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## Issues of teachers' preparedness to support learners with Autism Spectrum Disorder in schools of Kazakhstan

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**Abstract.** Ensuring access to education is a priority of any country, including Kazakhstan, where in recent years' emphasis has been placed on the development of inclusive education. The purpose of this article is to analyze the current practice of providing pedagogical support by teachers of inclusive classes in general education to children with ASD. Methods: A questionnaire consisting of open and closed questions was developed. Using a random sampling method, 85 teachers from 5 regions of the country took part in the survey (two megacities - Astana and Shymkent, as well as three regions - Akmola, Almaty and Aktobe). Results: The most of participants are between the ages of 31 and 60 and more than half of them 56.5%, have work experience of 10 years or more. The largest part of the interviewed teachers 44.7%, have the experience of working with SEN children 5 years or more. 56.5%, took short-term courses on inclusive education. It was identified the insufficient readiness of the country's teachers to implement inclusive practice, to fully perform their functions in the work of the service of psychological and pedagogical support of the ASD child. Conclusion: Based on these findings, we can conclude that the vast majority of teachers in the country feel the need for methodological support and advanced training in teaching and supporting children with behavioral difficulties, communication and social interaction disorders, in other words, signs of autistic disorders.

**Keywords:** autism, autism spectrum disorders, inclusive education, special educational needs, psychological and pedagogical support, socialization.

## **Introduction**

Accessible education is a priority for all countries, as it is the basis for improving the socio-economic living conditions of people. In this regard, leaders of all countries support the Sustainable Development Goals, where the fourth was to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all [1].

Equal rights to the accessibility of quality education are guaranteed by the legislation of the Republic of Kazakhstan (RK) to all learners, regardless of their individual characteristics, different opportunities, and special educational needs (SEN). In the longer term, creating conditions for equal access to quality education has great benefits both for children with SEN and for society as a whole [2-3]. This includes successful social adaptation and the possibility of self-realization for children, as well as significant steps taken by society towards a highly inclusive culture. In an inclusive environment, children with SEN reveal their abilities, acquire vital communication skills, and acquire interaction skills with surrounding peers and adults [4]. Undoubtedly, early social experience in an inclusive environment is an important condition for acquiring the necessary life skills for children with SEN and confidence in successful adaptation to modern life [5].

President of the Republic of Kazakhstan Kassym-Zhomart Tokayev in his Message to the people of Kazakhstan dated as September 1, 2022, emphasized the importance of the quality of secondary education as a factor in the formation of a successful nation: "Every Kazakh schoolchild should have decent conditions for learning and comprehensive development" [6]. In this regard, important tasks in the field of secondary education in the country are: ensuring the rights of all children to quality education, creating a culture of educational organization that is consistent with the goals of inclusion. This determines the requirement for the educational environment of any organization in its preparedness for the inclusion and inclusion of all children, taking into account their special needs and different capabilities. In this case, special attention must be paid to children with behavioral and emotional difficulties, most of whom are children with autism spectrum disorders (ASD).

According to the World Health Organization (WHO), "ASD is a special group of various conditions, the signs of which are present in about 1 child out of 100 [7]. It is important to note that according to the data of the Republican Scientific and Practical Center for Mental Health of the Ministry of Health of the RK (2021) in recent years there has been a significant increase in children with ASD, from 37 (0.8 per 100 thousand people) in 2008 to 756 (12.7 per 100 thousand) in 2020 [8]. Each of them is characterized by certain difficulties with social interaction and communication. Other characteristics include atypical patterns of action and behavior, such as difficulty in transitioning from one activity to another, focusing on details, and unusual reactions to external stimuli. Autistic manifestations often have a negative impact on educational and employment opportunities. Society's attitude and level of government support are important factors determining the quality of life of people with autism.

The Declaration of Salamanca states that "the practice of inclusion of children with mental and physical disabilities should be an integral part of national plans to achieve education for all. Even in those special cases where children are placed in special institutions, their education should

not be completely separate. It is necessary to encourage participation in educational activities in regular school settings" [9]. Following the requirements of international conventions, the inclusive policy of RK is progressively developing; the regulatory framework of RK in the field of educational policy is aimed at ensuring the rights of all children with special needs, including those with ASD. Thus, the Law of the RK "About Education" defines psychological and pedagogical support for students as "a systemically organized activity implemented in educational organizations, during which socio-psychological and pedagogical conditions are created for the successful training and development of people (children) with special educational needs" needs based on an assessment of special educational needs" [10]. Consequently, the organization of this activity in the country's schools requires the presence of the necessary competencies and professional skills, both among the school management and the entire teaching staff.

The purpose of this article is to analyze the current practice of providing pedagogical support by teachers of inclusive classes in general education to children with ASD.

## **Methodology**

To achieve the goal of the study the project participants used theoretical and empirical methods. The survey was developed among teachers of inclusive classes. The questions were developed on the basis of regulatory documents of Kazakhstan. To determine the level of readiness of teachers in inclusive schools, the following main directions of psychological and pedagogical support in educational organizations were taken as a basis:

- 1) Awareness of regulatory documents;
- 2) Studying the qualifications of teachers regarding inclusive education, including issues of ASD
- 3) Development of individual programs for children with ASD
- 4) Determining the needs of teachers regarding inclusive education of children with ASD.

The survey consisted of open and closed questions to ensure complete responses.

Using a random sampling method, 85 teachers from 5 regions of the country took part in the survey (two megacities - Astana and Shymkent, as well as three regions - Akmola, Almaty and Aktobe).

The survey was carried out in Google Forms format, the questionnaire contained 33 questions, covering the following sections: personal information and experience, skills, individual training programs for students with ASD, general questions. The survey was conducted on a voluntary basis, anonymously, confidentially, without personal identification.

Answers were classified as closed, where the answers were monosyllabic, which made it possible to combine them into classes or ask a specific code and open questions, which were combined into clusters of homogeneity of answers or definitions to one area of problem solving. Thus, questions regarding demographic data (region, gender, age) were identified by codes depending on the number of variables used. The work experience of the participants is divided into 4 groups: the first group - work experience from 1 to 2 years 11 months, the second group - 3 years to 5 years, the third group - 6-9 years, the 4th group - more than 10 years. Coding for the variable "experience working with children with special needs" is defined as follows: the first

group has 1 year of work experience, the second group – 2-3 years, the third group – 4-5 years, the fourth group – 5 or more years.

In the process of processing the obtained data, methods such as comparative analysis, classification, generalization, and synthesis were used. The use of these methods provided an opportunity for in-depth processing, interpretation, analysis of data, formulation of conclusions and building further prospects for studying the identified problematic issues.

The study design and questionnaire were approved by the Research Ethics Committee of the SDU University Institution (Protocol No. 6 of March 6, 2023), Almaty region, Kazakhstan.

## Results

The distribution of data by gender showed that women make up the vast majority of the teachers surveyed, and their share is 89.4%. (Figure 1)

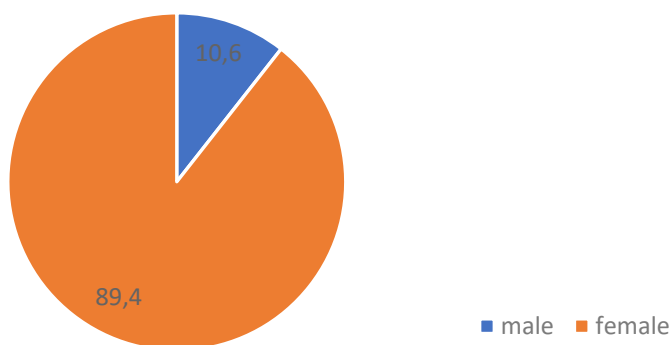


Figure 1. Distribution of the data by gender

The age composition of the survey participants is presented in such a way that most of them are between the ages of 31 and 60, their share was  $\frac{3}{4}$  of all respondents or 74.1%. The share of young teachers under the age of 30 was 15%, and the smallest share, 8.2%, was made up of those over 60 years old. (Figure 2)

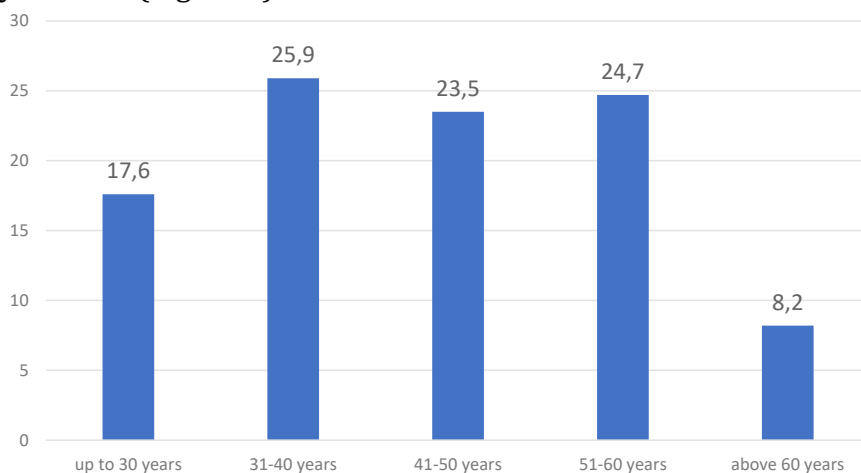


Figure 2. Age of respondents

The respondents' answers to the question about work experience showed that more than half of them, 56.5%, have work experience of 10 years or more, about 1/3, or 30.6%, are represented by young teachers with 1-3 years of experience, and the least the share, 5.9%, was made up of teachers with 6-9 years of experience. Based on the responses of the surveyed teachers, one can also see that the vast majority of them have higher education: 30.6% specialists, 48.2% bachelors, 4.7% masters, and only 16.5% indicated the answer "other", which is most likely indicates the level of technical and vocational education of respondents (Table 1). The experience of working with SEN children, the following data were obtained: the largest part of the interviewed teachers - 44.7%, have such experience in the amount of 5 years or more, ¼ part, or 24.7% have experience of less than 1 year, experience 3-5 years 20%, 10.6% of survey participants have 1-3 years of experience. This again confirms that all the interviewed educators have experience working with children with SEN.

According to the respondents' answers to the question about taking courses/seminars/trainings on inclusive education, the largest share of them, 56.5%, took short-term courses, a small part of the respondents took long-term courses, their share was 9.4%. About 1/4 of the respondents, their share 24.7%, did not take advanced training courses at all, and 9.4% chose the answer "other".

Table 1

**Information about respondents**

1.	<b>Work experience</b>	Frequency	Percentage
	1-3 years	26	30,6
	3-5 years	6	7,1
	6-9 years	5	5,9
	10 and more years	48	56,5
	Total	85	100,0
2.	<b>Education degree</b>		
	Bachelor	41	48,2
	Master	4	4,7
	Specialist	26	30,6
	Another	14	16,5
	Total	85	100,0
3.	<b>Work experience with children with SEN</b>		
	less than 1 year	21	24,7
	1-3 years	9	10,6
	3-5 years	17	20,0
	5 and more years	38	44,7
	Total	85	100,0

4.	<b>Type of capacity-building trainings</b>		
	short-term trainings	48	56,5
	long-terms trainings	8	9,4
	did not participate	21	24,7
	Other	8	9,4
	Total	85	100,0

Meanwhile, in responses to interview questions about the types of SEN of students in their classes, teachers named “impairments and behavioral difficulties, general speech underdevelopment, dyslexia, dysgraphia, rhinolalia, communication and social interaction disorders.” Most teachers are increasingly faced with difficulties associated with manifestations of an autistic nature in students. However, 81% of teachers surveyed responded that they find it difficult when they have to switch between the tasks to meet all the needs of students in the classroom, especially students with ASD. Only a small part, 16.5% of teachers, feel confident in such situations.

Here are quotes from the answers demonstrating the difficulties during the educational process:

“... a special child can start screaming in the middle of the lesson, get up to dance or walk around the class, can throw everything off the desk, hit the desk, if you scold her and make comments, she will not listen, to put it a little harsher, she will start swearing, screaming, and becoming hysterical. She can sometimes go and erase what the teacher has written on the board. This all bothers the other children”;

“Usually the child works slowly, but extraneous sounds irritate him and may scream during the lesson”;

“a child can simply scream when completing a task, there are children who categorically refuse to complete them (they do not contact the teacher or students)”;

“There have been cases when a student with ASD is not interested in a new topic, he writes his own examples or plays a table game.”

Answering the question about what actions they take in such situations; the teachers gave the following examples from their experience:

“I just don’t pay attention, and gradually she will calm down on her own; if it’s completely impossible, then I’ll threaten to call my mother, and she’ll immediately calm down”. She won’t listen otherwise”;

“it is difficult to calm down, behavioral disorders need to be studied”;

“it is not always possible to calm the child down”;

“I can’t always cope, I try to switch my attention. I select tasks that correspond to the child’s level of readiness and interests”;

“children of the class are involved in interaction”,

“in any case, we need to take control of the situation, divert his attention from the irritating factor.”

When asking teachers to express an opinion on the skills needed in such difficult cases during the educational process, the following judgments were received:

“patience, the ability to distract the child’s attention”;

“psychological foundations of behavior”;

“practice is needed”;

“knowledge about such characteristics of children”;

“behavior correction methods”;

“first of all, an individual approach to each child”;

“to be a good teacher and psychologist”;

“you need to be patient and calm, you need to master the basics of special psychology”;

“knowledge of the basics of inclusive education”;

“Theoretical knowledge is required. Tact in everything, understanding, experience comes with time.”

At the same time, among the opinions of teachers there were not only the above-mentioned “expected” positive answers, but also the opposite:

“we need to open a separate class for such children. Train them separately with a teacher who is well trained”;

“special class, special school”;

“this is a difficult question, every day is different”; “I don’t know”.

## **Discussion**

In accordance with the Law “About Education”, the order of the Minister of Education and Science of the Republic of Kazakhstan dated January 12, 2022 No. 6 “On Approval of the Rules for Psychological and Pedagogical Support in Educational Organizations” defines the procedure for psychological and pedagogical support in educational organizations. These Rules indicate the following main areas of psychological and pedagogical support in educational institutions:

1) identification and assessment of the special educational needs of people (children) with special educational needs;

2) advisory and methodological assistance to teachers and families of persons (children) with special educational needs;

3) creation of socio-psychological and pedagogical conditions for successful learning, development and socialization of persons (children) with special educational needs [11].

Accompanying students with special needs in the general educational process requires a team work: close interaction between specialists such as a psychologist, speech therapist, special educator, social teacher, as well as other teachers and parents.

In the process of psychological and pedagogical support, a team approach and the use of technologies for maximum individualization of support for students with ASD are important. At the same time, it is undeniable that the main role in accompanying a student with ASD and individualizing the learning process belongs to the teacher.

For the effective operation of the school's psychological and pedagogical support service, constant capacity-building trainings for teachers are necessary. However, in our study we

identified the insufficient readiness of the country's teachers to implement inclusive practice, to fully perform their functions in the work of the service of psychological and pedagogical support of the school [12-13].

Teachers have reported feelings of frustration and guilt regarding the amount of time required to adapt and modify lessons for students with autism [14]. Additionally, they state that they believe this time is wasted on the majority of their non-SEN students [3-4]. It is not surprising that educators feel frustrated that they are not prepared to teach these students. The educators who participated in this study emphasized that learning how to teach students with ASD is important to providing an appropriate education for these students. Successful inclusion of students with ASD in the general education environment requires collaboration between general and special education teachers. To achieve positive outcomes for all of their students, it is critical that general educators have the opportunity to work with others (e.g., special education teachers, therapists, etc.) to improve inclusive classroom environments [15]. The educators who participated in this study agreed that collaboration is important when teaching students with disabilities in inclusive settings. Working with students with ASD in inclusive settings can be challenging for educators; Insufficient knowledge about ASD and lack of access to support and advice from professionals (e.g. therapists and allied para professionals) with experience supporting these children only further complicates the work of the general educator [16]. All teachers noted that due to a lack of resources, inclusion is almost impossible.

### **Conclusion**

Thus, the analysis of the received materials based on the opinions' collection of school teachers working in the inclusive environment of a modern school confirmed the arguments of the authors of the article about the existence of an urgent problem in the country, which is the unpreparedness of a large part of teachers to implement inclusive practices and provide pedagogical support to children with SEN, including, especially, children with ASD. Based on these findings, we can conclude that the vast majority of teachers in the country feel the need for methodological support and advanced training in teaching and supporting children with behavioral difficulties, communication and social interaction disorders, in other words, signs of autistic disorders. In this regard, we can conclude that it is necessary to systematize all advanced training courses for teachers on inclusive education, especially on the provision of psychological and pedagogical support for children with ASD.

### **Contribution of the authors**

Development of the research concept – L. Kosherbaeva, preparation and editing of the text – S. Ismagulova, development of methodology and conduct of the study - L. Kozhageldieva, statistical analysis – N. Akhtaeva, approval of the final version – Yolanda Pena-Boquete.

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### **Қазақстан мектептерінде аутистік спектр бұзылыстары бар балаларға білім беретін педагогтардың дайындығы туралы мәселелер**

**Аңдатпа.** Білімге қолжетімділікті қамтамасыз ету кез келген елдің, соның ішінде соңғы жылдары инклюзивті білім беруді дамытуға баса назар аударылған Қазақстанның басымдығы болып табылады. Мақаланың мақсаты – жалпы білім берудің инклюзивті сыныптарындағы педагогтардың АСБ бар балаларға педагогикалық қолдау көрсетуінің заманауи тәжірибесін талдау. Зерттеу барысында ашық және жабық сұрақтардан тұратын сауалнама құрастырылды. Кездейсоқ таңдау әдісін қолдана отырып, сауалнамаға еліміздің 5 облысынан (екі мегаполис – Астана және Шымкент, сондай-ақ үш облыс – Ақмола, Алматы және Ақтөбе) 85 мұғалім қатысты. Нәтижесі: Қатысушылардың көпшілігі 31 мен 60 жас аралығында, ал олардың жартысынан көбісі (56,5%) 10 жыл және одан да көп жұмыс тәжірибесіне ие. Сауалнамаға қатысқан мұғалімдердің – 44,7%-ының ерекше білім беруді қажет ететін балалармен жұмыс тәжірибесі 5 жыл және одан да көп. 56,5%-ы инклюзивті білім беру бойынша қысқа мерзімді курстарды аяқтаған. Еліміздегі педагогтардың инклюзивті тәжірибені енгізуге және АСБ бар баланы психологиялық-педагогикалық қолдау қызметінің жұмысында өз функцияларын толық орындауға дайындығы жеткіліксіз екені анықталды. Қорытынды: Алынған мәліметтерге сүйене отырып, еліміздегі педагогтардың көпшілігі мінез-құлқы бұзылған, қарым-қатынас және әлеуметтік өзара әрекеттесу бұзылыстары бар, басқаша айтқанда, аутизм белгілері бар балаларды оқытуда және оларды сүйемелдеуде әдістемелік қолдау мен біліктілікті арттыру қажеттілігін сезінеді деген тұжырым жасауға болады.

**Түйін сөздер:** аутизм, аутистік спектр бұзылыстары, инклюзивті білім беру, арнайы білім беру қажеттіліктері, психологиялық-педагогикалық қолдау, әлеуметтену.

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### **Вопросы готовности педагогов к сопровождению обучающегося с расстройством аутистического спектра в школах Казахстана**

**Аннотация.** Обеспечение доступа к образованию является приоритетом любой страны, в том числе и Казахстана, где в последние годы сделан акцент на развитие инклюзивного образования.

Цель данной статьи - проанализировать современную практику оказания педагогической поддержки педагогами инклюзивных классов общеобразовательных учреждений детям с РАС. Методы: разработан опросник, состоящий из открытых и закрытых вопросов. Методом случайной выборки в опросе приняли участие 85 педагогов из 5 регионов страны (два мегаполиса – Астана и Шымкент, а также три области – Акмолинская, Алматинская и Актюбинская). Результаты: Большинство участников в возрасте от 31 до 60 лет; более половины из них (56,5%) имеют опыт работы 10 лет и более. Большая часть опрошенных учителей (44,7%) имеют опыт работы с детьми с ООП 5 лет и более. 56,5% прошли краткосрочные курсы по инклюзивному образованию. Выявлена недостаточная готовность педагогов страны к внедрению инклюзивной практики для полноценного выполнения своих функций в работе службы психолого-педагогического сопровождения ребенка с РАС. Заключение: на основании полученных данных можно сделать вывод, что большинство педагогов страны испытывают потребность в методологической поддержке и передовых повышениях квалификации в обучении и сопровождении детей с трудностями поведения, нарушениями общения и социального взаимодействия, иными словами, признаками аутистических расстройств.

**Ключевые слова:** аутизм, расстройства аутистического спектра, инклюзивное образование, особые образовательные потребности, психолого-педагогическое сопровождение, социализация.

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