

Quality of Educational Support for Children with Autism Spectrum Disorder in Bosnia and Herzegovina- Perception of Parents and Professionals

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Abstract

Children with autism spectrum disorder (ASD) attend regular education schools and special education schools in Bosnia and Herzegovina. Regardless of the setting, it is important to provide early, high quality, programs to children with ASD. High quality educational support must encompass evidence-based programs for these children. The goal of the present study was to assess parents and special education teachers' (SET) perceptions about the quality of educational supports for students with ASD in Canton Sarajevo, Bosnia and Herzegovina. The sample for this study comprised 150 parents and 52 SET. We asked parents and SET about their opinions on the quality of educational support for children with ASD. The results of this study showed different perceptions that SET and parents have about the educational supports for children with ASD. High-quality, evidence-based supports and services need to become a common-place for children with autism in various educational settings. Parents need to be trained as co-therapists and work together with SET in improving the educational outcomes of children with ASD.

Keywords: Autism spectrum disorder, Quality of educational support, Parents and teachers perceptions, Bosnia and Herzegovina

Introduction

Autism spectrum disorder (ASD) is a frequent neurodevelopmental disorder characterized by deficits in social communication and social interactions. ASD is a serious and lifelong condition that is very common in general childhood population (Matson, Mahan, & Matson, 2009). Its prevalence is about 14-15 children per 1000 and it affects boys around 4 times more often than girls (Christensen et al., 2016). Parents of children with disabilities have a higher risk for experiencing higher level of stress in comparison with parents of typically developing children (Baker-Ericzen, Brookman-Fraze, & Stahmer, 2005). In particular, parents of children with ASD have an increased risk to experience higher stress level than

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parents of children with other disabilities (Rivard, Terroux, Parent-Boursier, & Mercier, 2014). Usually the factors related to stress can be divided in child-related characteristics and parental characteristics. There are many within-the-child factors that can have an effect on parental stress and these are: severity of symptoms, behavioral problems, level of intelligence and others (Davis & Carter, 2008). Due to an increased risk of stress related conditions in parents of children with ASD it is very important to provide individualized information and professional support, especially at the time when the child receives his/her diagnosis (Keen et al., 2009).

The lack of social supports can worsen the stress levels of parents of children with ASD and is the best predictor of depression and anxiety (Boyd, 2002). It is a well-known fact that social supports can play a protective role in reducing and eliminating the consequences of stress. Social support and supportive interactions can protect people in all sort of crisis, from physical ailments to depression (Cobb, 1976). Thus, it is very important to provide support services to parents of children with ASD in order to prevent and reduce their stress levels. Support services can be different in its nature and range from informal services such as friends, other parents etc. to formal services such as schools, social services, and health care system (Bromley et al., 2004). In this paper we will deal with the segment of educational supports to children with ASD as perceived by their parents and special education teachers.

Children with ASD present a unique challenge to educators trying to design and implement effective instructional programs (Iovannone, Dunlap, Huber, & Kincaid, 2003). Trends in educational treatments for children with ASD are evolving and improving constantly (Sugita, 2016). All over the world there has been a call for the need of implementing evidence-based practices for children with ASD regardless of the educational setting (special education centers versus inclusive schools). At this point we find it necessary to briefly describe the educational system in Bosnia and Herzegovina with regards to type of education offered to children with disabilities in general and children with ASD in particular. Educational system with regards to administrative division has been explained elsewhere (Memisevic & Hodzic, 2011, Dizdarevic, Mujkanovic & Memisevic, 2017). Bosnia and Herzegovina has a dual system of education- general education and special education. General education, by its definition, serves all students regardless of their educational needs. Special education, on the other hand, serves children with disabilities. To be enrolled in a special education school, the child needs to have a certificate of disability, which is an official document confirming that a child has a disability and thus the right to attend a special education school. Certificate of disability is issued by a commission for child's categorization and members of the commission are: medical doctor, psychologist, social worker and defectologist (special education teacher/occupational therapist or speech therapist). According to the educational legislature in Bosnia and Herzegovina, parents of children with disabilities have a choice of enrolling their child to any school they wish. For example, in Canton Sarajevo, there are 4 special education schools: 2 for children with intellectual and developmental disabilities, one for children with hearing impairments and one for children with visual impairments. Children with autism spectrum disorders are mainly served in two centers for children with intellectual and developmental disabilities, although some of them are served by the general education schools. It is important to note that these special schools also have preschool departments to serve children with disabilities at an early age. Classrooms in these schools are run by defectologist/ special education teachers and not by regular education teachers. However, preschool departments can be run by both special education teachers and preschool teachers. Special education teachers are formally trained at the university level to teach students with disabilities, including students with ASD. As the number of students with ASD is increasing (Newschaffer, Falb, & Gurney, 2005; Dawson,

2013) both in regular and special schools, there has been an increased pressure on special education teachers, as well as on other professionals, to employ evidence-based strategies to educationally and behaviorally support students with ASD. Most of evidence-based strategies involve work with children based on applied behavior analysis (ABA) and the need to start as early as possible with the treatment (Rogers & Vismara, 2008). Special education teachers, in line with this new trend, are attending in-service formal and informal trainings aimed at increasing their competencies not just for ABA method, but also for other methods that have some circumstantial evidence such as TEACH, PECS and others. Also, Universities in Bosnia and Herzegovina that are educating future special education teachers are now offering trainings in evidence based methods such as ABA. Besides formal educational supports that are provided to students with ASD, a number of non-governmental organizations also provide educational supports to children with disabilities. Some of these NGOs are run by professionals but most of them are run by parents of children with ASD (Mujkanovic et al., 2016).

Thus, given its importance, the goal of the present study was to examine the perceptions of parents of children with ASD and special education teachers about the sufficiency of educational facilities that are providing supports to children with ASD. In addition to this we examined the attitudes of parents and special education teachers about the sufficiency of specialized staff who provide evidence-based programs to children with ASD. In line with the goal of the study, we set two hypotheses:

- 1) There are no statistically significant differences in the perceptions of parents and special education teachers about the satisfactory number of educational facilities offered to children with ASD;
- 2) There are no statistically significant differences in the perceptions of parents and special education teachers about the sufficient number of professionals providing evidence-based services to children with ASD

Method

Participants

The sample for this study comprised 150 parents of 98 children with ASD (98 mothers and 52 fathers) from Canton Sarajevo. The mean age of the children was 6.4 years (SD- 2.8 years). Children were attending different programs: regular preschool programs, special school preschool programs, regular schools and special education schools. The sample of mothers was the same as in a study regarding mother's satisfaction with treatment opportunities in Bosnia and Herzegovina (Mujkanovic et al., 2016). The sample of professionals comprised 52 special education teachers from special education schools in Canton Sarajevo.

Procedure

The customary designed questionnaires regarding parental satisfaction with many aspects of educational support was given to parents of children with ASD. The same questionnaires were distributed to the special education teachers working with children with ASD. For the purposes of this study we selected two questions on which the parents and professionals provided answers on a Likert based scale ranging from 1 (strong disagreement) to 5 (strong agreement) with the statement. The questions were:

- 1) There is a sufficient number of educational facilities providing educational and rehabilitation services to children with ASD;
- 2) There is a sufficient number of professionals providing evidence-based services to children with ASD.

Statistical analysis

The obtained answers were presented descriptively through the frequencies and percentages. The differences in the opinions of parents and professionals were tested with a Chi square test. For the purposes of statistical analysis the answers strongly disagree and disagree were merged into the category of disagreement and the answers agree and strongly agree were merged into the category of agreement. An alpha level of .05 was used for all statistical tests. For the statistical analysis we used a computer program SPSS v.13 for Windows.

Results

The first research question dealt with the perception of parents and teachers about the sufficient number of educational centers for children with ASD. These data are presented in Table 1.

Table 1. Agreement of parents and professionals on the question: *There is a sufficient number of schools providing educational services to children with ASD*

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Parents	53	35.3	30	20	25	16.7	42	28	0	0
Professionals	23	44.2	19	36.5	5	9.6	5	9.6	0	0

Prior to conducting a Chi-square analysis, we merged the answers in three categories: disagree, neutral and agree. So, 55.3% of parents disagreed with the statement, 16.7% were neutral and 28% agreed. In relation to the answers from professionals, 80.6% disagreed, 9.7% were neutral and 9.7% agreed. According to the results of the Chi-square test, the results were highly statistically significant $X^2=10.9, p=.004$. It is obvious that the professionals were highly sceptical about the sufficient number of schools providing evidence-based services to children with ASD. On the other hand parents' answers were more diverse, slightly more than half of them disagreed with the statement, 16.7% were neutral and almost 30% of them agreed with the statement.

In relation to the second research question, agreement with the statement that there are enough professionals who provide evidence-based treatments to children with ASD, the answers are presented in table 2.

Table 2. Agreement of parents and professionals on the question: *There is a sufficient number of professionals providing evidence-based treatments to children with ASD*

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Parents	63	42	46	30.7	29	19.3	12	8	0	0
Professionals	16	30.8	14	26.9	4	7.7	9	17.3	0	0

We again merged the answers, and 72.7% of parents disagreed with the statement, 19.3% were neutral and 8% agreed with the statement that there are enough professionals to work with their children. On the other hand, 57.7% of professionals disagreed with the statement, 7.7% were neutral and 34.6% agreed with the statement. The results of the Chi square test revealed a statistically significant difference in the distribution of parents and

teachers answers ($X^2=22.9, p<.001$). We can notice a somewhat different trend in the answers. This time only 8% of parents agreed with the statement as compared with 34.6% of the teachers.

Discussion

The goal of the present study was to examine the perceptions of parents and special education teachers about the sufficient number of educational facilities and sufficient number of experts for work with children with ASD. The first hypothesis we set, that there are no differences in the perceptions of parents and teachers about the sufficient number of educational facilities for children with ASD was rejected. The opinions of the parents and teachers significantly differed on this question. Majority of teachers believed that there are not enough educational facilities for children with ASD. As the special education teachers were recruited from special education schools it is possible that they regarded only their schools as competent for providing educational supports to children with ASD and thus the high percentage of disagreement with the statement. On the other hand, almost 1/3 of parents were satisfied with the number of educational facilities offering services to their children with ASD. A possible explanation for this difference is that many parents are using additional services, not just special schools and that fact accounted for their satisfaction with the number of educational facilities. However, majority of parents were not satisfied with the number of educational facilities that are at disposal to their children in Canton Sarajevo. It would be interesting to examine the intergroup differences in the parent perception and to see why such different views are held among parents. It might be the case that socio-economic status (SES) plays a role as parents who are more well-off have more treatment options to provide for their children. This claim was not systematically examined in BiH context. However, studies conducted elsewhere point to the fact that SES is correlated with more treatment opportunities and higher parental engagement (Benson, Karlof, & Siperstein, 2008). In any case, it is of utmost importance to provide more educational facilities to support children with ASD and that is the view held by most parents and special education teachers in this study. As a comparison, the number of educational facilities is not the issue in more developed countries. For example, the focus is placed on accelerating the pace of autism treatment through the development of innovative technologies (Goodwin, 2008).

The second hypothesis was that there are no differences in perception of parents and special education teachers on the sufficient number of experts providing evidence-based strategies for children with ASD. This hypothesis was also rejected. Majority of parents perceived that there are not enough professionals who use evidence-based treatments in their work with children with ASD and only 8% of them believed that there are enough professionals. This is in strong contrast to findings from United States, where about 90% of parents were satisfied with the experts who are working with their children with ASD (Bitterman et al., 2008). In the same line, the majority of professionals also believed that there are not enough experts who use evidence-based practice in their work with children with ASD. This seems like a counterintuitive finding but there might be a rationale behind it. We already mentioned that only recently Faculties educating special education teachers started with new courses such as Applied Behavior Analysis. Prior to that, these faculties did not have such specific courses. This might be the case while majority of special education teachers believed that there are not enough experts who use evidence-based strategies in their work with children with ASD. On the other hand, there were 34.6% of special education teachers who believed that there are enough experts who use evidence-based strategies in their work with children with ASD. Again, intergroup differences are more interesting to be examined than between group differences. One of the possible explanations is that teachers who agreed with the statement have gone through some kind

of formal or informal training and thus consider themselves competent to use evidence-based strategies in work with children with ASD. Given the present findings it is of utmost importance to offer special education teachers in-service trainings in evidence-based treatments for children with ASD, with a specific focus on applied behavior analysis. The first issue we tackled in this study dealt with the number of educational facilities for children with ASD. There is a clear need for the expansion of schools/centers/preschool institutions offering services to children with ASD. For this issue to be resolved successfully it is necessary to include authorities who will allocate the financial resources for new educational facilities for children with ASD.

The second question dealt with the sufficient number of professionals who are using evidence-based strategies in their work with children with ASD. The issue of special education teacher's preparedness to support students with ASD is present across the world. In the US many teachers who graduate have minimal training in evidence-based treatments for children with ASD (Loiacono & Allen, 2008). Current programs preparing special education teachers offered at BIH Universities have upgraded their curricula to include teaching evidence-based practices. However, Universities need to make an extra effort to offer support to in-service special education teachers in these strategies. This can be achieved through the programs of professional development and every teacher needs to attend these programs in order to be certified.

It is important to add one more prerequisite in order to fully educationally support children with ASD and that is parent education and training. Parents need to know how to differentiate between evidence-based treatments and treatments that are wasting their time, energy and money (Miller et al., 2012). Special education teachers can provide them with this information. In addition to this parents need to be empowered and knowledgeable about the services their children receive. Parent training has proven to be an excellent strategy to generalize and maintain the skills in children with ASD (Ingersoll & Dvortcsak, 2006). Of course, many programs aimed at increasing parents' competencies as co-therapists have proven to be very effective and need to be systematically encouraged (Short, 1984).

Let us finally mention some of the limitations of the present study. First of all, the sample was not random, which means we cannot over-generalize the present findings. Next, we used only two questions in the assessment of parents and special education teachers' perception on the quality of supports for children with autism. Lastly, we did not take into consideration some demographic variables that could have affected the results such as the socio-economic status of the parents, teacher formal and informal trainings etc. However, as this area of research is gaining its momentum in Bosnia and Herzegovina, we believe the future studies will take these factors into consideration. We will conclude this paper with a statement that these kinds of studies are very important and informative as they can point us to the deficiencies in the system and help us improve it, so the children with ASD can have the best possible supports.



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