (views of Czech teachers)

| | Frequence | Percentage |
|---|-----------|------------|
| Behaviour | 2 | 2.1 |
| Need for individual approach | 10 | 10.3 |
| Need for individual approach, demanding class preparation | 1 | 1.0 |
| Need for individual approach, effects on other students | 1 | 1.0 |
| Need for individual approach, demanding class preparation, patience | 1 | 1.0 |
| Need for individual approach, ability to hold attention | 1 | 1.0 |
| Communication | 1 | 1.0 |
| Demanding class preparation | 12 | 12.4 |
| Demanding class preparation, behaviour | 1 | 1.0 |
| Demanding class preparation, need for individual approach | 3 | 3.1 |
| Demanding class preparation, communication | 1 | 1.0 |
| Demanding class preparation, motivation | 1 | 1.0 |
| Effect on other students | 1 | 1.0 |
| Need for structure | 1 | 1.0 |
| Specific interests | 2 | 2.1 |
| Special teaching materials and aids | 2 | 2.1 |
| Space arrangement, creating the required conditions | 2 | 2.1 |
| Total number of responses | 43 | 44.3 |
| Did not respond | 54 | 55.7 |
| Total | 97 | 100.0 |

Factors rated as the most demanding in working with students with ASD by the teachers

A total of 16 teachers identify student motivation as the most demanding task within the education process. A total of 10 teachers experience issues communicating with the students. Other factors include the need for patience (9 teachers) and managing the problematic behaviour of the students (7 teachers).

Table 6

Factors rated as the most demanding when working with students with ASD by Czech teachers

| | Frequency | Percentage |
|---------------------------|-----------|------------|
| Motivation | 16 | 16.5 |
| Communication | 10 | 10.3 |
| Patience | 9 | 9.3 |
| Problematic behaviour | 7 | 7.2 |
| Other | 34 | 35.1 |
| Total number of responses | 76 | 78.4 |
| Did not respond | 21 | 21.6 |
| Total | 97 | 100.0 |

Suggestions by the teachers for optimising the situation in vocational training of students with ASD.

Another item of information the survey sought to collect concerns the factors, which, in the teachers' opinion, could have a positive effect by increasing the quality of the educational process of students with ASD. According to 19 teachers, raising awareness of ASD in general would be beneficial. A teacher assistant would be appreciated by 12 teachers from our research sample. A total of 6 teachers were against the integration of students with ASD.

Table 7

Suggestions by Czech teachers for improvements in the current situation in vocational training of students with ASD

| | Frequency | Percentage |
|------------------------------------|-----------|------------|
| Awareness of ASD | 19 | 19.6 |
| Teacher assistants | 12 | 12.4 |
| Do not integrate students with ASD | 6 | 6.2 |
| Other | 25 | 25.8 |
| Total number of responses | 62 | 64 |
| Did not respond | 35 | 36 |
| Total | 97 | 100 |

Results

The first area we focused on was the sense of satisfaction of Czech teachers with the level of awareness of ASD in relation to the demographic variables under consideration. We assumed the level of awareness and, by inference, that of satisfaction of the teachers with the quantity and quality of the information available will depend on the age of the teachers (and the time of their studies), the length of their teaching experience and the type of the school they work for. While postulating the hypotheses, we drew upon the assumption that given the absence of information on ASD in the past, the teachers in the older age category will be more likely to express dissatisfaction with the level of awareness of the issue at hand. This assumption, however, was not confirmed and we accepted null hypotheses **H1₀** and **H2₀** based on statistical validation. Therefore, the conclusion is that no significant differences exist between teachers belonging to the younger and older age category or between teachers with shorter and longer teaching experience as regards their subjective sense of satisfaction with the level of awareness of ASD. This observation could be explained by efforts on the part of the teachers to complete their knowledge in this area. However, the available data on the attendance of training courses and cooperation with organisations dealing with ASD do not seem to attest to increased activity on the part of the teachers (although half of them are dissatisfied with the level of awareness). It can be assumed, therefore, that the teachers interested in improving their knowledge in the area concerned obtain

the required information by reviewing specialised literature (this alternative was not reflected in the questionnaire).

The type of school the teachers work for was another variable. We adopted the assumption that at schools without study programmes with the school - leaving exam (particularly practical schools), the teachers will benefit from a better awareness of special education, and, by inference, of ASD. This assumption, however, was not confirmed either and null hypothesis **H3₀** was again accepted - i.e. there are no statistically significant differences between teachers from various types of secondary schools as regards their subjective satisfaction with the level of awareness of ASD. This may be explained by the fact that courses in special education have been expanded to all teaching study programmes and are no longer restricted only to programmes closely related to special education. The availability of specialised and popular literature, documentaries and films dealing with the issue to bring it closer to both experts and the lay public clearly also has a role to play. Although the connection between the awareness of teachers of ASD and demographic indicators was not confirmed, the research data analysis shows the situation in the area leaves much to be desired. The significance of awareness in increasing the quality of services is confirmed by Graetz, Spampinato (2008) and, with regard to successful job placement, also Muller, Schuler, Burton, Yates (2003) and Tobias (2009). We further devoted our attention to the factor determining the education of students with ASD and attempted to quantify the process difficulty. In this context, we also considered the relationship between the perceived difficulty of educating students with ASD and satisfaction with the level of awareness of the given issue among the teachers. We assumed that teachers who are satisfied with the level of awareness would have a lower tendency to regard certain areas of their work as problematic or demanding. We drew upon the assumption that these teachers were aware of the difficulty of educating students with ASD and of the implications of ASD and therefore would not be taken aback by or dedicate so much attention to them (in the negative sense of the word). We chose the four main areas most frequently given by the teachers. The areas were: motivation (15 respondents), communication (10 respondents), patience (9 respondents) and behaviour (7 respondents). The areas of communication and behaviour, as some of the fundamental pillars of ASD symptomatology, are also frequently referred to in literature as major factors determining the course of education (Čadilová, Žampacová, 2007). As observed by Haney (2012), problematic behaviour resulting from ASD symptomatology may have as an effect exclusion of the student from school. We regard this fact as alarming and once again emphasize the need for increasing the professional capacity of teachers, thus eliminating the negative impacts of ASD symptomatology. As part of our research, the statistical validation did not confirm any significant differences for any of the areas. Certain differences, however, were observed. Patience and problematic behaviour are mentioned more frequently by teachers satisfied with the level of

awareness of ASD. An initial interpretation of this relationship may be obtained by reversing it: teachers who are more concerned with the problematic behaviour of their students with ASD and feel exhausted as a result of the need for increased patience with these students displayed the need for improving their knowledge in order to be able to find ways to eliminate these negative accompanying phenomena. At present, although more information is available, perception of the severity of the work persists. Another possible explanation considers an initial stage of burnout syndrome, where it is primarily the well-informed and knowledgeable teachers who, under the effects of their strong altruism, start to perceive their work to be laborious, problematic and exhausting in certain areas. Idiosyncrasies in behaviour are suddenly regarded negatively and maintaining patience seems to demand even greater effort. This scenario would attest to the difficulty of the teaching profession and work with students with ASD and confirms teachers as a risk group in terms of burnout syndrome. In addition to trying to evaluate the postulated hypotheses and confirm or deny our assumptions, it was one of our aims to compare the respondent groups in the Czech Republic and Poland. One of the areas we focused on in the comparison was the level of awareness of ASD. The relationship between satisfaction with the level of awareness and the age of the teachers or length of their teaching experience was not confirmed for Czech and Polish teachers. Still, the comparison of the two groups of respondents (Czech and Polish teachers) revealed major differences. Generally speaking, the Polish teachers regarded the level of awareness of ASD obtained as part of their university studies to be lower compared to that reported by the Czech teachers. This may be the result of the different levels of tertiary education in the two countries and the degree of attention devoted to special educational issues as part of the study. Another interpretation involves increased requirements for the expertise of teachers on the part of the Polish group, which may be behind the low satisfaction level displayed by the respondents. As regards the level of awareness of ASD among teachers, we were subsequently interested in the rate of participation in courses dedicated to ASD and cooperation with organisations dealing with the issue. We assumed that where teachers are not entirely satisfied with the amount of information obtained during their university studies, they will want to increase their expertise. The Polish teachers reported much stronger figures for participation in courses and cooperation with specialised organisations than their Czech counterparts. This fact could correlate with the higher degree of dissatisfaction with the amount of information obtained during their university study and, by inference, with the increased need for redressing the situation. If we focus on the degree of the current subjective sense of satisfaction with the level of awareness of ASD, the two groups of respondents are equal and no statistically significant differences are reported. This means that for a proportion of the Polish teachers, a certain improvement has occurred in the level of awareness of the issue concerned since they completed their studies. This is

explained by their more frequent participation in courses and frequent cooperation with ASD organisations. Although the Czech and Polish sides are even as regards the level of awareness of ASD, we recommend that Czech teachers be encouraged to take part in courses on ASD and cooperate with ASD organisations. These activities will promote continuous improvement of the professional capacity of our teachers, which is one of the determining factors in the successful education of the students as well as improved level of their vocational training.

Conclusion

The present research focused on one of the major areas of educating students with ASD - namely, teachers' awareness of ASD. The level of awareness is identified as one of the cornerstones of efficient interaction with and education of the students. The adequate professional capacity of teachers in the field concerned and their knowledge of the fundamental needs of students with ASD do not amount to the mere list of various intervention methods, modifications to the classroom environment and daily regime. To the teachers, it (hopefully) primarily serves to open up a way towards their students as such, their personalities, individualities and their hearts. Naturally, professional capacity will not open up this path on its own; the personality of the teachers as well as their degree of empathy and teaching skills also have important roles to play. However, we are convinced that an increase in the level of awareness of ASD and teachers' education in this area will contribute to a deeper interest in the field and, by inference, to a deeper interest in the students themselves. While getting a clear image of specific students, their characteristic features and needs, we recommend prudence in selecting the intervention methods and the overall approach to them.

In connection with what has been said above, we recommend raising the awareness of ASD among teachers as part of university studies. We are aware of the broad range of issues covered by special education, the quantity of information and the bias of university teachers towards certain topics of specific interest to them. Still, we would like to recommend that ASD be included among the learning topics, not only as a theoretical issue, but mainly in practice as part of real-life instruction. We further recommend that the topic be discussed not only as part of psychopaedia or speech therapy studies, but rather as early as during the initial introduction to special education (especially for prospective teachers who do not major in special education and who, as regards special education, will only have information from this particular introductory course). Bearing in mind the continuous development in special education and the quantity of new information, and in consideration of the aforementioned breadth of issues covered by special education and the resulting impossibility of covering all of its aspects in a comprehensive and detailed manner, it is recommended that the level of awareness of ASD among teachers be raised by

self-study. Numerous literary sources are available, as are specialised courses, workshops, conferences and lectures. These offer an opportunity to gather theoretical knowledge and exchange practical experience with specialists in the field. In our opinion, this method of merging theory and practice through the cooperation of teachers with ASD organisations is at once the optimal way to get to know your students and contribute to their further development (Urbanovská, 2013).

References

1. Adreon, D., Stella, J. (2001) Transition to Middle and High School: Increasing the Success of Students with Asperger Syndrome. *Intervention in School & Clinic* (roč. 36, č. 5), s. 266-271.
2. Camarena, P. M., Sarigiani, P. A. (2009) Postsecondary Educational Aspirations of High-Functioning Adolescents With Autism Spectrum Disorders and Their Parents. *Focus on Autism & Other Developmental Disabilities*. [cit. 2012-02-01]. Dostupné z: <http://web.ebscohost.com/ehost/detail?vid=2&hid=17&sid=4e4b4160-49c4-45f0-93fd-95bd064b07f8%40sessionmgr10&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN=39773772> .
3. Čadilová, V., Žampachová, Z. (2007). *Specifika výchovy, vzdělávání a celoživotní podpory lidí s Aspergerovým syndromem*. Praha: IPPP.
4. Gajdzica, Z. (2008). *Wspólne i swoiste zagadnienia edukacji i rehabilitacji osób z upośledzeniem umysłowym*. Sosnowiec: Oficyna Wydawnicza „Humanitas”.
5. Graetz, J.E., Spampinato, K. (2008). Asperger's Syndrome and the Voyage Through High School: Not the Final Frontier. *Journal of College Admission*. č. 198, s. 19-24.
6. Haney, M. R. (2012). After school care for children on the Autism spectrum. *Journal of Child and Family Studies*. vol. 21, iss. 3, pp. 466-473.
7. Hendricks, D. R., Wehman, P. (2009). Transition From School to Adulthood for Youth With Autism Spectrum Disorders: Review and Recommendations. *Focus on Autism & Other Developmental Disabilities*. [cit. 2012-02-01]. Dostupné z: <http://web.ebscohost.com/ehost/detail?vid=2&hid=17&sid=146c3b12-301a-404c-bdf6-dbaf4abb91ca%40sessionmgr10&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN=39773769> .
8. Howlin, P. (2009). *Autismus u dospívajících a dospělých: Cesta k soběstačnosti*. Praha: Portál.
9. Kurth, J., Mastergeorge, A. M. (2010). Individual Education Plan Goals and Services for Adolescents With Autism: Impact of Age and Educational Setting. *Journal of Special Education* [cit. 2012-02-01]. Dostupné z : <http://web.ebscohost.com/ehost/detail?vid=2&hid=24&sid=08fbddb8-bdbc-43ca-bc8b-2091df73af99%40sessionmgr13&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN=54368136> .
10. Muller, E., Schuler, A., Burton, B.A., Yates, G. B. (2003). Meeting the vocational support needs of individuals with Asperger Syndrome and other autism spectrum disabilities. *Journal of Vocational Rehabilitation*. roč. 18, č. 3, s. 163-175.
11. Robinson, K.A., Smith, V. (2010). A Specific Vocational Training Program for an Adolescent with Autism. *Developmental Disabilities Bulletin*. roč. 38, 1/2, s. 93-109.
12. Thorová, K. (2006). *Poruchy autistického spektra*. Praha: Portál.

13. Tobias, A. (2009). Supporting students with autistic spectrum disorder (ASD) at secondary school: a parent and student perspective. *Educational Psychology in Practice*. roč. 25, č. 2, s. 151-165.
14. Urbanovská, E. (2013). *Profesní příprava a pracovní uplatnění jedinců s PAS*. Unpublished doctoral dissertation, University of Palacky, Czech Republic.
15. Valenti, M. et al. (2010). Intensive intervention for children and adolescents with autism in a community setting in Italy: a single-group longitudinal study. *Child and Adolescent Psychiatry and Mental Health* [cit. 2012-02-01]. Dostupné z <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=2&hid=17&sid=d62ebce5-f0ea-46d4-bf44-6379156b5d92%40sessionmgr11>.
16. *Vyhláška 72/2005 Sb. o poskytování poradenských služeb ve školách a školských poradenských zařízeních ve znění vyhlášky 116/2011 Sb.* Právní informační systém CODEXIS.
17. *Vyhláška 73/2005 Sb. o vzdělávání dětí, žáků a studentů se speciálními vzdělávacími potřebami a dětí, žáků a studentů mimořádně nadaných ve znění vyhlášky 147/2011 Sb.* Právní informační systém CODEXIS.
18. *Vyhláška 147/2011 Sb.* Právní system CODEXIS.
19. Wlazlo, M. (2009). The situation of people with autism in zachodniopomorskie region of Poland - Final Report 2008. *We make a difference*. Szczecin: Krajowe Towarzystwo autyzmu.
20. Wyczesany, J. (2002). *Pedagogika upośledzonych umysłowo*. Kraków: Impuls.
21. *Zákon 561/ 2004 Sb. o předškolním, základním, středním, vyšším odborném a jiném vzdělávání ve znění zákona 472/2011 Sb.* Právní informační systém CODEXIS.

| | |
|-----------------------------------|---|
| Mgr. Eva Urbanovská, Ph.D. | Institute of Special Education Studies, Faculty of Education, Palacky University, Žižkovo nám. 5, Olomouc, 77400, Czech Republic Email: evaurb@atlas.cz |
| Mgr. Jiří Kantor, Ph.D. | Institute of Special Education Studies, Faculty of Education, Palacky University, Žižkovo nám. 5, Olomouc, 77400, Czech Republic Email: kantorj@upol.cz |
| Mgr. Michal Růžička, Ph.D. | Institute of Special Education Studies, Faculty of Education, Palacky University, Žižkovo nám. 5, Olomouc, 77400, Czech Republic Email: michal.ruzicka@upol.cz |