ISSN 2312 - 4784

АЛЫҚ ҒЫЛЫМИ ЖУРНАЛ | МЕЖДУНАРОДНЫЙ НАУЧНЫЙ ЖУРНАЛ | INTERNATIONAL SCIENTIFIC JOURNAL

Қазіргі заманғы маңызды мәселелер

Актуальные проблемы современности

Actual Problems of the Present

№1 (51)

Қарағанды
Болашақ-Баспа
2026

ҚАЗІРГІ ЗАМАНҒЫ МАҢЫЗДЫ МӘСЕЛЕЛЕР

Халықаралық ғылыми журнал

АКТУАЛЬНЫЕ ПРОБЛЕМЫ СОВРЕМЕННОСТИ

Международный научный журнал

ACTUAL PROBLEMS OF PRESENT

The international scientific journal

№1 (51)

Қарағанды
Болашақ-Баспа
2026

ҚАЗІРГІ ЗАМАНҒЫ МАҢЫЗДЫ МӘСЕЛЕЛЕР: Халықаралық ғылыми журнал. – № 1(51). – 2026. – Қарағанды: «Болашақ - Баспа» РББ, 2026. – 93 б.

ISSN 2312 – 4784

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Басылымның мерзімділігі: тоқсанына 1 рет

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Ресей Федерациясының бұқаралық коммуникациялар және мәдени мұраны қорғау саласындағы заңнаманың сақталуын қадағалау жөніндегі федералдық қызметі РФ аумағында «Қазіргі заманғы маңызды мәселелер» (Қазақстан Республикасы) халықаралық журналын таратуға рұқсат берілген. 2006 жылғы 6 шілдедегі № 78 РП шетелдік мерзімді баспасөз басылымдарының өнімдерін таратуға рұқсаттама РФ аумағында № 88044 индексі, "Пресса России" Біріккен каталогында № 000053 индексі бойынша тіркелген.

«Қазіргі заманғы маңызды мәселелер» Халықаралық ғылыми журналы «Ресейлік ғылыми дәйексөз индексі» Ұлттық ақпараттық-талдау жүйесіне (РИНЦ)

енгізілген. 18.02.2016 ж.№ 75-02 / 2016 шарт

АКТУАЛЬНЫЕ ПРОБЛЕМЫ СОВРЕМЕННОСТИ: Международный научный журнал. – № 1(51). – 2026. – Караганда: РИО «Болашак-Баспа», 2026. – 93 с.

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Международный научный журнал «Актуальные проблемы современности» зарегистрирован Министерством культуры и информации Республики Казахстан (Свидетельство о постановке на учёт периодического печатного издания и№ 15583-Ж от 25.09.2015г.).

Периодичность издания: 1 раз в квартал

Основная тематическая направленность ППИ: разные направления науки. Журнал публикует научные статьи, материалы исследований, сообщения, рецензии и др.
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Международный научный журнал «Актуальные проблемы современности» включен в национальную информационно-аналитическую систему «Российский индекс научного цитирования» (РИНЦ) – Договор № 75-02/2016 от 18 февраля 2016 г.

ACTUAL PROBLEMS OF Present: International scientific journal. № 1(51). – 2026. – Karagandy: EPD «Bolashaq-Baspa», 2026. – 93 p.

ISSN 2312 – 4784

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The international scientific journal «Actual problems of present» was registered by the Ministry of Culture and Information of the Republic of Kazakhstan (Certificate of registration of periodicals and № 15583-Ж dated September 25, 2015).

Frequency of publication: quarterely

The main thematic focus : different branches of science. The journal publishes scientific articles, materials of the research, reports, reviews, etc.
When reprinting, a link to the journal is required. The authors are responsible for the accuracy of the facts, quotes, proper names, including geographical names.
Subscription on the territory of the Republic of Kazakhstan on the index 75319

The Federal Service for the Supervision of Compliance with the Law in the Field of Mass Communications and the Protection of the Cultural Heritage of the Russian Federation allows the distribution of the international journal «Actual problems of modernity» (Republic of Kazakhstan) on the territory of the Russian Federation. Permission to distribute products of foreign periodicals of the RF № 78 dated July 6, 2006. Subscription on the territory of the Russian Federation by the index 88044 in the joint catalog "Press of Russia" № 000053

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https://doi.org/10.64863/2312-4784/2025-1-51/40-54
Received: 03.03.2026
Accepted: 22.03.2026

Professional stress level of teachers working with children with autism spectrum disorder: the results of a pilot study

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Abstract

The professional activities of teachers working with children with autism spectrum disorder (ASD) are characterized by a high emotional and psychological burden. This situation can lead to an increase in the professional stress of teachers, emotional exhaustion and a decrease in professional well-being. Currently, one of the pressing issues in the field of special education is the study of the psycho-emotional state of teachers and the identification of effective ways to reduce professional stress. In this regard, it is scientifically and practically important to identify the features of professional stress of teachers working with children with autism spectrum disorders, and to study possible ways to reduce it. In the course of the study, a survey of teachers was conducted aimed at identifying the level of professional stress and factors affecting it. The study involved 25 educators working with children with autism spectrum disorder. The survey consisted of closed and open questions. Closed questions were rated on the Likert scale, and in some questions respondents had the opportunity to choose several answer options. The obtained data were processed by quantitative and analytical analysis methods. The results of the study showed that the professional activities of teachers are characterized by a high psycho-emotional burden. A significant proportion of respondents noted that working with children with autism spectrum disorder requires constant emotional stress. The main factors of professional stress are the complex behavior of children, a high level of responsibility, features of interaction with parents and the slow manifestation of work results. Also, teachers showed signs of emotional burnout, irritability and fatigue at the beginning of the working day. The results of the study showed that educators most often resort to social support and self-regulation methods to reduce stress. Respondents rated such types of support as psychological counseling, methodological support, training on stress management and exchange of professional experience. The results of the study show the need to develop a system of comprehensive support at the level of educational organizations to reduce the professional stress of teachers working with children with autism spectrum disorders. The introduction of programs aimed at maintaining the psychological well-being of teachers, strengthening vocational training and methodological support, as well as optimizing the workload can contribute to improving the professional efficiency of teachers and improving the quality of special educational services.

Keywords: autism spectrum disorder, professional stress, special educators, psycho-emotional stress, professional support.

Аутистік спектр бұзылысы бар балалармен жұмыс істейтін педагогтердің кәсіби күйзеліс деңгейі: пилоттық зерттеу нәтижелері

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Аннотация

Аутистік спектр бұзылысы (АСБ) бар балалармен жұмыс істейтін педагогтардың кәсіби қызметі жоғары эмоционалдық және психологиялық жүктememен сипатталады. Мұндай жағдай педагогтардың кәсіби күйзелісінің артуына, эмоционалдық сарқылуға және кәсіби әл-ауқаттың төмендеуіне әкелуі мүмкін. Қазіргі уақытта арнайы білім беру саласында педагогтардың психоэмоционалдық жағдайын зерттеу және кәсіби күйзелісті төмендетудің тиімді жолдарын анықтау өзекті мәселелердің бірі болып табылады. Осыған байланысты аутистік спектр бұзылысы бар балалармен жұмыс істейтін педагогтардың кәсіби күйзелісінің ерекшеліктерін анықтау және оны төмендетудің мүмкін жолдарын зерттеу ғылыми және практикалық тұрғыдан маңызды. Зерттеу барысында педагогтардың кәсіби күйзеліс деңгейін және оған әсер ететін факторларды анықтауға бағытталған сауалнама жүргізілді. Зерттеуге аутистік спектр бұзылысы бар балалармен жұмыс істейтін 25 педагог қатысты. Сауалнама жабық және ашық сұрақтардан тұрды. Жабық сұрақтар Лайкерт шкаласы бойынша бағаланды, ал кейбір сұрақтарда респонденттер бірнеше жауап нұсқасын таңдауға мүмкіндік алды. Алынған деректер сандық және мапалық талдау әдістері арқылы өңделді. Зерттеу нәтижелері педагогтардың кәсіби қызметі жоғары психоэмоционалдық жүктememен сипатталатынын көрсетті. Респонденттердің едәуір бөлігі аутистік спектр бұзылысы бар балалармен жұмыс істеу тұрақты эмоционалдық күш салуды талап ететінін атап өтті. Кәсіби күйзелістің негізгі факторлары ретінде балалардың күрделі мінез-құлқы, жоғары жауапкершілік деңгейі, ата-аналармен өзара әрекеттесу ерекшеліктері және жұмыс нәтижелерінің баяу байқалуы анықталды. Сонымен қатар педагогтарда эмоционалдық сарқылу, тітіркенгіштік және жұмыс күнінің басындағы шаршау сияқты күйзеліс белгілері байқалды. Зерттеу нәтижелері педагогтардың күйзелісті төмендету үшін көбіне әлеуметтік қолдауға және өзін-өзі реттеу әдістеріне жүгінетінін көрсетті. Респонденттер психологиялық кеңес беру, әдістемелік қолдау, стресс-менеджмент бойынша тренингтер және кәсіби тәжірибе алмасу сияқты қолдау түрлерін маңызды деп бағалады. Зерттеу нәтижелері аутистік спектр бұзылысы бар балалармен жұмыс істейтін педагогтардың кәсіби күйзелісін төмендету үшін білім беру ұйымдары деңгейінде кешенді қолдау жүйесін дамыту қажеттігін көрсетеді. Педагогтардың психологиялық әл-ауқатын қолдауға бағытталған бағдарламаларды енгізу, кәсіби оқыту мен әдістемелік қолдауды күшейту, сондай-ақ жұмыс жүктемесін оңтайландыру педагогтардың кәсіби тиімділігін арттыруға және арнайы білім беру қызметінің сапасын жақсартуға ықпал етуі мүмкін.

Кілт сөздер: аутистік спектр бұзылысы, кәсіби күйзеліс, арнайы педагогтар, психоэмоционалдық жүктеме, кәсіби қолдау.

Уровень профессионального стресса педагогов, работающих с детьми с расстройствами аутистического спектра: результаты пилотного исследования

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Аннотация

Профессиональная деятельность педагогов, работающих с детьми с расстройством аутистического спектра (РАС), характеризуется высокой эмоциональной и психологической нагрузкой. Такая ситуация может привести к повышению профессионального стресса педагогов, эмоциональному истощению и снижению профессионального благосостояния. В настоящее время одним из актуальных вопросов в сфере специального образования является изучение психоэмоционального состояния педагогов и определение эффективных путей снижения профессионального стресса. В этой связи научно и практически важно выявить особенности профессионального стресса педагогов, работающих с детьми с расстройствами аутистического спектра, и изучить возможные пути его снижения. В ходе исследования был проведен опрос педагогов, направленный на выявление уровня профессионального стресса и факторов, влияющих на него. В исследовании приняли участие 25 педагогов, работающих с детьми с нарушением аутистического спектра. Опрос состоял из закрытых и открытых вопросов. Закрытые вопросы оценивались по шкале Лайкерта, а в некоторых вопросах респонденты имели возможность выбрать несколько вариантов ответов. Полученные данные обрабатывались методами количественного и аналитического анализа. Результаты исследования показали, что профессиональная деятельность педагогов характеризуется высокой психоэмоциональной нагрузкой. Значительная часть респондентов отметила, что работа с детьми с расстройством аутистического спектра требует постоянного эмоционального напряжения. Основными факторами профессионального стресса определены сложное поведение детей, высокий уровень ответственности, особенности взаимодействия с родителями и медленное проявление результатов работы. Также у педагогов наблюдались признаки эмоционального выгорания, раздражительности и усталости в начале рабочего дня. Результаты исследования показали, что педагоги для снижения стресса чаще всего прибегают к социальной поддержке и методам саморегулирования. Респонденты оценили такие виды поддержки, как психологическое консультирование, методическая поддержка, тренинги по стресс-менеджменту и обмен профессиональным опытом. Результаты исследования показывают необходимость развития системы комплексной поддержки на уровне организаций образования для снижения профессионального стресса педагогов, работающих с детьми с расстройствами аутистического спектра. Внедрение программ, направленных на поддержание психологического благополучия педагогов, усиление профессионального обучения и методической поддержки, а также оптимизация рабочей нагрузки могут способствовать повышению профессиональной эффективности педагогов и улучшению качества специальных образовательных услуг.

Кілт сөздер: расстройства аутистического спектра, профессиональный стресс, специальные педагоги, психоэмоциональная нагрузка, профессиональная поддержка.

1. Introduction

In recent years, an increase in the number of children with autism spectrum disorder (ASD) has been observed in the Republic of Kazakhstan. This trend requires a reconsideration of the professional training of teachers and the organization of their work at all levels of the education system. Working with students with ASD has a complex psycho-emotional nature, as it involves sustained attention, regulation of behavioral characteristics, the design of individualized educational trajectories, and systematic interaction with parents.

Scientific literature indicates that teachers who work with this category of students are at an increased risk of emotional exhaustion, professional burnout, and depletion of psychological resources. Professional burnout directly affects teachers' motivational structure, professional effectiveness, and the overall quality of the educational process. Therefore, the issue of maintaining

and strengthening teachers' psychological well-being should be considered not only as an individual problem but also as an institutional and systemic challenge.

The relevance of this issue is also reflected in national strategic policy documents. The Concept «Quality Education: From Preschool to University» identifies the improvement of psychological and pedagogical support mechanisms for teachers and the creation of a supportive educational environment as one of the priority directions (Government of the Republic of Kazakhstan, 2024). In addition, the Action Plan for the implementation of the National Development Plan of the Republic of Kazakhstan until 2029 emphasizes the need to ensure the professional well-being of teaching staff as a key factor in improving the quality of educational services (Government of the Republic of Kazakhstan, 2025).

Teachers working with children with autism spectrum disorder face a range of specific professional stressors, including behavioral difficulties of students, insufficient professional preparation, emotional strain, and limited support from colleagues and school administration (Keenan-Mount et al., 2016; Brunsting et al., 2014; Wisniewski & Gargiulo, 1997; Billingsley et al., 2020; Spilt et al., 2011; Kurnia et al., 2024; Jennings & Min, 2023; Luthar & Mendes, 2020; Kruger & Cojocaru, 2022). Studies show that the stress levels of such teachers are significantly higher than those of teachers in mainstream schools, which increases the risk of emotional exhaustion, reduces job satisfaction, and may even lead to leaving the profession (Brunsting et al., 2014; Wisniewski & Gargiulo, 1997; Billingsley et al., 2020; Spilt et al., 2011). The main sources of stress include difficulties in managing the behavior of children with autism spectrum disorder, a lack of specialized knowledge and skills, high emotional workload, and insufficient external support (Keenan-Mount et al., 2016; Brunsting et al., 2014; Billingsley et al., 2020; Spilt et al., 2011). At the same time, the literature emphasizes the importance of developing coping strategies and implementing support and professional development programs aimed at reducing the negative consequences of professional stress (Kurnia et al., 2024; Jennings & Min, 2023; Luthar & Mendes, 2020).

The professional stress experienced by teachers working with children with autism spectrum disorder (ASD) can be theoretically explained through several fundamental scientific frameworks. One of the most widely referenced approaches in research is the transactional model of stress proposed by R. Lazarus and S. Folkman (1986). According to this model, stress is determined by an individual's subjective appraisal of a situation and the perceived availability of resources to cope with it (Spilt et al., 2011). This perspective helps explain why teachers may respond differently to similar professional situations. In addition, the analysis of teachers' professional activity from the perspective of systemic interaction often relies on U. Bronfenbrenner's ecological model, which emphasizes the influence of organizational and social environments on individual functioning (Brunsting et al., 2014). This framework highlights how factors such as school climate, institutional support, and professional collaboration can shape teachers' experiences of stress. A significant contribution to understanding the consequences of chronic stress was made by C. Maslach (1997), who developed the concept of burnout. In this framework, burnout is viewed as a multidimensional phenomenon that includes emotional exhaustion, depersonalization, and a reduced sense of professional accomplishment (Brunsting et al., 2014).

Empirical studies consistently demonstrate that teachers working with children with autism spectrum disorder (ASD) experience significantly higher levels of professional stress compared to teachers in mainstream education settings (Keenan-Mount et al., 2016; Brunsting et al., 2014; Wisniewski & Gargiulo, 1997). As noted by Keenan-Mount and colleagues (2016), one of the primary sources of stress is the difficulty of managing students' behavior, including aggression and affective outbursts. Similar conclusions are presented in the work of Brunsting and colleagues (2014), who additionally highlight role conflict and the ambiguity of professional expectations as significant contributing factors. Research by Kurnia and colleagues (2024) further indicates that insufficient specialized professional training increases teachers' feelings of professional insecurity and contributes to higher stress levels. Particular attention in recent studies has also been given to the phenomenon of high emotional involvement. Jennings and Min (2023) describe empathic stress as an

important factor contributing to the depletion of teachers' personal resources. At the same time, insufficient support from school administration and colleagues has been shown to intensify the negative effects of professional stressors (Keenan-Mount et al., 2016; Luthar & Mendes, 2020). Despite the widely recognized importance of organizational support, Luthar and Mendes (2020) note that sustainable models of systematic assistance for teachers remain limited in practice.

A curious feature of this research field emerges when reading these studies side by side. Stress in teaching is rarely caused by a single factor; instead, it behaves like a complex system. Behavioral challenges, emotional labor, institutional expectations, and social support intertwine like gears in a machine. When several of those gears grind at once, the system begins to overheat – what researchers politely call burnout. Understanding those interacting forces is exactly what makes studies on teachers working with children with ASD both scientifically rich and socially important.

Chronic professional stress is associated with the development of burnout and a decline in job satisfaction. Studies by Brunsting and colleagues (2014), as well as Wisniewski and Gargiulo (1997), demonstrate a clear relationship between emotional exhaustion and the deterioration of teachers' psychophysiological well-being. Research also indicates a link between burnout and teachers' intention to leave the profession, which in turn exacerbates the problem of staff instability in the field of special education (Brunsting et al., 2014; Billingsley et al., 2020). Thus, professional stress affects not only the individual well-being of teachers but also the overall stability of educational institutions. Within the context of preventing professional stress, researchers examine various coping strategies. Keenan-Mount and colleagues (2016) highlight the potential of mindfulness-based programs in reducing anxiety and emotional tension. Studies by Kruger and Cojocaru (2022) describe the positive effects of yoga programs and relaxation practices, although the authors note the need to expand the empirical evidence base in this area. Kurnia and colleagues (2024) emphasize the importance of professional development in the field of student behavior management as a means of reducing stress among teachers. In addition, according to Luthar and Mendes (2020), one of the most promising directions is the integration of both individual and organizational strategies for supporting teachers.

Viewed through a slightly wider lens, the pattern becomes almost ecological. Stress emerges when demands exceed resources. Add new resources – skills, institutional support, psychological tools – and the system begins to rebalance. In complex professions like teaching children with ASD, resilience rarely comes from a single intervention; it grows from a network of supports that reinforce one another like the beams of a well-built structure.

Despite the growing body of research, several important scientific gaps remain in this field. First, most intervention programs are implemented on a limited scale, and their effectiveness has not been sufficiently examined from a long-term (longitudinal) perspective (Keenan-Mount et al., 2016; Kruger & Cojocaru, 2022). Second, comparative analyses of coping strategies in relation to teachers' professional experience and individual characteristics remain insufficiently explored (Spilt et al., 2011). Third, organizational mechanisms aimed at preventing professional stress in inclusive education settings still require additional empirical validation (Luthar & Mendes, 2020). Thus, contemporary research confirms that teachers working with children with autism spectrum disorder experience high levels of professional stress and that this phenomenon has a multidimensional nature. Scientific evidence indicates the need for a comprehensive approach that integrates the development of teachers' personal resources, the improvement of professional training, and the establishment of systematic organizational support (Keenan-Mount et al., 2016; Brunsting et al., 2014; Billingsley et al., 2020). At the same time, there remains a clear need to expand the evidence base for intervention programs and to further investigate the long-term consequences of chronic professional stress.

Viewed from a broader scientific perspective, the situation resembles the classic problem of complex systems: researchers understand many of the components—stressors, coping strategies, institutional support – but the long-term dynamics of how they interact are still being mapped. Each new study adds another coordinate to that map, gradually revealing how educators can be supported more effectively in demanding professional environments.

The aim of the study is to identify the characteristics of professional stress among teachers working with children with autism spectrum disorder in inclusive education settings, to analyze the key factors influencing it, and to determine effective approaches to supporting teachers' psycho-emotional well-being.

2. Method

Participants

The study involved 25 teachers working with children with autism spectrum disorder (ASD). All participants had higher education and had completed training for working with children with special educational needs. No specific restrictions were imposed regarding participants' gender, ethnicity, or social status. Participation in the study was voluntary, and all participants were informed about the conditions and procedures of the research in advance.

Materials

The study was conducted using a questionnaire survey. The questionnaire consisted of 18 questions organized into the following sections:

Section 1. Socio-professional characteristics
Section 2. Features of professional workload
Section 3. Indicators of professional stress
Section 4. Stress factors
Section 5. Coping strategies
Section 6. Need for support
Section 7. Open-ended question

Procedure

The survey for the study was conducted online using the Google Forms platform. Participants were provided with detailed information about the research and clear instructions, and they gave their informed consent to participate in the study. The following instruction was presented on the first page of the questionnaire:

> *«Please read the questions carefully and select the answer that best reflects your opinion or experience. The survey is anonymous, and the collected data will be used solely for scientific purposes».*

Participants completed the questionnaire anonymously. No personal data were collected from the participants.

Data analysis

The collected data were analyzed using mathematical and statistical methods. The results were processed quantitatively in terms of percentages (%) and qualitatively by examining the number of participants who selected each response option. The findings are presented in the article in the form of tables.

3. Result

The study showed that teachers working with children with autism spectrum disorder (ASD) experience a high level of professional stress. Although the participants represented different specialists within the inclusive education system, all of them reported experiencing stress when working with children with ASD. The results for each section of the questionnaire are summarized below.

1. Section 1. Socio-professional characteristics

Among the 25 participants in the survey, the professional distribution was as follows: **13 (52%)** special education teachers (defectologists), **2 (8%)** preschool educators, **3 (12%)** educational

psychologists, **3 (12%)** speech therapists, **1 (4%)** ABA instructor, **1 (4%)** social pedagogue, **1 (4%)** neuropsychologist, and **2 (8%)** social workers.

The participants' work experience with children with autism spectrum disorder (ASD) was distributed as follows:

Less than 1 year – 7 participants (28%);

1-3 years – 13 participants (52%);

4-6 years – 2 participants (8%);

More than 6 years – 3 participants (12%).

Regarding their workplaces, **7 (28%)** participants work in preschool education organizations, **11 (44%)** participants in correctional centers, **9 (36%)** participants in special education institutions, **1 (4%)** participant in an inclusive group, and **2 (8%)** participants in primary school settings.

2. Section 2. Features of professional workload

This section examined the specific characteristics of the professional workload experienced by teachers working with children with autism spectrum disorder (ASD). At the beginning of this section, participants were given the following instruction: *«Please indicate the degree to which you agree with each statement (1 – strongly disagree, 5 – strongly agree)»*. The results for this section are presented in Table 1.

Statement	**1**	**2**	**3**	**4**	**5**
Working with children with autism spectrum disorder requires constant emotional effort from me.	4%	12%	24%	4%	56%
I frequently encounter unexpected children behaviors that cause internal tension.	8%	8%	28%	16%	40%
I feel a strong sense of responsibility for the emotional well-being and development of children with autism spectrum disorder.	8%	4%	12%	20%	56%
The volume of documentation and reporting increases my fatigue.	8%	4%	24%	20%	44%
I feel that I do not have enough time to rest properly after the workday.	4%	0%	16%	24%	56%

Table 1 – Results of the Section 2

Table 1 presents the frequency of stress factors experienced in the professional activities of teachers working with children with autism spectrum disorder (ASD). The assessment was conducted using a 5-point Likert scale (1 – rarely, 5 – very often). The results indicate a predominance of high-level responses across all statements.

In particular, **56%** of respondents **(14 participants)** rated the statement that working with children with ASD requires constant emotional effort as very frequent. **40% (10 participants)** reported frequently encountering unexpected behaviors from children. In addition, **56%** of teachers **(14 participants)** indicated that they consistently experience a strong sense of responsibility for the emotional well-being and development of children with ASD. **44%** of respondents **(11 participants)** identified the volume of documentation and reporting as a factor that frequently increases fatigue. Furthermore, **56%** of participants **(14 respondents)** reported experiencing a lack of sufficient time for proper rest after the workday.

Overall, a high proportion of responses fall within the 4-5 range of the Likert scale, indicating that the professional activity of teachers working with children with ASD is characterized by a high level of emotional workload and a pronounced level of professional stress.

3. Section 3. Indicators of professional stress

The questions in this section were aimed at assessing the types and frequency of manifestations of professional stress among teachers. Before answering, participants were asked the following question: *«How often do you experience the following conditions?»*. To evaluate the frequency of these stress-related experiences, participants were offered the following response options: *«never, rarely, sometimes, often, constantly»*. The results for this section are summarized in Table 2.

Type of stress	never	rarely	sometimes	often	constantly
Emotional exhaustion	12%	12%	24%	36%	16%
Feeling tired at the beginning of the workday	8%	20%	24%	36%	12%
Irritability or emotional tension	0%	32%	12%	48%	8%
Doubts about one's professional effectiveness	12%	28%	20%	20%	20%
A desire to distance oneself from professional responsibilities	16%	24%	20%	28%	12%

Table 2 – Results of the Section 3

Table 2 presents the frequency of different manifestations of stress experienced by teachers in their professional activities. The results indicate that several stress symptoms occur frequently among a considerable proportion of teachers. In particular, **36%** of respondents **(9 participants)** reported experiencing emotional exhaustion often, while **16% (4 participants)** indicated that they experience it constantly. The feeling of fatigue at the beginning of the workday was reported as occurring often by **36% (9 participants)** and constantly by **12% (3 participants)**.

Regarding irritability or emotional tension, **48%** of respondents **(12 participants)** reported experiencing this condition often, while **8% (2 participants)** indicated that it occurs constantly. In addition, **20%** of teachers **(5 participants)** reported frequently experiencing doubts about their professional effectiveness, and another **20% (5 participants)** indicated that they experience such doubts constantly. The desire to distance oneself from professional responsibilities was reported as occurring often by **28%** of respondents (7 participants) and constantly by **12% (3 participants)**.

Overall, the findings indicate that certain symptoms of stress are present among teachers to a noticeable extent. In particular, emotional exhaustion is experienced often by **36%** of respondents and constantly by **16%**, while **48%** of teachers report frequently experiencing irritability or emotional tension. In addition, **36%** of respondents reported frequently experiencing fatigue at the beginning of the workday.

However, some indicators of stress do not appear at equally high levels among all teachers. For example, doubts about professional effectiveness are experienced frequently by **20%** of teachers and constantly by another **20%**, while a portion of respondents reported experiencing this feeling rarely or only occasionally. Similarly, the desire to distance oneself from professional responsibilities is observed frequently **(28%)** or constantly **(12%)** only among part of the respondents.

Thus, the results indicate that teachers working with children with autism spectrum disorder experience a noticeable psycho-emotional workload in their professional activities. At the same time, manifestations of stress are not equally pronounced across all teachers, suggesting variability in individual responses to professional demands.

4. Section 4. Stress factors

To conduct Section 4, participants were asked the following question: *«Which factors most strongly increase your stress?»*. Seven response options were provided, and participants were allowed to select ***multiple answers***. The results for this section are presented in Table 3.

Factors of stress	% (n = 25)
High emotional involvement	24% – 6 people

Challenging children behavior	68% – 17 people
Lack of rapid progress	40% – 10 people
Lack of methodological support	16% – 4 people
Lack of support from administration	28% – 7 people
Interaction with parents	48% – 12 people
High responsibility	64% – 16 people

Table 3 – Results of the Section 4

Table 3 presents the main factors that intensify stress among teachers. The results indicate that teachers' professional stress is influenced by several interrelated factors.

One of the most frequently mentioned factors was challenging student behavior, reported by **68%** of respondents **(17 participants)**. In addition, a considerable proportion of teachers identified high professional responsibility as an important factor increasing stress **(64%, 16 participants)**.

Nearly half of the respondents also indicated interaction with parents as a factor that creates difficulties in their professional activity **(48%, 12 participants)**. The lack of rapid progress in students' development was identified as a stress-enhancing factor by **40%** of respondents **(10 participants)**.

Less frequently reported factors included the lack of support from administration **(28%, 7 participants)** and high emotional involvement **(24%, 6 participants)**. The lack of methodological support was observed among a relatively smaller proportion of teachers **(16%, 4 participants)**.

Overall, the results suggest that the stress experienced by teachers working with children with autism spectrum disorder is primarily associated with the complexity of students' behavior, the high level of professional responsibility, and the challenges of interaction with parents. These findings indicate that professional stress in this context arises from a combination of pedagogical, emotional, and organizational factors.

5. Section 5. Coping strategies

This section examined the methods used by teachers to reduce their level of stress. Participants were asked the question: *«What methods do you use to reduce stress?»*. Eight response options were provided, and participants were allowed to select ***multiple answers***. The results for this section are presented in Table 4.

Stress reducing methods	**% (n = 25)**
Self-regulation techniques (breathing exercises, relaxation)	40% – 10 people
Talking with colleagues	48% – 12 people
Humor	24% – 6 people
Professional training	24% – 6 people
Emotional distancing	16% – 4 people
Ignoring the problem	12% – 3 people
Consulting a specialist	20% – 5 people
I do not use special approaches	16% – 4 people

Table 4 – Results of the Section 5

Table 4 presents the main methods used by teachers to reduce their level of stress. The results indicate that teachers use a variety of personal and social strategies to cope with stress.

One of the most frequently used strategies is talking with colleagues, chosen by **48%** of respondents **(12 participants)**. This suggests that support within the professional community plays an important role for teachers. In addition, **40%** of teachers **(10 participants)** reported using self-regulation techniques such as breathing exercises and relaxation.

Several respondents indicated that they cope with stress through personal rest or engaging in enjoyable activities **(24%, 6 participants)** and by participating in professional training **(24%, 6 participants)**. Seeking help from a specialist was reported by **20%** of teachers **(5 participants)**.

At the same time, some coping strategies appear to be used less frequently. For example, maintaining emotional distance was reported by **16%** of respondents **(4 participants)**, while **16%** of teachers **(4 participants)** indicated that they do not use any specific stress-management strategies. The strategy of ignoring the problem was selected by only 12% of respondents **(3 participants)**.

Overall, the findings suggest that teachers most often rely on social support and self-regulation techniques to reduce stress. However, the results also indicate that some teachers do not systematically use specific coping strategies, which may limit their ability to effectively manage professional stress.

6. Section 6. Need for support

Section 6 examined teachers' needs for support. According to the responses, the following distribution was obtained among the 25 participants: **28% (7 participants)** indicated that they need support, **32% (8 participants)** responded «mostly yes», **16% (4 participants)** selected «difficult to answer», **12% (3 participants)** answered «mostly no», and **12% (3 participants)** responded «no».

In addition, respondents were asked to specify which types of support would be most useful for them. To determine this, participants were asked the question: *«Which forms of support would be most beneficial for you?»*. Six response options were provided, and participants were allowed to select ***multiple answers***. The results are presented in Table 5.

Forms of support	**% (n = 25)**
Stress management training	36% – 9 people
Supervision	16% – 4 people
Psychological consultation	60% – 15 people
Methodological support	44% – 11 people
Group reflection	24% – 6 people
Sport	4% – 1 people

Table 5 – Results of the Section 6

Table 5 presents the types of support that teachers consider useful for reducing professional stress. The results indicate a clear demand for psychological and methodological support in teachers' professional activities.

The highest percentage was recorded for psychological counseling, which **60%** of respondents **(15 participants)** identified as a useful form of support. This finding suggests that teachers have a significant need for psychological assistance in coping with professional stress.

In addition, **44%** of teachers **(11 participants)** considered methodological support to be important. This indicates a demand for effective teaching methods and professional guidance when working with children with autism spectrum disorder.

Several respondents also identified stress management training as a useful form of support **(36%, 9 participants)**. Group reflection was selected by **24%** of respondents **(6 participants)**, while supervision was indicated as a helpful support mechanism by 16% of teachers **(4 participants)**.

The lowest percentage in the table corresponds to sports or physical activity, which was selected by only **4%** of respondents **(1 participant)**. This suggests that teachers tend to consider professional and psychological forms of support more important than purely recreational activities for reducing stress.

Overall, the findings indicate that teachers show a greater need for organized professional and psychological support mechanisms than for individual leisure or physical activities when addressing professional stress. In other words, the solution they imagine is not simply rest, but structured support within the professional system itself.

7. Section 7. Open-ended question

In this section, participants were asked the open-ended question: *«In your opinion, what could help reduce the level of professional stress among teachers working with children with autism spectrum disorder?»*. Respondents were invited to provide their own written answers.

The analysis of the open-ended responses indicates that reducing teachers' professional stress requires systemic and multifaceted support. A content analysis of the responses revealed several key directions.

The first direction concerns **psychological support and the maintenance of emotional well-being**. Teachers emphasized the importance of regular psychological support, group psychotherapy, professional stress management training, and opportunities for emotional recovery. Respondents also mentioned the importance of taking short breaks, properly planning rest periods, and restoring personal resources.

The second important direction relates to **professional and methodological support**. Respondents highlighted the need for specialized training courses for working with children with autism spectrum disorder, practical workshops, supervision, and opportunities for professional experience exchange. Some responses also indicated the importance of preliminary training for teaching assistants and the need to strengthen specialists' professional competencies.

The third direction involves **organizational and administrative support**. Teachers noted that reducing the volume of documentation, distributing workload more evenly, ensuring favorable working conditions, and receiving support from school administration could help decrease professional stress. In addition, issues related to fair evaluation of teachers' work and adequate salary were also mentioned.

The fourth direction concerns **teamwork and professional support within the work environment**. Respondents emphasized that collaboration among specialists, supervision, exchange of professional experience with colleagues, and effective interaction with parents are important factors that can help reduce professional stress.

Overall, the responses indicate that individual coping strategies alone are not sufficient to reduce professional stress among teachers. Instead, effective stress reduction requires systematic support at psychological, professional, and organizational levels. In other words, the phenomenon revealed here behaves less like a personal weakness and more like a structural condition of the work itself – one that must be addressed through coordinated support systems rather than isolated individual efforts.

4. Discussion

The results of the conducted study indicate that the professional activity of teachers working with children with autism spectrum disorder (ASD) is characterized by a high level of psycho-emotional workload. The analysis of the survey data revealed that teachers' professional stress has a multifactorial nature and is closely related to the content of pedagogical work, organizational conditions, and the characteristics of social interaction.

The obtained results show that emotional workload occupies a significant place in teachers' professional activities. A considerable proportion of respondents noted that working with children with ASD requires constant emotional effort, and that complex or unpredictable student behavior can significantly affect teachers' psycho-emotional well-being. These findings are consistent with conclusions from other studies indicating that teachers working in the field of special education face particularly high emotional demands. For example, several studies have shown that teachers working with children with ASD may experience higher levels of emotional exhaustion and professional stress compared to teachers in general education settings (Boujut et al., 2017; Brunsting et al., 2014).

The analysis of specific manifestations of stress revealed that a proportion of teachers experience emotional exhaustion, irritability or emotional tension, as well as feelings of fatigue at the beginning of the workday. At the same time, the results indicate that these symptoms are not equally pronounced among all teachers. Such differences may be related to factors such as teachers' professional

experience, individual psychological resources, and the characteristics of the work environment. Researchers have noted that professional self-efficacy, social support, and organizational conditions can significantly influence the level of professional stress among teachers (Cappe et al., 2019).

The study also identified the main factors influencing teachers' professional stress. According to the results, the primary sources of stress include challenging student behavior, a high level of professional responsibility, and the specific nature of interaction with parents. In addition, factors such as the lack of rapid progress, insufficient support from administration, and high emotional involvement were also identified as conditions that intensify teachers' professional stress. These findings are consistent with conclusions from scientific studies indicating that teachers' professional stress is determined not only by the complexity of the educational process itself but also by the social and organizational context of pedagogical work (Jennett et al., 2003; Keenan-Mount et al., 2016).

The analysis of stress-reduction strategies showed that teachers most often rely on social support and self-regulation techniques. In particular, discussing professional issues with colleagues and using self-regulation methods such as breathing or relaxation exercises were identified as widely used coping strategies. These results align with studies demonstrating the important role of social support in reducing teachers' professional stress. A number of researchers note that support within the professional community, the exchange of experience, and collaborative discussions serve as important resources for maintaining teachers' emotional well-being (Brunsting et al., 2014).

The results of the study also revealed which forms of support may be effective in reducing teachers' professional stress. The majority of respondents identified psychological counseling and methodological support as particularly important. In addition, forms of support such as stress management training, group professional reflection, and the exchange of professional experience were also considered significant resources for supporting teachers' professional well-being. The content analysis of responses to the open-ended question indicated that reducing teachers' professional stress requires not only individual coping resources but also systematic support at the organizational and institutional levels. Such support may include optimizing the volume of documentation, ensuring a balanced distribution of workload, expanding opportunities for professional development, and promoting teamwork among specialists.

At the same time, several limitations of the study should be acknowledged. First, the research was conducted with a relatively small sample, which may limit the generalization of the results to the broader teaching community. Second, the data were based on a self-report method, meaning that respondents' subjective perceptions may have influenced the findings. For this reason, future research should consider including larger samples and combining quantitative and qualitative methods to obtain a more comprehensive understanding of teachers' professional stress.

Thus, the findings of the study indicate that the professional stress experienced by teachers working with children with autism spectrum disorder has a multidimensional and systemic nature. Ensuring teachers' professional well-being requires the development of a comprehensive support system that integrates psychological, methodological, and organizational levels of assistance.

5. Conclusion

The conducted study demonstrated that the professional activity of teachers working with children with autism spectrum disorder (ASD) is characterized by a high level of psycho-emotional workload. The analysis of the survey results made it possible to determine that teachers' professional stress is a multifactorial phenomenon shaped by the content of pedagogical work, the characteristics of social interactions, and organizational conditions.

The findings indicate that a considerable proportion of teachers reported that working with children with ASD requires constant emotional effort. In addition, factors such as challenging student behavior, a high level of professional responsibility, the specific nature of interaction with parents, and the slow visibility of work results were identified as the main contributors to teachers' professional stress. The manifestations of stress observed among teachers included emotional

exhaustion, irritability, feelings of fatigue at the beginning of the workday, and doubts about professional effectiveness.

At the same time, the study showed that social support and self-regulation strategies play an important role in reducing teachers' professional stress. Teachers most often rely on strategies such as discussing professional challenges with colleagues, applying self-regulation techniques, and engaging in professional development activities. However, the results also revealed that a certain proportion of respondents do not systematically use specific stress-management strategies.

The study also identified the types of support considered necessary for maintaining teachers' professional well-being. Respondents evaluated psychological counseling, methodological support, stress management training, professional experience exchange, and supervision as particularly important forms of support. In addition, organizational-level support, including the optimization of workload, reduction of documentation requirements, and the development of teamwork among specialists, may contribute to reducing teachers' professional stress.

Thus, the findings indicate that reducing professional stress among teachers working with children with ASD requires not only the development of individual psychological resources, but also the establishment of a comprehensive support system at the level of educational organizations. Such support can help maintain teachers' professional well-being, enhance their professional effectiveness, and improve the quality of educational services provided to children with autism spectrum disorder.

Acknowledgments

The authors express their deep gratitude to all of the survey participants.

Financing statement

This research did not receive any financial support.

Conflict of Interest

The authors declare no conflicts of interest.

Author Contributions

M. Turganbay – concept, methodology, analysis, translation and conclusions; A. Suleymenova – literature review and statistical data analysis.

Data availability

The data used in this article are available upon request from the authors.

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