

ПСИХОЛОГИЧЕСКАЯ НАУКА И ОБРАЗОВАНИЕ

PSYCHOLOGICAL SCIENCE AND EDUCATION

ТРУДНОСТИ В ОБУЧЕНИИ И ШКОЛЬНАЯ НЕУСПЕШНОСТЬ В ФОКУСЕ КОМПЛЕКСНЫХ ПСИХОЛОГО-ПЕДАГОГИЧЕСКИХ ИССЛЕДОВАНИЙ

LEARNING DIFFICULTIES AND ACADEMIC FAILURE IN THE FOCUS OF PSYCHO-PEDAGOGICAL RESEARCH

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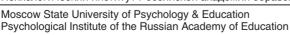
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LEARNING DIFFICULTIES AND ACADEMIC FAILURE IN THE FOCUS OF PSYCHO-PEDAGOGICAL RESEARCH

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ПСИХОЛОГИЧЕСКОГО БЛАГОПОЛУЧИЯ ДЕТЕЙ ИНОСТРАННЫХ ГРАЖДАН В РОССИИ 200

Learning Difficulties and School Failure in the Focus of Psycho-pedagogical Research

Modern international studies of the quality of educational achievements and Russian psychological, pedagogical, and sociological studies show that the number of Russian schoolchildren experiencing difficulties in learning and not reaching the threshold values of functional literacy is significant and tends to increase (in terms of science literacy, for example). A growing diversity of students due to demographic and socio-political factors became a serious challenge to the capacity of the modern school system, which is supposed to provide quality education for all. We have more and more students with disabilities, from migrant families, refugees, single-parent families, and orphans, coming into schools. The problem of learning difficulties has serious anthropological and socio-economic dimensions. School failure is a significant predictor of professional and social failure at the next stage. The negative effects of this problem are manifested in the lives of some children, affect the well-being of territories, and have a long-term impact on the quality of human capital in Russia, especially in conditions of population decline.

According to surveys, teachers, educational psychologists, heads of educational organizations, and parents experience to a greater or lesser extent a deficit of knowledge and competencies for preventing and overcoming learning difficulties in students and formulate a request for psychological and pedagogical science. In turn, for science, this problem opens wide opportunities for impact, generation, and mobilization of knowledge to solve the acute problem and promote an evidence-based approach in educational policy and practice.

At the same time, it can be argued that the topic of unsuccessfulness, underachievement, and learning difficulties in Soviet science did not have a simple fate. The initial keen interest in its study, including the "fight against grade repetition," was based on the ideas of L.S. Vygotsky and on the achievements of foreign scientists (A.R. Luria, P.P. Blonsky, etc.), and then there was a long period of "cooling down" by the campaign against pedology.

Later, Soviet and Russian researchers addressed this topic in a number of profound and original works, but this subject was not a priority; it did not become the subject of large-scale comprehensive, longitudinal studies, and it did not stimulate the emergence of original theories and scientific schools on this topic on an international level. It was developing in isolation from global trends and without reliance on the potential of cultural-historical theory. Russian science didn't provide practitioners with a full-fledged set of tools for diagnostics, prevention, and solving problems.

Recognition of the learning difficulties at the state level in recent years has stimulated a growing interest in some universities and academic research in this area.

In the period 2020—2022, teams of the Moscow State University of Psychology and Education, the National Research University Higher School of Economics, educational institutions in the CIS, and regional centers in Russia conducted research on a wide range of learning difficulties and school failure. Among them are the studies "Development and testing of the target model of the prevention and correction of learning difficulties students with relevant risks of unfavorable social conditions may face" (2020), "Formation of the psychological component of methodological training for the future teacher, necessary for the analysis of the causes of learning difficulties and school failure" (2021-2022), and "Diagnosis of learning difficulties among elementary school students" (2022). The first Russian longitudinal study of educational failure factors was launched in 2022.

Since 2020, a permanent seminar "School failure: prevention, diagnosis, and overcoming" has been operating, organized by the Moscow State University of Psychology and Education and the Institute of Education of the National Research University Higher School of Economics. It has become a communication platform for researchers, policymakers, and practitioners, as well as a platform for public consolidation to implement the problem of school failure into the agenda of Russian national educational policy. In 2022, leading Russian scientists and specialists from the Russian Academy of Sciences organized the seminar "School Failure Prevention: Diagnosis and Overcoming." In 2023,

specific aspects of the problem were included in the "List of topical topics of PhD research in the field of educational sciences," approved by the Russian Academy of Education and the Higher Attestation Commission.

The special thematic issue of the journal "Psychological Science and Education" is designed to record the changing situation of the problem of learning difficulties in the agenda of Russian science, to present the results of research, and to contribute to the solution of this complex problem of state and public importance.

When selecting articles for the issue, the editors sought to reflect the diversity of aspects of the problem, including the range of difficulties, the variety of factors that determine the emergence of difficulties, the specifics of their manifestation at different ages, and the peculiarities of their perception by different participants. The editors listed approaches to the diagnosis and correction of difficulties at school, program support in national-level policies. The authors come from research teams in Russia (Moscow, Nizhny Novgorod, Novosibirsk, and Elabuga), Kazakhstan, and Azerbaijan. The opening article by E.I. Isaev and A.A. Margolis presents an objective analysis of the possibilities and limitations of understanding the nature of difficulties and ways to overcome them developed in Russian science. From the standpoint of cultural-historical theory, diagnosing and overcoming learning difficulties is dominated by the idea that learning and development are two independent processes. The approach proposed by the authors, synthesizing the ideas of "zone of proximal development," scaffolding, and RTI (response to intervention), is designed to expand the possibilities and increase the effectiveness of practical diagnosis, prevention, and correction of learning difficulties in school. This approach formed the basis of the target model for learning difficulties prevention and correction, developed and tested in 2020-2022 by the research teams of the Moscow State University of Psychology and Education and the National Research University Higher School of Economics.

Elementary school is where learning difficulties first appear for everyone, and it is still possible to provide prevention, diagnosis, and management of the problem. Here you'll find articles that consider the manifestation of difficulties of younger schoolchildren in communication and social adaptation (anxiety, fears, aggression, stress), which act as predictors of learning difficulties and school failure (S.P. Sanina, M.D.D. Kuznetsov, M. A. Kuznetsov), as well as predictors of previous educational experience and family conditions and their impact on children's success in elementary school (D.R. Akhmedjanova, R.M. Bayramyan, E.G. Lisunova, A.K. Nisskaya).

The teacher is a key figure in ensuring that schoolchildren achieve the necessary level of functional literacy. Hence, teachers' ideas about the causes of learning difficulties, optimal methods of their prevention and correction, teachers' attitudes towards low-achieving students, as well as beliefs about their own professional responsibilities and capabilities, are a significant factor in maintaining or solving the problem and an important subject of research. These issues are discussed in articles by Russian authors (E.V. Hovakimyan, R.M. Bayramyan, N.A. Serova, and O.M. Isaeva) and Kazakh researchers (Sh.O. Tazabek, K.A. Tursunbaeva, and A.A. Shcherbakov). In the first article, the issue is revealed by comparing teachers' and parents' perceptions of elementary school students. In the second article, researchers from Privolzhsky Research Medical University (E.D. Bozhkova, V.V. Katunova, and A.A. Konovalov) assess the differences in the results of the expert surveys filled out by parents and teachers. It's made on the basis of the continuous psychological examination of the elementary school children in order to identify individual risk factors for mental and behavioral disorders.

The challenge for students, their families, and teachers was the change in the mode of education during the pandemic. The forced transition to distance learning created difficulties in mastering educational programs for children from low socio-economic backgrounds. They lack resources for the successful organization of the educational process at home. It was also challenging for students with low motivation, autonomy, and purely developed skills in organizing learning activities. Research on

the impact of changes in learning environments is relevant not only for retrospective analysis but also in the case of possible recurrences of similar phenomena, as well as in the more general issue of ensuring the quality of educational outcomes for all students involved in digital learning. Here you'll find the results of research on changes in the academic performance of students in rural and urban schools before and after the onset of the pandemic (Y.D. Kersha, O.V. Nedosyp, and O.I. Piotukh).

In this issue, you'll also find research on factors that determine the ability of a student to adapt to social situations, to demonstrate high academic achievement despite adversity and limitations caused by living conditions and developmental circumstances, and to develop resilience. In the article written by V.L. Vinogradov and V.L. Shatunova, the authors propose the following versions of answers to the questions about the correlation between personal resilience and other characteristics of the student: his or her academic success, on the one hand, and the characteristics of the educational process, on the other hand.

Given the scale of the existing problem, the realization of models of prevention of school failure and assistance to children with learning difficulties cannot become the exclusive responsibility of teachers and pedagogical psychologists but implies the development of a corresponding state educational policy with mechanisms of normative and resourceful support. The article by S.G. Kosaretsky discusses the experience of solving this problem in Russia from the 1990s to the present day and reveals the shortcomings of the implemented approaches and promising solutions based on the principles of educational equity and inclusion.

The first Russian state project in recent decades that addressed the problems of overcoming school failure was the Project of Targeted Methodological Assistance to Schools with Low Educational Results. I.S. Denisenko's article presents the results of the research that accompanied the implementation of the project and made it possible to draw significant conclusions about the factors of success in preventing low educational results in students by changing some school practices. The experience of other countries is important for selecting effective approaches to solving the problem at the state level. Azerbaijan's education system is historically connected to Russia. It s very interesting to learn about the factors influencing the performance of secondary school students and their correlation with the reforms carried out in Azerbaijan (U.T. Mikayilova, G.Z. Huseynzadeh).

We hope that the studies presented in this thematic issue stimulate discussions in the scientific community. We will be glad to receive your feedback. We believe that learning difficulties will not be limited to a single thematic issue but will be reflected in further editorial policy. We invite researchers to submit their publications on this topic.

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PSYCHOLOGY OF EDUCATION | ПСИХОЛОГИЯ ОБРАЗОВАНИЯ

Learning Difficulties: Diagnosis, Prevention, Overcoming

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Analysis of the theory and practices of overcoming learning difficulties has shown that the existing pedagogical and psychological approaches are not effective enough. They do not take into account the connection between learning and development processes. More productive is the approach of cultural-historical psychology, which considers education as a developmental process. This approach can be used to create an effective system of diagnostics, prevention and correction of learning difficulties. The model of such pedagogical activity includes three levels of individualization of learning: from individual planning of lessons to individual lessons for correction of psychological problems, and it was presented in this study.

Keywords: learning difficulties; diagnostics; zone of proximal development; prevention; overcoming learning difficulties; model of individualization of pedagogical activity.

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Трудности в обучении: диагностика, профилактика, преодоление

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Проведен анализ теории и практики работы с трудностями в обучении в отечественном образовании. Выявлена ограниченность односторонних педагогических и психологических подходов к пониманию природы трудностей в обучении, их диагностики, профилактики, преодоления. Делается вывод, что в основе параллелизма данных подходов к проблеме обнаруживается сохраняющаяся в сознании профессионалов-практиков модель образовательного процесса как независимость процессов обучения и развития. Обосновывается продуктивность положений культурно-исторической психологии о развивающем образовании и конструкта «зона ближайшего развития» в построении теории и практики диагностики, профилактики и коррекции трудностей в обучении. Анализируется корпус исследований, непосредственно рассматривающий понятие зоны ближайшего развития в отношении диагностики и преодоления трудностей в обучении. Представлена модель педагогической деятельности при работе с трудностями в обучении, предполагающая использование трех постепенно углубляющихся этапов индивидуализации обучения: индивидуальное планирование в рамках основных занятий, дополнительные занятия в малых группах, индивидуальные занятия по коррекции выявленных психологических дефицитов.

Ключевые слова: трудности в обучении; диагностика; зона ближайшего развития; профилактика; преодоление трудностей в обучении; модель индивидуализации педагогической деятельности.

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Introduction

In mass pedagogical practice, students' learning difficulties are defined as non-compliance with the requirements for the development of educational programs. They are fixed through the failure of students to achieve certain set parameters for completing tasks (test papers, tests, exams). In this variant, the diagnosis of difficulties acts as a

pedagogical diagnosis aimed at identifying the level of formation of certain knowledge, skills, and abilities. Depending on the ideas of researchers about the structure of the learning process used at a particular stage of the development of education, difficulties are differentiated and classified. N.I. Murachkovsky based the classification on the correlation of two main groups of personality

traits of schoolchildren: 1) features of mental activity related to learning ability; 2) the orientation of the student's personality, which determines his attitude to learning. Based on the combination of these personality traits, they identified three types of underachieving schoolchildren [17].

The well-known teacher Yu.K. Babansky proposed to study the educational opportunities of underachieving schoolchildren, combining in this concept two main factors of academic performance (underachievement): internal and external. The researcher attributed to internal conditions the features of the student's body and the features of his personality. The reasons for the internal plan included violations of children's health, deficits in their development, insufficient knowledge, skills and abilities. The external factor included a wide range of conditions: the household, hygienic conditions at school, the features of upbringing in the family, the features of education and upbringing at school. The reasons for learning difficulties could be deficits in both internal and external conditions for the development and training of schoolchildren [4].

The problems of the causes of difficulties in this approach, of course, are touched upon, but the approaches to their identification are rather limited, and are more interpretative/analytical than objectively diagnostic. The predictive ability of this approach in relation to specific schoolchildren is limited. The approach opens up certain opportunities for prevention, attracting the attention of teachers to the collection of data on internal and external risk factors of failure, but due to a wide range of reasons, it practically does not prevent the manifestation of primary learning difficulties. In turn, the ways of correcting and overcoming difficulties are actually associated with working out certain deficits in the knowledge and skills of students through additional classes with underachieving schoolchildren, providing for the implementation of exercises related to the area of identified deficits, first of all, the repetition of the covered material.

Psychological science has proposed an approach for overcoming the limitations of pedagogical diagnostics through the use of psychological diagnostic methods. The original and preserved approach provided for the diagnosis of abilities, primarily mental: standardized intelligence tests (first of all, IQ). This approach fixed a certain level of mental development. The low level made it possible to explain already observed learning difficulties (considered as their cause) or predict their occurrence.

With the development of psychodiagnostics, the variety in the classifications of difficulties increase with the explanation of their causes and the proposal of related correction methods. Psychologists A.F. Anufriev and S.N. Kostromina conducted an empirical study of the difficulties of teaching primary school children. The results of the study on the diagnosis of typical difficulties in teaching and raising children were summarized and presented in a psychodiagnostic table. The table includes the description of the phenomenology of difficulties, their possible psychological causes, psychodiagnostic techniques, the recommendations for eliminating difficulties. As typical difficulties, researchers identify erroneous actions of schoolchildren in written works on the Russian language (an omission of letters, spelling errors), difficulties in solving mathematical problems, as well as difficulties in retelling the text, absent-mindedness, inattention, restlessness, etc. [1]. We didn't conduct experimental studies of the effectiveness of the methods. At the same time, the psychocorrective approach, in a certain sense, repeated the logic of pedagogical correction: methods of psychological correction "trained" individual mental functions without affecting the educational and cognitive activity of the student and without solving the problems of learning difficulties.

The greatest degree of validity and depth in this direction is demonstrated by the neuropsychological approach, which connects the causes of difficulties with the features of the development of higher mental functions (thinking, memory, atten-

tion) and offers the appropriate methods for diagnosing their development. At the same time, neuropsychological diagnostics allows not only to state the "underdevelopment" of a certain mental function, but also to give a qualitative description of the problem. This approach opens up good opportunities both for the prevention (through regular screenings or early diagnosis of developmental abnormalities) and opportunities for individual correctional and developmental work with timely changes in individual support plans. It is significant that such opportunities arise when additional specialists are often absent from the school, which limits the possibilities of its implementation in mass practice. [2; 3].

Another important circumstance: traditional psychodiagnostics, including neuropsychological, searches for and finds the causes of learning difficulties in the peculiarities of individual development. With such a "deficit" approach, the actual learning process does not become the subject of analysis and diagnosis. The social, socio-psychological context of the learning process (communication and interaction of its subjects) is not included in the field of study and diagnosis.

It can be stated that pedagogical and psychological diagnostics of learning difficulties are developing as parallel lines. For pedagogical diagnostics, the processes of the development of mental functions are in the shadow. For psychological and pedagogical components of the learning process: the interaction and the communication of the teacher with the students and the students themselves, the features of educational and pedagogical activities, team educational activities. Behind this, the model of the relationship between learning and development, rejected by modern psychology, but preserved in the minds of professional practitioners, is easily revealed.

The efforts of the teacher are focused on achieving subject learning outcomes, and the features of development act as a support or barrier to their achievement, virtually independent of the nature and results of the educational process. The psychologist determines the level or, at best, the structural and dynamic characteristics of development in isolation from what the child does and achieves in the learning process. He does not actually see the connection between learning and development, he is focused on development as an autonomous process, and learning for him is actually the same as for a teacher — something that "falls on the soil" of development; and if development is normal, then learning is successful. The maximum that is possible with this understanding: the psychologist discusses aspects of an individual approach and can use separate techniques that take into account the features of behavior, attention, etc. In practice, this is reflected in the approaches to the interaction of teachers and support specialists, which most often represent a "transfer" of responsibility rather than cooperation with a distributed responsibility and continuity.

The Zone of Proximal Development as the Subject of Diagnosis of Learning Difficulties

From our point of view, approaches to the problem of learning difficulties, their diagnosis and the construction of preventive and correctional work suggest a return to the fundamental issues of the relationship between learning and development. The solution to this problem was proposed by L.S. Vygotsky in the 1930s. L.S. Vygotsky criticizes the approach to the problem of Jean Piaget, who asserted the independence of the processes of learning and development, and the one-sided dependence between development and learning. In the words of L.S. Vygotsky, in this theory, learning is always at the tail end of development. Learning reaps the fruits of childhood maturation, but learning itself remains indifferent to development. "Piaget," writes L.S. Vygotsky, "detaches the learning process from the development process, they turn out to be disproportionate, and this means that the child experiences two independent processes at school: development and learning. The fact that a child is learning and that he is developing has nothing to do with each other" [8, p. 485].

Vygotsky's approach is based on the distinction, but not the opposition of learning and development, on the recognition of their unity, but not identity. The fundamental formula of the relationship between learning and development is expressed by L.S. Vygotsky in the following form: "Learning is ... an intrinsically necessary and universal moment in the development process of a child, not natural, but historical human characteristics. All learning is a source of development that brings to life a number of such processes that cannot arise without it at all" [8, p. 388]. L.S. Vygotsky writes that learning and development do not coincide directly, but represent two processes that are in a very complex relationship. "Learning is only good when it goes ahead of development. Then it awakens and brings to life a number of functions that are in the stage of maturation, lying in the zone of proximal development. This is the main role of learning in development" [6, p. 252.].

L.S. Vygotsky considered the initial task of psychodiagnostics to be the determination of the real level of development of the child. He pointed out that determining the real level of development is the most urgent and necessary task in solving any practical issues of raising and educating a child, monitoring the normal course of its physical and mental development or establishing certain developmental disorders that disrupt its normal course. At the same time, the definition of the real (actual) level of development characterizes the already completed development cycles, which does not give a complete picture of the child's mental development.

Defining the aim and purpose of the diagnosis of development, L.S. Vygotsky writes that "the general principle of any scientific diagnosis of development is the transition from symptomatic diagnosis based on the study of symptom complexes of child development, i.e. its signs, to clinical diagnosis based on determining the internal course of the development pro-

cess itself" [7, p. 267]. Clinical diagnosis is based on knowledge of the age norms of child development at a certain stage of ontogenesis. Age-related objective norms of development form the basis of diagnostics: "Development schemes provide measures of development" [ibid.]. Clinical diagnosis is an age—related normative diagnosis. According to L.S. Vygotsky, "the task of normative age diagnostics is to clarify with the help of age norms, or standards, this state of development, characterized by both mature and immature process" [ibid.].

L.S. Vygotsky notes that clinical diagnosis, which includes the diagnosis of the dynamics of development, "should be based on a critical and careful interpretation of data obtained from various sources. It is based on all the manifestations and facts of maturation" [ibid.]. L.S. Vygotsky emphasizes the practical importance of the diagnosis of development: "The true ... diagnosis should give an explanation, prediction and scientifically based practical purpose" [ibid., p. 268].

L.S. Vygotsky pays special attention to the place of diagnostics in the processes of education and training. "It can be said without any exaggeration," writes L.S. Vygotsky, "that absolutely all practical measures to protect the development of a child, his upbringing and training, since they are associated with the features of a particular age, need to have a diagnosis of development. The application of developmental diagnostics to the solution of countless and infinitely diverse practical tasks is determined in each case by the degree of scientific development of the developmental diagnostics itself and by the requests that are presented to it when solving each specific practical problem" [7, p. 268].

L.S. Vygotsky's position on the unity of learning and development, his understanding of learning as the cooperation between an adult and a child, allows us to pose the problem of diagnosing mental development as identifying the developmental potential of a particular educational system. Psychodiagnostics of development is thereby associated with a specific educational practice.

The original ideas of L.S. Vygotsky were developed in the works of D.B. Elkonin. He believed that psychological and pedagogical diagnostics should solve two main tasks: the first is to control the dynamics of the mental development of children studying and being brought up in children's institutions, and the correction of development in order to create optimal opportunities and conditions for pulling weak and average students up to the level of strong students. as well as establishing the right direction of the development of children who show special abilities; the second is a comparative analysis of the developmental effect of various systems of education and training in order to develop recommendations for increasing the developmental potential of educational systems [23].

When solving the first task, a separate child is located in the diagnostic center — his level of development, difficulties, prognosis and correctional and pedagogical measures. Comparative diagnostic research reveals the effectiveness of new contents, organizational forms and teaching methods in terms of their developing capabilities. D.B. Elkonin emphasized that both types of diagnostics are inextricably linked with each other. He also noted the inextricable link between diagnostics in age psychology and diagnostics in educational psychology. Psychological and pedagogical diagnostics should be primarily age-related: there cannot be diagnostic systems that are the same for different age periods. The content of the diagnosed aspects of mental development in each individual age period should reflect the level of formation and forecast of further development of the leading type of activity and the level of formation and prognosis of the development of the main neoplasms of the child's psyche. Therefore, for each age period, its own special system of development criteria and diagnostic means of their control should be developed [ibid.].

From our point of view, little attention was paid to the line of the "individual child" in the future, and the approaches of cultural and

historical psychology to diagnosis did not become a solid basis for building a system of diagnosis, prevention and correction of learning difficulties in a general school. The second line has become dominant — the diagnostics of the formation of neoplasms of appropriate ages, including the leading type of activity. In the system of developing education D.B. Elkonin-V.V. Davydov's diagnosis was carried out along the line of assessing the formation of the main components of theoretical thinking — meaningful analysis, meaningful planning, meaningful reflection. Diagnostic methods were developed in relation to individual components of theoretical thinking [9, 10]. But we believe that this important line has not opened up opportunities for the systematic use of its methods for "solving countless and infinitely diverse practical tasks", for "monitoring and correcting the development of individual children" in general Soviet and post-Soviet schools. We see two reasons for this.

The first is that general education has not become a developmental one: the school in its ideas about educational results focuses on the subject, despite the consolidation of personal and meta-subject educational results in educational standards. In the currently implemented model of the organization of the educational process and pedagogical activity in general education, the entire subject of leading activities, theoretical thinking, etc. remains out of interest, is not a support for understanding the learning process and the actual difficulties in learning.

But, in turn, the existing methods of diagnosing thinking and activity offered in the tradition of developmental learning have visible limitations for working with an individual student and his difficulties. For this line (psychodiagnostics of developmental learning, diagnostics of age-normative development), the result of diagnostics is not so much individual differences and their causes but the organization of the educational process. Accordingly, it creates opportunities for the designing or redesigning of the educational process at the level of a certain class, community, level of education, but to a much

lesser extent — at the level of an individual child. What remains out of attention in traditional psychodiagnostics, including neuropsychological, here becomes the main subject of attention, and the line of individual development, the main one for them, in the psychodiagnostics of developmental learning becomes peripheral.

At the same time, L.S. Vygotsky's initial ideas about the correlation between learning, development and relevant diagnostics contain a concept that has significant potential for solving the problems of learning difficulties. This is the concept of the "zone of proximal development" (ZPD). For L.S. Vygotsky, the concept of the zone of proximal development fixes the law of child development, development through education: the child develops in a community with adults and peers; the formation of new mental qualities and abilities of the student takes place in the educational child-adult community. Today a child is able to do something new for him together with an adult, and tomorrow he will do it on his own. L.S. Vygotsky writes that "a child develops in collaboration through imitation, which is the source of all the specific human properties of consciousness, development from learning is the main fact... The main point of learning is that the child learns new things. Therefore, the zone of proximal development, which defines this area of transitions available to the child, turns out to be the most defining moment in terms of learning and development" [6, p. 250].

The value of the concept of the zone of proximal development in the context of interest to us lies in the fact that, fixing on "individual differences" in development, it considers them not only as already established (as traditional psychodiagnostics does), but as opportunities that open up in the process of interaction between a child and an adult in the educational process, including this in the subject of diagnosis. At the same time, unlike the psychodiagnostics of developmental learning (diagnostics of age-normative development), this concept retains the "individual", considers the

practice of interaction (educational practice) for each specific case, and not as a whole of a certain period of development or in a certain learning system.

In the works of domestic practice-oriented research, the possibilities of solving specific problems of education with a focus on a certain aspect, the meaning of this concept are thoroughly considered. V.V. Rubtsov in his research substantiates a system of joint educational actions related to the coordination, planning and organization of interactions between students and adults, students among themselves when solving an educational task through the processes of communication, reflection and mutual understanding [19; 20]. For G.A. Zuckerman, the zone of proximal development is a special form of interaction between a child and an adult, in which an adult's action is aimed at supporting the initiative, independent action of a child [21]. A.A. Margolis points out that the key position of L.S. Vygotsky's ZPD is the development of scientific concepts based on everyday ones: the cooperation of a child and an adult in the learning process is focused on mastering scientific concepts. The learning process is a process of the team activity of the student and the teacher on the formation of scientific concepts, generalized methods of action based on the development, transformation of spontaneous concepts available to the child [16].

Of particular interest is the body of research that directly examines the concept of the zone of proximal development in relation to the diagnosis and overcoming of learning difficulties or opens up opportunities for such use. In the study of I.A. Kotlyar and M.A. Safronova, the methods of diagnosing learning ability as the main indicator of learning disability and scaffolding as a tool for assessing one of the components of the level of mental development are correlated [13]. In the diagnosis of learning ability, an adult helps a child in case of difficulties. The quantity and quality of care is considered as an indicator of the ZPD. It is argued that the method of dosed care is associated with a deeper diagnosis of actual development, the study of mechanisms that provide the solution to intellectual tasks. This method shows that the current level of development is also heterogeneous, it has a certain internal structure. The help of an adult acts as a tool for studying this individual or age structure. Similarly, scaffolding is revealed as a process that enables a child or a beginner to solve a problem, complete a task or achieve goals that are beyond his individual efforts (capabilities). The focus of the diagnosis is on the actions of an adult towards a child, support during the task, the building up of the space of his or her ZPD. Assistance to a child has various types: showing, the verbal indication of an error, a direct verbal instruction. The authors link these two approaches, considering learning ability as a child's ability to advance in the space of the ZPD, manifested in special conditions; the main condition is a properly constructed scaffolding [13].

In the study of J.P. Shopina, the focus of attention is on positions in communication, where each position is interpreted and comprehended as the help of one participant (participants) of communication to another (others) in order to perform (solve) a task that he cannot do at the level of actual development, i.e. independently [22]. Thus, in all studies, the features of interaction between an adult and a child during the task allow us to identify the size of the individual zone of proximal development [14].

Once again, we emphasize that in this kind of approache to diagnosis, attention to individual differences is maintained and even intensified. In different children, not only is the level of actual development different, but also the size of the zone of proximal development. This suggests that learning that allows for the overcoming of difficulties is designed not as a one-size-fits-all, based on an age-normative model of development, but as individualized learning. It is significant that in all the considered works and a number of others, the importance of not only the operational side of the interaction between an adult and a child (the volume and the

type of assistance), but also its semantic, motivational, emotional side, relations (positions) in interaction are noted [5; 18].

Another important circumstance that opens up in the interpretation of the ZPD is the emphasis on independence in the performance of the task, which, as shown, is not reduced to the fact of mastering the subject content, but, as shown in the works of V.K. Zaretsky, is revealed through the fundamental characteristic of "subjectivity". The author distinguishes the student as a subject of mastering educational material and as a subject of overcoming their own difficulties. Accordingly, we can talk about two ZPD lying in different planes: the zone outlined by the possibilities of mastering educational material in cooperation with an adult, and the zone of developing the ability to overcome learning difficulties independently. Children with learning difficulties are defined as children who cannot complete certain tasks on their own. Hence, the necessary component of helping children with learning difficulties becomes the support of reflection, goal formation, etc. [11].

The Model of Individualization of Pedagogical Activity when Working with Learning Difficulties

The flexible modification of teacher student interaction to overcome learning difficulties is the main idea of RTI (response to intervention), the dominant model of helping children with learning difficulties used in the USA, England, and a number of European countries, which has replaced the traditional diagnostic approach. RTI focuses on assessing the student's reactions to changing practices of working with him, the modification of forms of assistance. The lack of reaction to changes becomes a signal of the need to change the educational strategy in order to find optimal levels of effective teaching and learning. RTI turns out to be important in the context of the previous arguments, because, unlike traditional approaches to the identification and interpretation of learning difficulties, it focuses on how learning is organized, connects the student's difficulties with ineffective learning practices [12].

Along with this, there is an increasing recognition in foreign pedagogy (including on an evidence-based basis) of various forms of feedback as an effective teaching method [25]. In the research and development in this area, different aspects of feedback are considered, related to both the subject content and the socio-emotional aspects of teacher-student interaction, the motivation of teaching. It seems promising to study the effectiveness of various types of feedback and ways to provide it. In particular, feedback is more effective in overcoming learning difficulties, in which the teacher helps students not only to understand what mistakes they have made, but also why they made these mistakes and what they can do to avoid them next time.

It is especially interesting that, at present, more and more attention in this direction is paid to the problems of self-regulation, independence (subjectivity, agency) in providing feedback. Thus, in the study by Griffiths, Murdock-Perriera, Eberhardt, the concept of agent feedback is introduced, in which teachers provide students with the opportunity to independently review their work, making the student an active partner in the review process, and not a passive recipient of feedback [24]. Agency is understood as the sense of control and freedom that a student has when he responds to a teacher's comments. Agent feedback offers more choice and the expectation that those who received more agentbased feedback should have done more in response than those who received less agent-based feedback. It is noted that students' independent strategy and seeking help can mediate feedback effects [25].

Thus, cultural-historical theory, both in its basic provisions and in specific developments, has a serious potential for building modern approaches to diagnosis, prevention and overcoming learning difficulties. At the same time, this potential should not be opposed to either the neuropsychological tradition or the promising solutions being implemented today in foreign tradition

(scaffolding, formative assessment). On the contrary, as we tried to show, it is important and possible to see variants of the area in which synchronicity or complementarity (integration) is detected.

Guided by this vision, we have developed a model of working with children with learning difficulties based on domestic studies of this problem, as well as on foreign experience in the prevention and correction of learning difficulties. The model includes two blocks: 1) preemption, prevention of risks of difficulties, 2) elimination, correction of existing learning difficulties.

The proposed model of working with children with learning difficulties involves the use of three gradually deepening stages of the individualization of learning, including a number of mandatory forms of organizing such work: a) individual planning within the framework of main classes, b) additional classes in small groups, c) individual classes, the psychological correction of identified psychological deficits, the participation of correctional and social educators if necessary.

At all stages of the implementation of the model, parents or legal representatives of students are necessarily involved in the development of an individual curriculum and a correctional and developmental program, and starting from primary school, students themselves are involved. The transition to the next stage of individualization is carried out on the basis of the decision of the psychological and pedagogical council and the evaluation of the effectiveness of the complex of measures of the previous stage based on the monitoring of the educational results of the student and the data of the psychological and pedagogical examination based on the results of correctional work. The model assumes two stages of the deepening individualization of education carried out at school on the basis of decisions of the psychological and pedagogical council: the implementation of an individual curriculum within main classes (the first stage), the implementation of an individual plan within additional classes (the second stage), the third stage

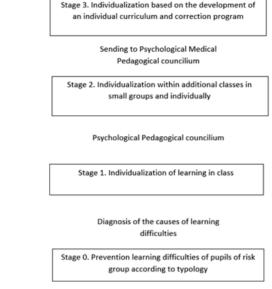


Fig. The Model of Individualization of Pedagogical Activity

is carried out on the basis of the decisions of the psychological, medical and pedagogical commission (PMPC). Let us present a detailed description of the stages of the individualization model.

The implementation of the target model of providing assistance to students who already have learning difficulties at the first stage involves a certain sequence of pedagogical actions and the use of the following mandatory forms of work:

- conducting psychological and pedagogical monitoring of students demonstrating low educational results, aimed at obtaining objective diagnostic examination data on possible causes of educational difficulties:
- conducting, on the basis of the obtained data, a psychological and pedagogical consultation aimed at the joint development by teachers (with the possible participation of a methodological association) and specialists of the psychological service of an individual curriculum and a program of psychological support for the student, taking into account the standard methodological recommendations for the individualization of learning;

 monitoring educational results and psychological and pedagogical examination at the end of the first stage.

The duration of the first stage is typically 3 months and assumes the possibility of implementing most of the planned corrective measures within the framework of the main classes with the class through individual variable planning (based on the recommendations of the council), the use of formative assessment. Psychological support using the programs recommended by the council is carried out within the current activities of the psychological service.

If there is no progress in achieving the positive dynamics of the student's educational results in accordance with the previously drawn up individual plan and effective correction of the identified psychological deficits, the psychological and pedagogical council may decide to move to the second stage of the individualization of training with appropriate changes to the individual curriculum and the program of correctional and developmental classes for a period of 3—6 months. As part of the second stage of the in-depth individualization of training,

additional classes in a small group or in an individual form can be used in accordance methodological recommendations that take into account the main causes of learning difficulties, as well as longer programs of correctional and developmental work. If necessary, by the decision of the council, other specialists may be involved in complex work with the student: a social pedagogue, a defectologist. The individualization of the student's education within the second stage should be the subject of regular consideration at meetings of the methodological association by jointly developing possible pedagogical solutions.

In the absence of positive dynamics in the process of implementing the second stage of the individualization of training, a psychological and pedagogical council may decide to send a student (with the consent of parents or legal representatives) to the PMPC for an in-depth diagnosis of the causes of learning difficulties (including on the basis of neuropsychological or special psychological examination data) and develop recommendations for further comprehensive work, aimed at eliminating learning difficulties. Based on the results of the review of the results of the two previous stages of the implementation of the model in a general education organization and the results of an in-depth psychological examination of the PMPC, a decision may be made on the need to create special conditions for the implementation of the individualization of education in an educational organization, as well as adjustments to the previously developed individual curricula and the program of correctional and developmental work. Ensuring the implementation of special conditions implies the need to allocate additional resources to the educational organization for the implementation of the individualization program, including the involvement of external specialists (if necessary) to participate in a comprehensive individualization training program. Following the completion of the third stage, the PMPC performs an independent assessment of the effectiveness of

the activities carried out by the educational organization and makes recommendations on the further educational route, taking into account data on the three previous stages of individualization of training.

The individualization model includes two essential components: the organization of evidence—based learning, and continuous assessment to track the progress or reaction of students — screening and monitoring. The latter allows teachers to guarantee that students will not participate in activities that do not help them achieve the expected level of assessment, but will receive the optimal type and amount of training, a set of support measures in accordance with their needs.

The individualization model is also an example of promoting a culture of the evidencebased approach in educational practice. It provides that the technologies used for training and support are based on scientific research that has shown their effectiveness. The model is aimed at the widest possible range of students who need support to improve their academic performance. It changes the paradigm of education for children with learning difficulties: it proceeds from the fact that many problems affecting students are not related to deficits in their development, but to ineffective learning, and is aimed at finding the causes of difficulties in the organization of the educational process itself.

Conclusion

Learning difficulties are an interdisciplinary problem that requires the combined efforts of different specialists to solve: teachers, educational psychologists, social educators, speech pathologists, neuropsychologists, etc. The unifying basis of such cooperation should be an understanding of the nature of difficulties, the means of their detection, evidence-based programs for their prevention and overcoming. The analysis has shown that the theoretical basis for solving the problem can be the cultural-historical psychology of L.S.Vygotsky: his views on the leading role of learning in the development process, the teaching of

the zone of proximal development as cooperation between a child and an adult in the learning process, on the diagnosis of the current level and the zone of proximal development as a psychological basis for individualization of learning. The ideas developed in modern foreign and domestic psychology about scaffolding as the dosed assistance of a teacher to a student in case of educational difficulties, about the RTI model as a model of deepening assistance to a child in the learning process confirm the productivity of the zone of proximal development construct introduced by L.S. Vvgotsky and operationalize it.

The prospects for further studies of learning difficulties, their diagnosis, prevention and correction will be a wide range of research, design and practical work. The main ones, in our opinion, are as follows:

 development of programs of psychological and pedagogical monitoring (separately for each stage of education) of students with low educational results;

- References 1. Anufriev A.F., Kostromina S.N. Kak preodolet` old]. Moscow: Kogito-Centr, 2008 (In Russ.).
- trudnosti v obuchenii detej: psixodiagnosticheskie tablicy: psixodiagnosticheskie metodiki: korrekcionny`e uprazhneniya [How to overcome difficulties in teaching children: psychodiagnostic tables: psychodiagnostic techniques: corrective exercises]. Moscow: Os-89, 1997. 224 p. (In Russ.).
- 2. Axutina T.V., Py`laeva N.M. Preodolenie trudnostej ucheniya: nejropsixologicheskij podxod [Overcoming the difficulties of teaching: a neuropsychological approach]. St. Petersburg: Peter, 2008. 320 p. (In Russ.).
- 3. Axutina T.V., Py`laeva N.M., Kamardina I.O. Nejropsixolog v shkole. Posobie dlya pedagogov. Individual'ny'i podxod k detyam s trudnostyami obucheniya [Neuropsychologist at school. A manual for teachers. Individual approach to children with learning difficulties]. Moscow: Izd. V. Sekachev [V. Sekachev Publishing House], 2022. 57 p. (In Russ.).
- 4. Babanskij Yu.K., Kosonozhkin I.M. O prichinax neuspevaemosti shkol`nikov putyax preduprezhdeniya: rekomendacii dlya uchitelej i organov narodnogo obrazovaniya [On the causes of school failure and ways to prevent it: recommendations for teachers and public education authorities]. Rostov n/D: [B. I.], 1972. 38 p. (In Russ.).
- Belopol`skaya N.L. Metodiki issledovaniya poznavateľ ny x processov u detej 4-6 let [Methods of

- substantiation of diagnostic programs and a bank of diagnostic techniques for in-depth individual analysis of possible causes of educational difficulties that manifest themselves at each stage of education. as well as at the transition from one level of education to another:
- creation of a library of preventive programs for students with a high level of risk of learning difficulties;
- creation of a library of correctional and developmental programs for the psychological support of students with learning difficulties aimed at eliminating the main identified psychological deficits;
- preparation of methodological recommendations on the individualization of training of students with the main types of learning difficulties:
- professional development of teachers and specialists of the psychological service of education in the field of the prevention and correction of learning difficulties.
- research of cognitive processes in children 4-6 years
- Vy`gotskij L.S. Sobranie sochinenij: V 6-ti t. T. 2. Problemy' obshhej psixologii [Collected works: In 6 volumes. Vol. 2. Problems of general psychology]. Moscow: Pedagogika, 1982. 504 p. (In Russ.).
- 7. Vy`gotskij L.S. Sobranie sochinenij: V 6-ti t. T. 5. Osnovy` defektologii [Collected works: In 6 volumes 5. Fundamentals of defectology]. Moscow: Pedagogika, 1983. 368 p. (In Russ.).
- Vy`gotskij L.S. Pedagogicheskaya psixologiya [Pedagogical psychology]. Moscow: Pedagogika, 1991, pp. 374—390. (In Russ.).
- Davy`dov V.V. Teoriya razvivayushhego obucheniya [Theory of developmental learning]. Moscow: INTOR, 1996. 544 p. (In Russ.).
- 10. Zak A.Z. Diagnostika razlichij v my`shlenii mladshix shkol`nikov: Ocenka gotovnosti k nachal`noj i srednej shkole: Kontrol` razvitiya v period 6—10 let [Diagnostics of differences in the thinking of younger schoolchildren: Assessment of readiness for primary and secondary school: Control of development in the period of 6—10 years]. Moscow: Genesis, 2007. 160 p. (In Russ.). 11. Zareczkij V.K. Teorema L.S. Vy`gotskogo «Odin shag v obuchenii - sto shagov v razvitii»: v poiskax dokazateľ stva [L.S. Vygotsky's theorem "One step in learning — one hundred steps in development": in search of proof]. Kul turno-istoricheskaya psixologiya =

- *Cultural and historical psychology*, 2015. Vol. 11, no. 3, pp. 44—63. (In Russ.).
- 12. Isaev E.I., Kosareczkij S.G., Koroleva Ya.P. Sovremenny'e modeli profilaktiki i korrekcii trudnostej v obuchenii v rabote shkol'ny'x sluzhb podderzhki v zarubezhny'x stranax [E'lektronny'j resurs] [Modern models of prevention and correction of learning difficulties in the work of school support services in foreign countries]. *Modern foreign psychology*, 2022. Vol. 11, no. 3, pp. 17—26. DOI:10.17759/jmfp.2022110302 (In Russ.).
- 13. Kotlyar I.A., Safronova M.A. Tri ponyatiya o real`nosti detskogo razvitiya: obuchaemost`, zona blizhajshego razvitiya i skaffolding [Three concepts about the reality of child development: learning ability, the zone of proximal development and scaffolding]. *Kul turno-istoricheskaya psixologiya = Cultural and historical psychology*, 2011. Vol. 7, no. 2, pp. 74—83. (In Russ.).
- 14. Kravczov G.G., Kravczova E.E. Vzaimosvyaz` obucheniya i razvitiya: problemy` i perspektivy`[The relationship of learning and development: problems and prospects]. *Kul' turno-istoricheskaya psixologiya = Cultural and historical psychology*, 2020. Vol. 16, no. 1, pp. 4—12. DOI:10.17759/ chp.2020160101 (In Russ.).
- 15. Lokalova N.P. Shkol`naya neuspevaemost`: prichiny`, psixokorrekciya, psixoprofilaktika [School failure: causes, psychocorrection, psychoprophylaxis]. St. Petersburg: Peter, 2009. 368 p. (In Russ.).
- 16. Margolis A.A. Zona blizhajshego razvitiya (ZBR) i organizaciya uchebnoj deyatel`nosti uchashhixsya [The zone of proximal development (ZBR) and the organization of educational activities of students]. Psikhologicheskaya nauka i obrazovanie = Psychological science and education, 2020. Vol. 25, no. 4, pp. 6—27. DOI:10.17759/pse.2020250402 (In Russ.).
- 17. Murachkovskij N.I. Tipy' neuspevayushhix shkol'nikov: avtoreferat dis. na soiskanie uchenoj stepeni kandidata pedagogicheskix nauk (po psixologii) [Types of underachieving schoolchildren: Ph. D. (Pedagogy) Thesis]. Academy of Pedagogical Sciences of the USSR, Scientific research. Institute of Psychology. Moscow: [B. I.], 1967. 17 p. (In Russ.).

Литература

- 1. Ануфриев А.Ф., Костромина С.Н. Как преодолеть трудности в обучении детей: психодиагностические таблицы: психодиагностические методики: коррекционные упражнения. М.: Ось-89, 1997. 224 с.
- 2. Ахутина Т.В., Пылаева Н.М. Преодоление трудностей учения: нейропсихологический подход. СПб.: Питер, 2008. 320 с.
- 3. *Ахутина Т.В., Пылаева Н.М., Камардина И.О.* Нейропсихолог в школе. Пособие для педагогов. Индивидуальный подход к детям с трудностями обучения. М.: Изд. В. Секачев, 2022. 57 с.

- 18. Obuxova L.F., Korepanova I.A. Sovremenny'j rebyonok: shagi k ponimaniyu [The modern child: steps to understanding]. *Psikhologicheskaya nauka i obrazovanie = Psychological science and education*, 2010, no. 2, pp. 5—19. (In Russ.).
- 19. Rubczov V.V. Social`no-geneticheskaya psixologiya razvivayushhego obrazovaniya: deyatel`nostny`j podxod [Socio-genetic psychology of developing education: an activity approach]. Moscow: MGPPU, 2008. 416 p. (In Russ.).
- 20. Rubczov V.V., Isaev E.I., Konokotin A.V. Uchebnaya deyatel`nost` kak zona blizhajshego razvitiya refleksivny`x i kommunikativny`x sposobnostej detej 6—10 let [Educational activity as a zone of immediate development of reflexive and communicative abilities of children 6—10 years old]. *Kul`turno-istoricheskaya psixologiya = Cultural and historical psychology*, 2022. Vol. 18, no. 1, pp. 28—40. DOI:10.17759/chp.2022180103 (In Russ.).
- 21. Czukerman G.A. Vzaimodejstvie rebenka i vzroslogo, tvoryashhee zonu blizhajshego razvitiya [The interaction of a child and an adult, creating a zone of immediate development]. *Kul turno-istoricheskaya psixologiya = Cultural and historical psychology*, 2006. Vol. 2, no. 4, pp. 61—73. (In Russ.).
- 22. Shopina Zh.P. Psixologicheskie zakonomernosti formirovaniya i aktualizacii zony` blizhajshego razvitiya [Psychological patterns of formation and actualization of the zone of proximal development. Ph. D. (Psychology) diss.]. Moscow, 2002. 190 p. (In Russ.).
- 23. E`l`konin D.B. Izbranny`e psixologicheskie trudy` [Selected psychological works]. Moscow: Pedagogika, 1989. 560 p. (In Russ.).
- 24. Griffiths C.M., Murdock-Perriera L., Eberhardt J.L. Can you tell me more about this?: Agentic written feedback, teacher expectations, and student learning. *Contemporary Educational Psychology*, 2023. Vol. 73. DOI:10.1016/j.cedpsych.2022.102145
- 25. Hattie J., Wisniewski B., Zierer K. The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. *Frontiers in Psychology*, 2020. DOI:10.3389/fpsyg.2019.03087
- 4. Бабанский Ю.К., Косоножкин И.М. О причинах неуспеваемости школьников и путях ее предупреждения: рекомендации для учителей и органов народного образования. Ростов н/Д: [б. и.], 1972. 38 с.
- 5. *Белопольская Н.Л.* Методики исследования познавательных процессов у детей 4—6 лет. М.: Когито-Центр, 2008.
- 6. Выготский Л.С. Собрание сочинений: В 6-ти т. Т. 2. Проблемы общей психологии. М.: Педагогика, 1982. 504 с.

- 7. Выготский Л.С. Собрание сочинений: В 6-ти т. Т. 5. Основы дефектологии. М.: Педагогика, 1983. 368 с.
- 8. *Выготский Л.С.* Педагогическая психология. М.: Педагогика, 1991. С. 374—390.
- 9. *Давыдов В.В.* Теория развивающего обучения. М.: ИНТОР, 1996. 544 с.
- 10. Зак А.З. Диагностика различий в мышлении младших школьников: Оценка готовности к начальной и средней школе: Контроль развития в период 6—10 лет. М.: Генезис. 2007. 160 с.
- 11. *Зарецкий В.К.* Теорема Л.С. Выготского «Один шаг в обучении сто шагов в развитии»: в поисках доказательства // Культурно-историческая психология. 2015. Т. 11. № 3. С. 44—63.
- 12. Исаев Е.И., Косарецкий С.Г., Королева Я.П. Современные модели профилактики и коррекции трудностей в обучении в работе школьных служб поддержки в зарубежных странах [Электронный ресурс] // Современная зарубежная психология. 2022. Том 11. № 3. С. 17—26. DOI:10.17759/imfp.2022110302
- 13. Котляр И.А., Сафронова М.А. Три понятия о реальности детского развития: обучаемость, зона ближайшего развития и скаффолдинг // Культурно-историческая психология. 2011. Т. 7. № 2. С. 74—83. 14. Кравцов Г.Г., Кравцова Е.Е. Взаимосвязь обучения и развития: проблемы и перспективы // Культурно-историческая психология. 2020. Том 16. № 1. С. 4—12. DOI:10.17759/chp.2020160101
- 15. Локалова Н.П. Школьная неуспеваемость: причины, психокоррекция, психопрофилактика. СПб.: Питер, 2009. 368 с.
- 16. *Марголис А.А*. Зона ближайшего развития (ЗБР) и организация учебной деятельности учащихся // Психологическая наука и образование. 2020. Том 25. № 4. С. 6—27. DOI:10.17759/pse.2020250402

- 17. *Мурачковский Н.И.* Типы неуспевающих школьников: автореф. дисс. ... канд. пед. наук (по психологии) / Акад. пед. наук СССР, Науч.-исслед. ин-т психологии. М.: [б. и.], 1967. 17 с.
- 18. *Обухова Л.Ф., Корепанова И.А.* Современный ребенок: шаги к пониманию // Психологическая наука и образование. 2010. № 2. С. 5—19.
- 19. Рубцов В.В. Социально-генетическая психология развивающего образования: деятельностный подход. М.: МГППУ, 2008. 416 с.
- 20. Рубцов В.В., Исаев Е.И., Конокотин А.В. Учебная деятельность как зона ближайшего развития рефлексивных и коммуникативных способностей детей 6—10 лет // Культурно-историческая психология. 2022. Т. 18. № 1. С. 28—40. DOI:10.17759/chp.2022180103
- 21. *Цукерман Г.А.* Взаимодействие ребенка и взрослого, творящее зону ближайшего развития // Культурно-историческая психология. 2006. Т. 2. № 4. С. 61—73.
- 22. *Шопина Ж.П.* Психологические закономерности формирования и актуализации зоны ближайшего развития: дисс. ... канд. психол. наук. М., 2002. 190 с.
- 23. Эльконин Д.Б. Избранные психологические труды. М.: Педагогика, 1989. 560 с.
- 24. Griffiths C.M., Murdock-Perriera L., Eberhardt J.L. Can you tell me more about this?: Agentic written feedback, teacher expectations, and student learning // Contemporary Educational Psychology. 2023. Vol. 73. DOI:10.1016/j. cedpsych.2022.102145
- 25. Hattie J., Wisniewski B., Zierer K. The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research // Frontiers in Psychology. 2020. DOI:10.3389/fpsyq.2019.03087

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Educational Policy Regarding Learning Difficulties and Equity in Education in the Russian Federation during the Post-Soviet Period

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The article examines the educational policy on the issues like learning difficulties, disadvantaged students, equity in education in Russia during the post-Soviet period. We analyzed the relevant changes and proposed solutions in the legislation and strategic documents at different stages in the period from 1992 to 2022. Nowadays there prospects of keeping the topic on the agenda of educational policy in the current conditions are discussed.

Keywords: educational policy; learning difficulties; disadvantaged students; equality of educational opportunities; equity.

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Образовательная политика Российской Федерации постсоветского периода в отношении трудностей в обучении и равенства образовательных возможностей

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В статье рассматривается образовательная политика России постсоветского периода в отношении проблемы трудностей в обучении, образовательной неуспешности, равенства образовательных возможностей в общем образовании. Анализируются место данных вопросов в законодательстве и стратегических документах на разных этапах в период с 1992 по 2022 годы, изменения в актуальности задач и содержании предлагавшихся решений. Обсуждаются перспективы сохранения темы в повестке образовательной политики в текущих условиях.

Ключевые слова: образовательная политика; трудности в обучении; образовательная неуспешность; равенство образовательных возможностей; справедливость.

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Introduction

All countries strive to improve quality of education, stating this as the main goal of education policy. In the discussion of ways to achieve this goal and the interpretation of the very concept of 'quality education' today, the task of realising the educational potential of every student is brought to the fore. The unavailability of high-quality education is no longer considered in terms of the impossibility of inclusion in the educational process or the restrictions on access

to educational resources. Rather, it is now regarded as the presence of students experiencing difficulties in mastering educational programmes (i.e. students with learning difficulties or who are underperforming).

In modern approaches, educational failure and learning difficulties are associated with the presence of certain circumstances that prevent the realisation of a child's potential. An important concept in this regard is the concept of 'equity' in education [38]. Fair education systems are those that en-

sure that the realisation of educational potential is not the result of personal and social circumstances, including factors such as gender, ethnic origin, immigrant status and special educational needs [38]. The possibility of achieving equally high academic results among students from different groups (social, ethnic, etc.) is becoming a key criterion for an effective education system in the modern world [38].

Accordingly, the policy of ensuring quality education for all focuses on groups of students who may be at risk of failure or face difficulties in mastering educational programs, providing institutional mechanisms and policy measures to ensure equity [4; 35; 38; 39].

In this article, we answer the question of how the topics of children's learning difficulties, educational failure and educational equity have been addressed in the national policy on general and extracurricular education in the Russian Federation over the past 30 years.

Several aspects of the policy in the field of educational inequality and quality management in post-Soviet Russia were examined in some studies on the transformation of Russian education in the post-Soviet period [9; 30; 34; 36; 40]. However, these issues were not directly discussed in this formulation and were not applied to the specified historical period.

Method

We studied education policy in Russia at the state level in the post-Soviet period (since 1992) using institutional and historical approaches as well as methods of critical political analysis [41].

We analysed the key documents of education policy, including legal acts and strategic planning documents, among others, spanning the period from 1992 to 2022. The sources were selected using the Consultant Plus and Garant reference legal systems.

The documents were analysed in accordance with their chronological sequence for the presentation and nature of the disclosure of topics of learning difficulties, educational failure and educational equity. Each document was searched for words, phrases and sentences that reflect these topics. Then the differences and continuity in the disclosure of topics between the documents was identified.

We were interested in the following questions:

- (1) How were the issues of learning difficulties, educational failure and equal opportunities for children to receive a quality education presented in the education policy of the period under review?
- (2) What categories of children were identified as risk groups for limiting access to quality education and educational failure?
- (3) What systemic mechanisms and measures have been used to prevent and correct learning difficulties, reduce the risk of educational failure and ensure equal opportunities for quality education?

Results

In state education policy of the 1990s, which focused on issues of de-ideologisation, variability and autonomy, issues of educational success and equality of educational opportunities were in the periphery of attention. In the second half of the 1990s, the task of 'improving the quality of education' was formulated. However, the focus was not on the differences in availability of quality education or the problems with achieving a certain level of quality, but on ensuring a 'new quality' that meets the changing needs of citizens and society, primarily through updating its content [13].

Measures to overcome learning difficulties are primarily related to psychological, pedagogical, medical and social assistance to children, as reflected in the Decree of the Government of the Russian Federation No. 867 of 31.07.1998 'On the Approval of Model Regulation on an Educational Institution for Children in Need of Psychological, Pedagogical and Medical and Social Assistance' and the Decree of the Ministry of Education of the Russian Federation No. 636 of 22.10.1999 'On the Approval of the Regulations on the Service of Practical Psychology in the System of the Ministry of Education of the Russian Federation'. This topic remains important throughout the entire period under review.

The presence of barriers to access quality education and differences/gaps in the quality of education for specific categories of children, including those related to socio-economic differentiation and place of residence, has been acknowledged in education policy documents since the beginning of the 21st century, with an increasing emphasis on addressing the problem [17]. Accordingly, the task of ensuring equal opportunities for obtaining a full-fledged education, regardless of the material wealth of the family, place of residence, nationality and state of health, is formulated as one of the most significant in the Concept of the Modernization of Education Until 2010, the first Federal Target Program (FTP) for the development of education and the 'Education' national project [28]. To achieve these goals, measures such as improving the material conditions of children's education, developing school transport in rural schools, creating an accessible educational environment and offering distance education for children with disabilities were proposed [17; 21].

The next stage of state policy began in the early 2010s. Its vectors are set by the national educational initiative 'Our New School', which literally contains the 'credo' of an inclusive school: 'A new school is a school for everyone' [11]. The FTP for 2011—2015 identified 'unequal access to quality education, which is one of the factors that exacerbate current social inequal-

ity', and 'the level of access to education in accordance with modern standards for all categories of citizens, regardless of their place of residence, social, property and health status' as key target indicators of the program [18]. The composition of measures used in the FTP and the project for the modernisation of regional general education systems remains generally the same (i.e. the development of infrastructure, transport support, distance learning and school libraries with special attention to rural schools, children with disabilities and disabled people) [16].

The most important event of this stage and the entire period under review was the adoption in 2012 of the new federal law 'On Education in the Russian Federation'. This law spelled out in more detail the powers and mechanisms for ensuring universal access to education. It also made significant steps to institutionalise special rights and special conditions for the education of children with disabilities, as well as for students experiencing difficulties in development, social adaptation and the mastering of basic general education programmes.

In 2012, the problem of schools with low achievement associated with social characteristics of the student body appeared. for the first time, as a focal point in state education policy [3; 23; 31]. Measures at the regional level to support schools operating in difficult social contexts and with low educational achievement are being launched slowly but consistently [19; 20; 29]. Another manifestation of the topic takes place in the period of 2016 2020 within the formed discourse of strengthening the role of education in the development of human capital, recognising the importance of each child's success for a country with a limited population [2; 5]. The peak of development in this area was a federal project aimed at schools with low educational outcomes, implemented from 2020 to 2022 [10].

By 2020, the line under consideration is represented in the evaluation of educational management bodies, methodological services, organisations of extracurricular activities and after-school education sectors [7; 15; 25]. The task of assisting children with learning difficulties is becoming central and thoroughly elaborated in new documents regulating the work of structures and specialists in the service of practical psychology in education [8; 24; 26].

During the entire period under review, the composition of risk groups of restricted access to quality education experiences the following changes: children from rural and remote territories, children of minority and indigenous peoples, children with disabilities, children from low-income and socially disadvantaged families, children in difficult life situations, orphans and children without parental care. However, at no stage does the policy cover all groups nor does it include children from migrant families. The dominant discourse is mostly negative in nature [12].

The policy on children with disabilities, children with special educational needs and children from rural areas is most consistent and institutionalised. To a lesser extent, this likewise applies to children from low-income families. The group of indigenous children included in the policy in the early 2000s was no longer considered a target group for the policy. There is a weakening focus on considering the cultural and linguistic characteristics of children that affect their educational achievements.

The very idea of the diversity of categories of children and their needs in education and the importance of its inclusion in education policy is inconsistently articulated in policy documents. Pointing out the different needs and interests of children is widespread, but conceptually, the topic of diversity is not initially integrated into the Russian education policy agenda. Moreover, at this stage, it is increasingly interpreted in a

negative way as an element of globalisation politics.

The educational inclusion framework is used in a narrow interpretation only for the category of children with disabilities. The modern framework of inclusion, which focuses not on the integration of individual groups but on providing access to high-quality education for every child by taking into account their individual characteristics, has not received official recognition.

Projects and programs did not include measures aimed at supporting vulnerable groups with learning difficulties to overcome difficulties and achieve high educational achievements, for example, assistance in preschool education, remedial education, extended education and 'second chance' programmes.

As for the main directions of institutionalisation of mechanisms for ensuring equal opportunities to obtain high-quality education, the institutionalisation of adaptive educational programs and the approval of the Federal State Educational Standard for Students with disabilities should be noted in terms of educational standards for disabled children [32].

In the area of teacher training and professional development, the Federal Standard of Higher Education- the Bachelor's Degree in Teacher Education does not include detailed requirements for preparing a teacher to work with students in the classroom, taking into account differences in opportunities and diversity. Rather, we formulate general expectations regarding the teacher's ability to use the technologies necessary for personalised learning, including for students with special educational needs, in their professional activities. In turn, the 'Teacher' Professional Standard guite clearly focuses on the use of special approaches and technologies 'in order to include all students in the educational process'. This encompasses those with special educational needs, such as those for whom Russian is not their native language, with disabilities, socially vulnerable, in difficult life situations, migrant children, orphaned children, children with behavioural deviations and children with addictions [22]. However, this standard does not include programs involving teachers in rural schools ('Zemsky Uchitel' and regional initiatives). Systematic measures to support teachers working with children at risk of educational failure and learning difficulties were not implemented, despite the fact that this topic was outlined in the Presidential Decree of 2012 [31].

The financing system of educational organisations includes specific features related to small rural and remote schools, children with disabilities and schools for indigenous children. However, it does not reflect aspects such as the social composition of schools, the social and cultural characteristics of students and the level of deprivation of territories, among many others, all of which are generally recognised in the world [39; 42].

In the quality assessment system, the introduction of the Unified State Exam at a certain stage became an important tool for ensuring equal opportunities for higher education and supporting educational mobility, but it had contradictory consequences in terms of ensuring the quality of education of vulnerable groups and addressing the gaps in educational achievements of students from different social groups at the school level.

In terms of the school stratification system and educational tracks, the Russian education system began in the 1990s by increasing the level of segregation and selection but then moved towards reducing these elements in the system (free school choice, types of schools, e.g. gymnasiums, lyceums, etc.) without using positive discrimination mechanisms.

The weak point of education policy throughout the entire period under review remains the lack of data reflecting differences in the quality of education for different groups of students. At the previous stage, a significant incentive to pay attention to the problem of educational failure and the differences in the quality of education was Russia's participation in international comparative studies of the quality of education and an analysis of the results. These studies primarily focused on the proportion of children who do not reach the basic level of functional literacy, as well as on differences in the quality of education and socio-economic status [1; 14].

In the context of the Russian Federation's withdrawal from international studies of the quality of education, it is important to maintain a focus on groups of students and schools with low results in complex social contexts in the current quality assessment system. An essential condition for keeping the topic on the agenda of education policy is the inclusion of data and indicators of the socio-economic status of students in the structure of the national quality assessment system. In the presentation of data from the national and regional monitoring of the quality of education, there are no sections of analysis by student category, which allow us to conclude that differences in educational outcomes are related to the characteristics of these groups.

Currently, Russia is experiencing a change in the vector of education policy from global world standards towards a sovereign educational system and a nationally oriented policy. At the same time, the process of constructing original national performance standards, success rates and evaluation criteria has not yet been completed. 'The entry of the Russian Federation into the top ten countries of the world in terms of the quality of general education' is retained as a target for the 'Education' national project.

The 'School of the Ministry of Education of the Russian Federation' concept, approved in 2022, is considered as a mechanism for implementing the basic principle of the Russian education system. Formulated

by the President of the Russian Federation Vladimir Putin, the principle states: 'Access to quality education for every child in accordance with their interests and abilities, and regardless of where they live — in a city or village, in Moscow or any other region of the country, regardless of where they study-in a public school or a private one, and, of course, regardless of the social status and income of their parents' [6].

Differences in the quality of education in the Concept are associated with heterogeneous approaches to the organisation of the educational environment, the different levels of professional competence of teachers, a variety of software, educational and methodological support, and a shortage of individual groups of teaching staff. In addition, the key solution is seen as 'the formation of a single educational space, which schools in accordance with the unified requirements for the content of training, educational work, career guidance and development of children with different needs and interests, towards the environmental conditions of child development and teacher's work' [6]. Promotion of unified textbooks and the federal educational program are also justified as measures to ensure equal opportunities for students. This approach, in our view, focuses on equalising access to resources rather than on equality to achieve high-quality educational outcomes. Achieving the uniformity of conditions, in our opinion, should be combined with attention to the diversity of students in the classrooms, which requires a differentiation of conditions and the use of various methods and content.

Conclusion

Ensuring equal opportunities for quality education and reducing the proportion of children who have difficulties in mastering educational programs are recognised worldwide as the leading goals of general education policy.

We conducted an analysis of education policies of post-Soviet Russia in relation to the problem of learning difficulties, educational failure and equity in education.

Our analysis focused on federal policy allowed us to draw conclusions about the common norms and trends of the country. Nonetheless, such a focus also has a limitation, since the main powers in the field of basic general and additional education are transferred to the regional and municipal levels, where you can find features that go beyond the national vectors. We also focused on goal setting and policy institutionalisation but did not consider the practice of applying legislation, implementing plans and specific measures, and implementing specific solutions and did not provide data on their impact and effectiveness. We consider these subjects as prospects for continuing our research.

The analysis showed that the task of ensuring access to quality education in post-Soviet education policy, regardless of social status and place of residence, has been set since the beginning of the 21st century and occupies a significant place at all subsequent stages. The most consistent and large-scale policy was implemented in relation to children with disabilities and children from rural areas. Since 2013, the policy has focused on students from families with a low socio-economic status and the schools where they are concentrated, but the institutionalisation of this area has not been completed. The initially higher level of attention towards indigenous students has decreased. The educational opportunities of children from migrant families have not become the target group for support.

The institutionalisation process of the mechanisms for ensuring equal opportunities to obtain quality education was launched, but it did not cover all significant sectors with the necessary depth (curriculum, financing, staff policy, the quality assessment system and the psychological, medical and social support systems).

Throughout this period of time, the policy was dominated by a 'weak interpretation' of the concept of the equality of educational opportunities and equity in education, that is, the possibility of access to resources, by taking into account the characteristics of student groups [33]. Despite the fact that the issue of gaps in the level of educational achievements of different student groups is addressed in one way or another, the tasks and measures for preventing its occurrence and reducing it are practically not formulated. Measures to overcome learning difficulties are primarily associated with psychological, pedagogical and medical and social assistance to children, and in recent years, with methodological support from teachers. Social risk factors for learning difficulties and educational failure remain unaddressed. The problem of learning difficulties continues to be considered as localised at the school level, where teachers and parents shift responsibility towards each other. This perspective does not recognise its impact on the system as a whole and the socio-cultural contexts of its functioning. Thus, a balance of responsibility should be built between authorities and management at all levels.

In our opinion, promoting a 'strong interpretation' of equal educational opportunities (i.e. achieving high results for all) makes the concept of fair education a promising task and meets the national interests of the country, including its traditions, both cultural and pedagogical.

References

- 1. Analiz rezil'entnosti rossiiskikh shkol [Elektronnyi resurs] [Analysis of the resilience of Russian schools]. Federal'nyi institut otsenki kachestva obrazovaniya [Federal State Budgetary Institution "Federal Institute for Evaluation of Education Quality"], 2020. Available at: https://fioco.ru/Media/Default/Documents/%D0%A8%D0%9D%D0%9E%D0%A0/%D0%90%D0%BD%D0%B0%D0%B8%D0%B8%D0%B8%D0%B7%20%D1%80%D0%B5%D0%B7%D0%B8%D0%B8%D0%B8%D1%8C%D0%B5%D0%B7%D0%B8%D0%BB%D1%82%D0%BB%D1%82%D0%BB%D1%82%D0%BB%D1%81%D1%81%D1%81%D0%B8%D0%B8%D0%B9%D1%81%D0%B8%D0%B8%D0%B8%D1%81%D0%B8%D1%85%20%D1%88%D0%BA%D0%BB%D1%85%20%D1%88%D0%BA%D0%BB%D1%85%20%D1%88%D0%BA%D0%BB%D1%85%20%D1%88%D0%BA%D0%BB%D1%85%20%D1%88%D0%BA%D0%BB%D1%85%20%D1%88%D0%BA%D0%BB%D0%BB_.pdf (Accessed 23.07.2023).
- 2. Dvenadtsat' reshenii dlya novogo obrazovaniya. Doklad tsentra strategicheskikh razrabotok i Vysshei shkoly ekonomiki [Elektronnyi resurs] [Twelve solutions for a new education. Report of the Center for Strategic Research and the Higher School of Economics]. Moscow: Natsional'nyi issledovatel'skii universitet "Vysshaya shkola ekonomiki", 2018. Available at: https://www.hse.ru/data/2018/04/06/1164671180/Doklad_obrazovanie_Web.pdf (Accessed 10.06.2023). 3. Doklad Razvitie sfery obrazovaniya i sotsializatiki.
- 3. Doklad Razvitie sfery obrazovaniya i sotsializatsii v Rossiiskoi Federatsii v srednesrochnoi perspektive. Doklad ekspertnoi gruppy [Elektronnyi resurs] [Development of education and socialization in the Russian Federation in the medium term. Report of the expert group]. *Voprosy obrazovaniya = Educational Studies*, 2013, no. 1, pp. 6—58. Available at: https://vo.hse.ru/article/view/15513/ (Accessed 10.06.2023).

- 4. Isaev E.I., Kosaretskii S.G., Mikhailova A.M. Zarubezhnyi opyt profilaktiki i preodoleniya shkol'noi neuspevaemosti u detei, vospityvayushchikhsya v sem'yakh s nizkim sotsial'no-ekonomicheskim statusom [Western European experience of prevention and overcoming school failure among children living in families with low socio-economic status]. Sovremennaya zarubezhnaya psikhologiya = Journal of Modern Foreign Psychology, 2019. Vol. 8, no. 1, pp. 7—16. DOI:10.17759/jmfp.2019080101
- 5. Kak sdelat' obrazovanie dvigatelem sotsial'noekonomicheskogo razvitiya? [How to make education an engine of socio-economic development?]. Kuz'minov Ya.I., Frumin I.D., Sorokin P.S. (eds.). Moscow: Izd. dom Vysshei shkoly ekonomiki, 2019. 284, 4 p.
- Kontseptsiya proekta «Shkola Minprosveshcheniya Rossii» ot 8.04.2022 N PK-1vn [Elektronnyi resurs] [The concept of the project "School of the Ministry of Education of Russia" dated 04/08/22 N PK-1vn]. Available at: https://smp.edu.ru/concept/ (Accessed 23.07.2023).
- 7. Kontseptsii razvitiya dopolnitel'nogo obrazovaniya detei do 2030 goda / Rasporyazhenie Pravitel'stva RF ot 31.03.2022 N 678-r [Concepts for the development of additional education for children until 2030/ Decree of the Government of the Russian Federation N 678-r dated 03/31/2022].
- 8. Kontseptsiya razvitiya psikhologicheskoi sluzhby v sisteme obrazovaniya v Rossiiskoi Federatsii na period do 2025 goda (utv. Minobrnauki Rossii ot 19.12.2017) [The concept of the development of psychological services in the education system in the Russian

Federation for the period up to 2025 (approved by the Ministry of Education and Science of the Russian Federation dated 12/19/2017)].

- 9. Kosaretskii S.G., Grunicheva I.G., Goshin M.E. Obrazovateľnaya politika Rossii kontsa 1980-kh nachala 2000-kh godov: deklaratsii i prakticheskoe vliyanie na neravenstvo v obshchem obrazovanii [Russian Educational Policy of the Late 1980s-Early 2000s: Declarations and the Actual Impact on Inequality in General Education]. *Mir Rossii = The world of Russia*, 2016, pp. 115—134.
- 10. Metodika vyyavleniya obshcheobrazovatel'nykh organizatsii, imeyushchikh nizkie obrazovatel'nye rezul'taty. Prikaz Federal'noi sluzhby po nadzoru v sfere obrazovaniya i nauki ot 19.08.2020 N 847 [Methods of identifying general education organizations with low educational results. Order of the Federal Service for Supervision of Education and Science dated 08/19/2020 N 847].
- 11. Natsional'naya obrazovatel'naya initsiativa «Nasha novaya shkola» ot 04.02.2010 N Pr-271 [Elektronnyi resurs] [National educational initiative "Our new School" dated 02/04/2010 N Pr-271]. Available at: https://docs.cntd.ru/document/902210953
- 12. Omeľ chenko E.A. Problema adaptatsii detei inoetnichnykh migrantov: negativnyi diskurs v internete [Ethnic Migrants' Children Adaptation: The Negative Internet Discourse]. *Vestnik antropologii = The Herald of Anthropology*, 2021, no. 4, pp. 269—282. DOI:10.33876/2311-0546/2021-4/269-282
- 13. Osnovnye polozheniya kontseptsii ocherednogo etapa reformirovaniya sistemy obrazovaniya Rossiiskoi Federatsii [The main provisions of the concept of the next stage of reforming the education system of the Russian Federation]. Moscow, 1997. P. 168.
- 14. Osnovnye rezul'taty rossiiskikh uchashchikhsya v mezhdunarodnom issledovanii chitatel'skoi, matematicheskoi i estestvennonauchnoi gramotnosti PISA-2018 i ikh interpretatsiya [Russia results in math, reading, and science in PISA 2018 and what they say about education in the country]. Adamovich K.A., Kapuza A.V., Zakharov A.B., Frumin I.D. Natsional'nyi issledovatel'skii universitet Vysshaya shkola ekonomiki, Institut obrazovaniya. Moscow: NIU VShE, 2019. P. 28.
- 15. Pis'mo Minprosveshcheniya Rossii «O napravlenii metodicheskikh rekomendatsii» ot 05.07.2022 g. N TV-1290/03 [Letter of the Ministry of Education of Russia "On the direction of methodological recommendations" dated 07/05/2022 N TV-1290/03].
- 16. Postanovlenie Pravitel'stva Rossiiskoi Federatsii ot 31.12.2011 № 436 «O poryadke predostavleniya v 2011-2013 godakh subsidii iz federal'nogo byudzheta byudzhetam sub"ektov Rossiiskoi Federatsii na modernizatsiyu regional'nykh sistem obshchego obrazovaniya» [Elektronnyi resurs] [Decree of the Government of the Russian Federation "About the

- procedure for granting subsidies from the federal budget to the budgets of the constituent entities of the Russian Federation for the modernization of regional general education systems in 2011-2013" dated 31/12/2011 N 436]. Available at: https://docs.cntd.ru/document/902281966/ (Accessed 21.06.2023).
- 17. Postanovlenie Pravitel'stva Rossiiskoi Federatsii ot 23.12.2005 N 803 «O Federal'noi tselevoi programme razvitiya obrazovaniya na 2006—2010 gody» [Elektronnyi resurs] [Decree of the Government of the Russian Federation "On the Federal Target Program for the Development of Education for 2006-2010" dated 12/23/12.2005 N 803]. Available at: https://base.garant.ru/189041/ (Accessed 21.07.2023).
- 18. Postanovlenie Pravitel'stva Rossiiskoi Federatsii ot 07.02.2011 N 61 «O Federal'noi tselevoi programme razvitiya obrazovaniya na 2011—2015 gody» [Elektronnyi resurs] [Decree of the Government of the Russian Federation "On the Federal Target Program for the Development of Education for 2011-2015" dated 02/07/2011 N 61]. Available at: https://base.garant.ru/55170694/ (Accessed 21.07.2023).
- 19. Postanovlenie Pravitel'stva Rossiiskoi Federatsii ot 23.05.2015 N 497 «O Federal'noi tselevoi programme razvitiya obrazovaniya na 2016—2020 gody» [Decree of the Government of the Russian Federation "On the Federal Target Program for the Development of Education for 2016-2020" dated 05/23/2015 N 497].
- 20. Postanovlenie Pravitel'stva Rossiiskoi Federatsii ot 15.04.2014 N 295 «Ob utverzhdenii gosudarstvennoi programmy Rossiiskoi Federatsii "Razvitie obrazovaniya" na 2013—2020 gody» (s izmeneniyami i dopolneniyami) [Decree of the Government of the Russian Federation "On approval of the State program of the Russian Federation "Development of Education" for 2013-2020" (with amendments and additions) dated 04/15/2014 N 295].
- 21. Prikaz Ministerstva obrazovaniya Rossiiskoi Federatsii ot 11.02.2002 N 393 «O Kontseptsii modernizatsii rossiiskogo obrazovaniya na period do 2010 goda» [Elektronnyi resurs] [Order of the Ministry of Education of the Russian Federation "On the Concept of modernization of Russian education for the period up to 2010" dated 02/11/2002 N 393. Available at: https://normativ.kontur.ru/document?moduleld=1& documentId=14553 (Accessed 21.07.2023).
- 22. Prikaz Mintruda Rossii ot 18.10.2013 N 544n (red. ot 05.08.2016) «Ob utverzhdenii professional'nogo standarta "Pedagog (pedagogicheskaya deyatel'nost' v sfere doshkol'nogo, nachal'nogo obshchego, osnovnogo obshchego, srednego obshchego obrazovaniya) (vospitatel', uchitel')"» [Order of the Ministry of Labor of the Russian Federation "On approval of the professional standard "Teacher

- (pedagogical activity in the field of preschool, primary general, basic general, secondary general education) (educator, teacher)"" dated 10/18/2013 N 544n (ed. dated 08/05/2016)].
- 23. Putin V.V. Stroitel'stvo spravedlivosti. Sotsial'naya politika dlya Rossii [Social policy for Russia] [Elektronnyi resurs]. Rossiiskaya gazeta. Available at: https://rg.ru/2012/02/13/putin-statya.html (Accessed 21.07.2023).
- 24. Rasporvazhenie Ministerstva prosveshcheniva Rossiiskoi Federatsii ot 09.09.2019 № R-93 «Ob utverzhdenii primernogo Polozheniya o psikhologopedagogicheskom konsiliume obrazovateľ noi organizatsii» [Order of the Ministry of Education of the Russian Federation "On approval of the approximate Regulations on the psychological and pedagogical council of an educational organization" dated 09/09/2019 N R-93]. Pis'mo Ministerstva prosveshcheniya Rossiiskoi Federatsii ot 05.03.2021 N DG-492/07 «O deyatel'nosti tsentrov psikhologopedagogicheskoi, meditsinskoi i sotsial'noi pomoshchi» [Letter of the Ministry of Education of the Russian Federation "On the activities of the centers of psychological, pedagogical, medical and social assistance" dated 03/05/2021 N DG-492/07].
- 25. Rasporyazhenie Minprosveshcheniya Rossii ot 01.09.2021 № R-210 «Ob utverzhdenii Metodologii motiviruyushchego monitoringa deyatel'nosti organov ispolnitel'noi vlasti sub"ektov Rossiiskoi Federatsii, osushchestvlyayushchikh gosudarstvennoe upravlenie v sfere obrazovaniya» [Order of the Ministry of Education of the Russian Federation "On approval of the Methodology of motivating monitoring of the activities of executive authorities of the Subjects of the Russian Federation exercising public administration in the field of education" dated 09/01/2021 N R-210].
- 26. Rasporyazhenie Minprosveshcheniya Rossii ot 28.12.2020 N R-193 «Ob utverzhdenii metodicheskikh rekomendatsii po sisteme funktsionirovaniya psikhologicheskikh sluzhb v obshcheobrazovatel'nykh organizatsiyakh» [Order of the Ministry of Education of the Russian Federation "On approval of methodological recommendations on the system of functioning of psychological services in educational organizations" dated 12/28/2020 N R-193].
- 27. Rasporyazhenie Pravitel'stva Rossilskoi Federatsii ot 30.12.2012 N 2620-r «Izmeneniya v otraslyakh sotsial'noi sfery, napravlennye na povyshenie effektivnosti obrazovaniya i nauki» [Decree of the Government of the Russian Federation "Changes in social sectors aimed at improving the effectiveness of education and science" dated 12/30/2012 N 2620-R].
- 28. Rasporyazhenie Praviteľstva Rossiiskoi Federatsii ot 17.11.2008 N 1662-r (red. ot 28.09.2018) «O Kontseptsii dolgosrochnogo sotsiaľno-

- ekonomicheskogo razvitiya Rossiiskoi Federatsii na period do 2020 goda» (vmeste s "Kontseptsiei dolgosrochnogo sotsial'no-ekonomicheskogo razvitiya Rossiiskoi Federatsii na period do 2020 goda") [Decree of the Government of the Russian Federation «On the Concept of long-term socio-economic Development of the Russian Federation for the period up to 2020» (together with the "Concept of long-term socio-economic development of the Russian Federation for the period up to 2020") dated 11/17/2008 N 1662-r (ed. dated 09/28/2018)].
- 29. Rasporyazhenie Praviteľstva Rossilskoi Federatsii ot 30.04.2014 N 722-r «Ob utverzhdenii plana meropriyatii ("dorozhnoi karty") «Izmeneniya v otraslyakh sotsiaľnoi sfery, napravlennye na povyshenie effektivnosti obrazovaniya i nauki» [Elektronnyi resurs] [Decree of the Government of the Russian Federation «On approval of the action plan ("roadmap") "Changes in social sectors aimed at improving the effectiveness of education and science" dated 04/30/2014 N 722-r]. Available at: http://government.ru/docs/all/91350/ (Accessed 21.07.2023).
- 30. Rossiiskaya shkola: nachalo XXI veka [Russian school: the beginning of the XXI century]. Kosaretskii S.G., Barannikov K.A., Belikov A.A. [et al.]. Kosaretskii S.G., Frumin I.D. (eds.). Moscow: Izd. dom Vysshei shkoly ekonomiki, 2019. 432 p.
- 31. Ukaz Prezidenta Rossiiskoi Federatsii ot 07.05.2012 N 599 «O merakh po realizatsii gosudarstvennoi politiki v oblasti obrazovaniya i nauki» [Elektronnyi resurs] [Decree of the President of the Russian Federation "On measures to implement state policy in the field of education and science" dated 05/07/2012 N 599]. Available at: http://static.kremlin.ru/media/acts/files/0001201205070020.pdf (Accessed 21.07.2023).
- 32. Federal'nyi gosudarstvennyi obrazovateľnyi standart nachal'nogo obshchego obrazovaniya obuchayushchikhsya s ogranichennymi vozmozhnostyami zdorov'ya / Utverzhden prikazom Ministerstva obrazovaniya i nauki Rossiiskoi Federatsii ot 19.12.2014 N 1598 [Federal State educational standard of primary general education of students with disabilities / Approved by the order of the Ministry of Education and Science of the Russian Federation dated 12/19/2014 N 1598].
- 33. Frumin I.D. Osnovnye podkhody k probleme ravenstva obrazovateľnykh vozmozhnostei [The Principal Approaches to the Problem of Education Equality]. *Voprosy obrazovaniya = Educational Studies Moscow*, 2010, no. 2, p. 5—22. (In Russ.).
- 34. Cherednichenko G.A. Shkol'naya reforma 90-kh godov: novovvedeniya i sotsial'naya selektsiya [School reform of the 90s: innovations and social selection]. Sotsiologicheskii zhurnal = The Sociological journal, 1999, no. 1—2, pp. 5—21. (In Russ.).

- 35. Brussino O. Mapping policy approaches and practices for the inclusion of students with special education needs. OECD Education Working Papers. Paris OECD Publishing, 2020, no. 227. DOI:10.1787/600fbad5-en
- 36. Eklof B., Holmes L., Kaplan V., eds. Educational Reform in Post-Soviet Russia: Legacies and Prospects. London/New York: Frank Cass, 2005. 350 p.
- 37. Field S., Kuczera M., Pont B. No More Failures: Ten Steps to Equity in Education. Education and Training Policy. Paris OECD Publishing, 2007. DOI:10.1787/9789264032606-en
- 38. Equity and Quality in Education: Supporting Disadvantaged Students and Schools. Paris: OECD Publishing, 2012. DOI:10.1787/9789264130852-eT

Литература

- 1. Анализ резильентности российских школ. Федеральный институт оценки качества образования, 2020 [Электронный ресурс]. URL: https://fioco.ru/Media/Default/Documents/%D0% A8%D0%9D%D0%9E%D0%A0/%D0%90%D0 %BD%D0%B0%D0%BB%D0%B8%D0%B7%20 %D1%80%D0%B5%D0%B7%D0%B8%D0%BB %D1%8C%D0%B5%D0%BD%D1%82%D0%BD %D0%BE%D1%81%D1%82%D0%B8%20%D1 %80%D0%BE%D1%81%D1%81%D0%B8%D0 %B9%D1%81%D0%BA%D0%B8%D1%85%20 %D1%88%D0%BA%D0%BE%D0%BB .pdf обращения: 23.07.2023).
- 2. Двенадцать решений для нового образования. Доклад центра стратегических разработок и Высшей школы экономики [Электронный ресурс]. М.: Национальный исследовательский университет «Высшая школа экономики», 2018. URL: https:// www.hse.ru/data/2018/04/06/1164671180/Doklad obrazovanie_Web.pdf (дата обращения: 10.06.2023). «Развитие сферы Доклад образования и социализации в Российской Федерации в среднесрочной перспективе». Доклад экспертной Вопросы [Электронный pecypc] // образования. 2013. № 1. С. 6—58. URL: https:// vo.hse.ru/article/view/15513/ (дата обращения: 10.06.2023).
- 4. Исаев Е.И., Косарецкий С.Г., Михайлова А.М. Зарубежный опыт профилактики и преодоления школьной неуспеваемости у детей, воспитывающихся в семьях с низким социально-экономическим статусом // Современная зарубежная психология. 2019. Том 8. № 1. С. 7—16. DOI:10.17759/jmfp.2019080101
- 5. Как сделать образование двигателем социально-экономического развития? / Под ред. Кузьминова Я.И., Фрумина И.Д., Сорокина П.С. М.: Изд. дом Высшей школы экономики, 2019. 284, [4] с.

- 39. Equity and Inclusion in Education: Finding Strength through Diversity. Paris: OECD Publishing, 2023. 372 p. DOI:10.1787/e9072e21-en
- 40. Minina E. Post-socialist Neoliberal? Education Reform in Russia as a Socially Interpreted Process. In A. Mustajoki, K. Lehtinsaari (Eds.). In Russian Modernisation: Philosophical and Cultural Interpretations, 2016, pp. 102—117.
- 41. The Routledge International Handbook of Critical Education. In Apple M.W., Au W., Gandin L.A. (Eds.). New York, 2009. 512 p.
- 42. UNESCO How committed? Unlocking financing for equity in education, UNESCO. 2021. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000375326.locale=en (Accessed 10.05.2023).
- 6. Концепция проекта «Школа Минпросвещения России» от 8.04.2022 № ПК-1вн [Электронный ресурс]. URL: https://smp.edu.ru/concept/ (дата обращения: 23.07.2023).
- 7. Концепции развития дополнительного образования детей до 2030 года / Распоряжение Правительства Российской Федерации от 31.03.2022 № 678-р.
- 8. Концепция развития психологической службы в системе образования в Российской Федерации на период до 2025 года (утв. Минобрнауки России от 19.12.2017).
- 9. Косарецкий С.Г., Груничева И.Г., Гошин М.Е. Образовательная политика России конца 1980-х—начала 2000-х годов: декларации и практическое влияние на неравенство в общем образовании // Мир России. 2016. С. 115—134.
- 10. Методика выявления общеобразовательных организаций, имеющих низкие образовательные результаты. Приказ Федеральной службы по надзору в сфере образования и науки от 19.08.2020 № 847.
- 11. Национальная образовательная инициатива «Наша новая школа» от 04.02.2010 № Пр-271 [Электронный ресурс]. URL: https://docs.cntd.ru/document/902210953
- 12. *Омельченко Е.А.* Проблема адаптации детей иноэтничных мигрантов: негативный дискурс в интернете // Вестник антропологии. 2021. № 4. С. 269—282. DOI:10.33876/2311-0546/2021-4/269-282
- 13. Основные положения концепции очередного этапа реформирования системы образования Российской Федерации. М., 1997. 168 с.
- 14. Основные результаты российских учащихся в международном исследовании читательской, математической и естественнонаучной грамотности PISA 2018 и их интерпретация / Адамович К.А., Капуза А.В., Захаров А.Б., Фрумин И.Д. Национальный исследовательский

- университет «Высшая школа экономики», Институт образования. М.: НИУ ВШЭ, 2019. 28 с.
- 15. Письмо Минпросвещения России «О направлении методических рекомендаций» от 05.07. 2022 № ТВ-1290/03.
- 16. Постановление Правительства Российской Федерации от 31.05.2011 № 436 «О порядке предоставления в 2011-2013 годах субсидий из федерального бюджета бюджетам субъектов Российской Федерации модернизацию на региональных систем общего образования» [Электронный ресурс]. URL: https://docs.cntd.ru/ document/902281966 (дата обращения: 21.06.2023). 17. Постановление Правительства Российской Федерации от 23.12.2005 № 803 «О Федеральной целевой программе развития образования на 2006—2010 годы» [Электронный ресурс]. URL: https://base.garant.ru/189041/ (дата обращения: 21.07.2023).
- 18. Постановление Правительства Российской Федерации от 07.02.2011 № 61 «О Федеральной целевой программе развития образования на 2011—2015 годы» [Электронный ресурс]. URL: https://base.garant.ru/55170694/ (дата обращения: 21.07.2023).
- 19. Постановление Правительства Российской Федерации от 23.05.2015 № 497 «О Федеральной целевой программе развития образования на 2016—2020 годы».
- 20. Постановление Правительства Российской Федерации от 15.04.2014 № 295 «Об утверждении государственной программы Российской Федерации «Развитие образования» на 2013—2020 годы» (с изменениями и дополнениями).
- 21. Приказ Министерства образования Российской Федерации от 11.02.2002 № 393 «О Концепции модернизации российского образования на период до 2010 года» [Электронный ресурс]. URL: https://normativ.kontur.ru/document?moduleId=1&document Id=14553 (дата обращения: 21.07.2023).
- 22. Приказ Минтруда России от 18.10.2013 № 544н (ред. от 05.08.2016) «Об утверждении профессионального стандарта «Педагог (педагогическая деятельность сфере дошкольного, начального общего. основного общего, среднего общего образования) (воспитатель, учитель)».
- 23. Путин В.В. Строительство справедливости. Социальная политика для России. [Электронный ресурс] // Российская газета. URL: https://rg.ru/2012/02/13/putin-statya.html (дата обращения: 21.07.2023).
- 24. Распоряжение Министерства просвещения Российской Федерации от 09.09.2019 № Р-93 «Об утверждении примерного Положения о психолого-педагогическом консилиуме образовательной организации». Письмо Министерства просвещения

- Российской Федерации от 05.03.2021 № ДГ-492/07 «О деятельности центров психолого-педагогической, медицинской и социальной помощи».
- 25. Распоряжение Минпросвещения России от 01.09.2021 № Р-210 «Об утверждении Методологии мотивирующего мониторинга деятельности органов исполнительной власти субъектов Российской Федерации, осуществляющих государственное управление в сфере образования».
- 26. Распоряжение Минпросвещения России от 28.12.2020 № Р-193 «Об утверждении методических рекомендаций по системе функционирования психологических служб в общеобразовательных организациях».
- 27. Распоряжение Правительства Российской Федерации от 30.12.2012 № 2620-р «Изменения в отраслях социальной сферы, направленные на повышение эффективности образования и науки». 28. Распоряжение Правительства Российской Федерации от 17.11.2008 № 1662-р (ред. от 28.09.2018) «Ο Концепции долгосрочного социально-экономического развития Российской Федерации на период до 2020 года» (вместе «Концепцией долгосрочного социальноэкономического развития Российской Федерации на период до 2020 года»).
- 29. Распоряжение Правительства Российской Федерации от 30.04.2014 № 722-р «Об утверждении плана мероприятий («дорожной карты») «Изменения в отраслях социальной сферы, направленные на повышение эффективности образования и науки» [Электронный ресурс]. URL: http://government.ru/docs/all/91350/ (дата обращения: 21.07.2023).
- 30. Российская школа: начало XXI века / Косарецкий С.Г., Баранников К.А., Беликов А.А. [и др.] / под ред. Косарецкого С.Г., Фрумина И.Д. М.: Изд. дом Высшей школы экономики, 2019. 432 с.
- 31. Указ Президента Российской Федерации от 07.05.2012 № 599 «О мерах по реализации государственной политики в области образования и науки» [Электронный ресурс]. URL: http://static.kremlin.ru/media/acts/files/0001201205070020.pdf (дата обращения: 21.07.2023).
- 32. Федеральный стандарт начального общего образования обучающихся с ограниченными возможностями здоровья / Утвержден приказом Министерства образования и науки Российской Федерации от 19.12.2014 № 1598.
- 33. *Фрумин И.Д.* Основные подходы к проблеме равенства образовательных возможностей. Вопросы образования / Educational Studies Moscow. 2010. № 2. С. 5—22.
- 34. *Чередниченко Г.А.* Школьная реформа 90-х годов: нововведения и социальная селекция // Социологический журнал. 1999. № 1—2. С. 5—21.

- 35. Brussino O. Mapping policy approaches and practices for the inclusion of students with special education needs // OECD Education Working Papers. Paris OECD Publishing, 2020. № 227. DOI:10.1787/600fbad5-en
- 36. *Eklof B., Holmes L., Kaplan V., eds.* Educational Reform in Post-Soviet Russia: Legacies and Prospects. London/New York: Frank Cass, 2005. 350 p.
- 37. Field S., Kuczera M., Pont B. No More Failures: Ten Steps to Equity in Education. Education and Training Policy. Paris OECD Publishing, 2007. DOI:10.1787/9789264032606-en
- 38. Equity and Quality in Education: Supporting Disadvantaged Students and Schools. Paris: OECD Publishing, 2012. DOI:10.1787/9789264130852-eT

- 39. Equity and Inclusion in Education: Finding Strength through Diversity. Paris: OECD Publishing, 2023. P. 372. DOI:10.1787/e9072e21-en
- 40. *Minina E.* Post-socialist Neoliberal? Education Reform in Russia as a Socially Interpreted Process. In A. Mustajoki, K. Lehtinsaari (Eds.). In Russian Modernisation: Philosophical and Cultural Interpretations. 2016. P. 102—117.
- 41. The Routledge International Handbook of Critical Education. In Apple M.W., Au W., Gandin L.A. (Eds.). New York, 2009. 512 p.
- 42. UNESCO How committed? Unlocking financing for equity in education, UNESCO. 2021. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000375326.locale=en (Accessed 10.05.2023).

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Academic Failure in Azerbaijan: Who is to Blame and What is to be Done?

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This study provides an overview of education reforms in Azerbaijan since gaining independence, as well as a review of the dynamics of school success in the country based on data from final exams in lower secondary schools. The results of these exams show that despite the implemented reforms, students' academic success is not improving. The authors present factors that leading national education experts participating in research believe play a decisive role in students' success in school. These factors include the quality of teachers, their education, and professional development; standardized testing of students upon graduation from school: as well as school evaluations. The authors present a comparative analysis conducted on the identified "influence" factors in relation to data from international studies, as well as changes in national education policies and practices in terms of their effectiveness in ensuring successful school learning. The diagnosis of the national education system, using the RISE Systems Framework instrument (Research on Improving Education Systems), revealed that the alignment of all system elements in the reform process around academic success raises questions. The research findings may be useful for education policymakers, both in analyzing past reforms and in developing subsequent coherent changes in education policies aimed at enhancing students' success.

Keywords: curriculum reform; school academic success; private tutoring; teacher education; teacher professional development; RISE Systems Framework.

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Школьная неуспешность в Азербайджане: кто виноват и что делать?

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В работе дается обзор реформ в области образования в Азербайджане с момента обретения независимости, а также обзор динамики школьной успешности в стране на основе данных выпускных экзаменов в неполной средней общеобразовательной школе. Результаты выпускных экзаменов показывают, что, несмотря на проводимые реформы, успешность учеников не улучшается. По мнению участников исследования, ведущих национальных экспертов в области образования, в качестве факторов, являющихся решающими для успешности обучения в школе, были определены качество учителя, его образования и профессионального развития; стандартизированное тестирование учеников на выходе из школы; а также оценка школ. Авторы представляют сравнительный анализ выявленных факторов «влияния» относительно данных международных исследований, а также изменений в политике и практике национального образования с точки зрения их эффективности для обеспечения успешного школьного обучения. Диагностика системы национального образования с использованием инструмента RISE Systems Framework (Research on Improving Education Systems) выявила, что в процессе реформ степень согласованности элементов системы в отношении успешности обучения вызывает вопросы. Проведенное исследование может быть полезным управленцам в области образования как при анализе уже проведенных реформ, так и при разработке последующих согласованных изменений в политике образования с целью повышения успешности школьников.

Ключевые слова: курикулумная реформа; успешность обучения в средней школе; частное репетиторство; подготовка педагогов; профессиональное развитие педагогов; RISE Systems Framework.

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Introduction

National and international research on assessing the success of school education are important tools for analyzing and improving educational policies and practices. According to data from the State Examination Center (SEC) [9; 12], there is no decrease in the number of students demonstrating low results in graduation exams in the 9th grade of secondary schools (STEs).

The fact of the low success among $9^{\text{th}}\text{-grade}$ graduates is of particular re-

search interest, considering that the country has been undergoing educational reforms for more than two decades. For example, within the framework of the first State Education Reform Program [8], a curriculum reform was implemented from 2003 to 2013 [23]. In 2013, the State Program for the Development of Education was approved [31]. The need to improve the academic achievement of all students is emphasized in both strategic documents.

However, at the national level, there has been no research conducted to investigate the reasons for the low success of Azerbaijani schoolchildren. This study is pioneering both in terms of its research question and the novelty of the obtained results.

Problem Statement

In the graduation exam, the knowledge and skills of 9th-grade students are assessed in the subjects of the language of instruction (Azerbaijani or Russian), mathematics, and a foreign language. In

this study, students with low academic performance are considered those who received a "2" or "3" on a 5-point scale in their school graduation exams. The grades 2 and 3 on the 5-point scale constitute 40% and 60% of the overall assessment, respectively.

As evident from the reports of the State Examination Center (SEC) on the results of 9th-grade graduation exams [30], the percentage of students with low academic performance did not decrease below certain levels during the observation period. Specifically, in Azerbaijani language, it remained above 66.74% (2018), in Russian language above 46.2% (2014), and in Mathematics above 63.32% (2016). What exactly, and which factors are causing both a significant proportion of students with low academic performance and the overall decline in the success of graduates from an incomplete secondary education?

It is important to note that in 2006, when Azerbaijan first participated in the international PISA study, the country's

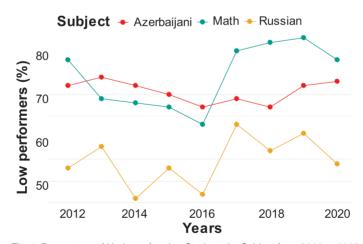


Fig. 1. Percentage of Underperforming Students by Subject from 2012 to 2020

results showed that Azerbaijani students performed relatively well in Mathematics compared to other countries with similar levels of economic development and even outperformed highly developed countries like the United States [20]. What changes in the country's education system since then have contributed to the decline in student success?

Research Method

To identify factors that can be considered priorities in influencing student success, the study employed an expert assessment method [13].

Individual in-depth interviews were conducted with leading national experts in the field of education. The experts participating in the study have extensive experience in the school education system (at least 20 years), have been involved in the development of the curriculum reform program or its implementation, and have held various leadership positions within the education system. The study involved 6 experts, including 2 men and 4 women, with their ages ranging from 55 to 75 years.

Expert Views on the Causes of Low Student Success

As factors exerting the greatest influence on the low academic performance of school graduates, experts unanimously identified the following:

Topic 1: Teacher Quality

Experts identified the low professionalism of teachers as the main problem in the educational process. According to their observations, teachers predominantly implement a reproductive teaching process based on memory development and rote learning, rather than a student-centered approach.

"Our teacher still perceives themselves as the authority in the classroom, and it is the duty of students to follow their instructions and obey," an expert stated.

Domestic teachers are oriented towards the average, standardized student and do not individualize education. When characterizing the professional qualities of contemporary teachers, experts used the following definitions: "Our teacher does not know or understand their student", "Our teacher does not develop critical thinking, empathy, or a democratic spirit in students."

The analysis of experts' assessments suggests that the problem also lies in the values required of teachers in their professional activities. "We have very few teachers who perceive the student as an individual and treat them with respect," "In the classroom, on average, 30% succeed, and the teacher does not think about the 70% who do not succeed." "The teacher is not motivated to teach the student... Everything depends on the teacher's level of professionalism, their level of culture." Teaching practices and the nature of teacher-student relationships are recognized as potentially powerful factors influencing student motivation and performance [33; 28].

Recognizing the importance of the personnel issue, the Ministry of Science and Education (MSE), starting from 2012, initiated several initiatives to strengthen the human resources of schools, such as verifying the authenticity of teachers' diplomas, introducing a pension threshold for teaching activities, prohibiting the employment of non-certified teachers in schools, teacher

certification, and centralized hiring based on testing (MIG).

The experts tend to blame not the teachers themselves but the teacher training system for the current situation:

"It is necessary to start with pedagogical universities... with the preparation of pedagogical personnel. The most important factors determining the current state of affairs are gaps in the initial training of pedagogical personnel and the professional development system. Because a teacher is prepared for what MIG (MSE) demands. And MIG demands what the pedagogical university provided to the teacher", an expert stated.

In this view, the root of the problem lies in the preparation and education of teachers in pedagogical universities, which should align more closely with the requirements and standards set by the MSE. The experts emphasize the importance of improving the teacher education and the teacher professional development system to address the issues in the education system effectively.

Subtopic 1.1: Teacher Education

"Children's achievements largely depend on what teachers know and can do" [6, p. 11]. Such an approach helps identify the characteristics of teachers that influence student learning and, as a result, allows for possible recommendations for teacher education [3].

Experts consider the preparation of a new generation of teachers and the changing of the existing teacher preparation system to be of the highest priority. The main problems in this regard are the limited capacity of the teaching staff working in pedagogical universities. Another problem

is outdated educational programs and the methods of their implementation.

"Our future teachers are taught various theories that students memorize but are not prepared for what they will encounter in practice, in the classroom. Our pedagogical education... does not develop the competencies necessary for teachers", an expert noted.

However, it is necessary to acknowledge that the teacher training system has not been the focus of education reforms in the country, including the curriculum reform.

Subtopic 1.2: Professional Development of Teachers

The importance of continuous and quality education for the professional growth and skill development of educators is recognized by its inclusion as a target indicator in the United Nations Sustainable Development Goals [34].

Experts believe that without reforming the teacher training system, professional development (PD) will not be effective, as teachers must be prepared for new approaches, and they must recognize the importance of PD for themselves. According to experts, the state allocates sufficient funds for PD, but its effectiveness is not high enough:

"For example, since 2003, the curriculum has been introduced. All teachers have undergone training. However, they all learned the theoretical part but cannot implement it in practice", an expert explained.

According to experts, teachers should be provided with diverse opportunities for PD, and it should be designed in a way that teachers can perceive its positive impact on themselves. Moreover, it's important to note that the PD system has undergone significant changes in recent years. For example, starting in 2014, the Ministry of Education began conducting the diagnostic assessments of teachers, mandatory for every teacher every five years, which gradually evolved into teacher certification [19]. Certification is done through a test exam that assesses the knowledge of job functions, pedagogical knowledge, subject knowledge, and teaching method [32]. Teachers who successfully pass certification have had their salaries increased twofold, and their teaching load reduced by 1.5 times [18; 11].

Additionally, since 2010, the MSE initiated centralized electronic teacher recruitment based on competition (MIG) [17]. This process includes document authenticity verification, testing, the selection of vacant positions by participants, and personal interviews. During the testing phase, participants have the opportunity to answer ques-

tions related to their subject of instruction (40 questions) and teaching methodology (20 questions).

Both certification and competitive hiring have stimulated interest in PD among teaching staff. However, according to experts, to raise the professionalism of teachers, it is necessary to do so at the systemic level:

"...today teachers prepare for certification. Training courses are overcrowded, and there are no places. There are both online and face-to-face courses... teachers sign up and pay a certain amount... What are they learning there? Only theories. Are they learning anything practical? No, they learn how to answer questions on tests", an expert pointed out.

PD based on schools is implemented on a limited scale, mainly at the initiative of school principals. This is indirectly confirmed by the results of a survey of teachers in the country as part of an international study [21].

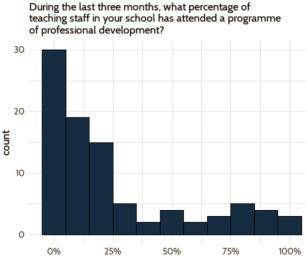


Fig. 2. The Number of Teachers Who Participated in Professional Development Programs in the Last Three Months (Prior to the Survey).

Subtheme 3: Teacher Professional Standards

At the level of education policy, teacher certification and licensing serve as the foundation on which teacher education is built. Certification and licensing should be based on a set of agreed-upon national professional standards.

"We need professional teachers. But there is not a single document that clearly defines what this professionalism means", an expert said.

According to experts, the understanding of a teacher's professionalism still largely revolves around their subject knowledge, as well as their theoretical knowledge of pedagogy and teaching methods. However, the creation of professional teacher standards will help clarify what is expected of them and in which direction they should develop.

Topic 2: Standardized Testing (STE) of Students upon Leaving School

This theme is related to the impact of the final state exams conducted in 9th grade on the teaching and learning process. The general consensus among experts was that STE creates a demand for teaching only the specific subjects that are used to test students' knowledge. This, in turn, has some important consequences.

First and foremost, parents try to enroll their children in private tutoring for these specific subjects. Furthermore, parents even categorize subjects into two groups: important subjects that their children will study for university entrance exams and other subjects as less important.

"On the graduation exam, there are three different subjects. To prepare well for the exam, parents usually enroll their children in private tutoring... In the 9th grade, parents approached me and asked not to require their children to attend classes for less important subjects", an expert said.

Secondly, seeing the demand for private tutoring, teachers start teaching for the test rather than fostering the learning process in schools.

"Once, I asked English teachers why they spend the whole day preparing students for the 75 questions on the STE. They told me clearly that it's because there's a demand for it. Society demands it from us", an expert said.

Moreover, school teachers also start offering private tutoring services themselves:

"In reality, a teacher should prepare for the next class after lessons. They should work with students... Some students grasp things quickly, some are slower... A teacher should work on that... But here, the teacher comes, conducts the lessons, and then, until 8 p.m., does private tutoring", an expert said.

Last but not least, students lose interest in studying other subjects that are not part of the upcoming university entrance exam.

"Imagine that a student who doesn't attend school classes receives private tutoring to prepare for the upcoming test. This student successfully passes the exam. As a result, parents are satisfied. The student is very satisfied because it was easy. The teacher is also happy because they earn money. So, who is to complain?" an expert said.

The negative impact of private tutoring on the educational process in schools has been extensively researched in academic literature. It is believed that private tutoring can hinder the implementation of the curriculum and disrupt the classroom teaching process [26; 27].

Furthermore, the widespread practice of private tutoring deepens educational inequality for children from families with different socio-economic statuses (SES) and diminishes the role of schools as social lifts for some children:

"Not all families can afford private tutors for their children. For example, more than 300 students study in a 9th grade at a school. Only 50 or 60 of them go to private tutors. When those students take the exams, their scores will be satisfactory, even if they were not high-achieving students in previous years. However, those students who do not go to private tutors and were not high-achieving students in previous years typically show low results on the exams", an expert said.

Theme 3: School Evaluation

Schools "bear the direct and immediate responsibility for... improving the quality of teaching and achieving successful results in education and upbringing" [10, Article 5.4.4]. When assessing schools, sustained progress in the improvement of their results over several years is also taken into account. The MoSE compiles an overall ranking of schools based on several criteria, including the average score on the final exams in 9th grade [1].

"School principals work on a contract basis, which is signed for a year... Their work is assessed, and then a decision is made to extend the contract for another year... If the school's results are low... the Ministry terminates the contract with the school director...", an expert said. As a result, many school principals, in order to achieve good results on the final exams in 9th grade, create groups of underachieving students at the beginning of the school year and start preparing them for the STE tests, ignoring the 9th-grade school curriculum. According to experts, this is how many schools improve their results.

Analysis and Discussion

The authors of the article attempted to visualize the expert perspective on the reasons for low student success, which is presented in the figure below.

It would be tempting to point to any of the factors as the direct determinant of low learning outcomes [22] and propose corresponding solutions. For example, if teachers are involved in private tutoring, it is necessary to increase their salaries so that they can focus on their primary job. To attract the best educators from universities, you can stimulate the recruitment of top-performing students by offering them increased scholarships. Or, if certification is conducted effectively, it can help rid schools of unprepared and unprofessional teachers, and so on. All of these solutions have already been tested in practice in Azerbaijan. However, addressing the symptoms of the problem may lead to a false conclusion about the cause of the problem and a solution that has little impact on the quality of education [7].

As a first step toward understanding how the national education system can be transformed into a system capable of providing high-quality education for all, precise and comprehensive diagnosis of

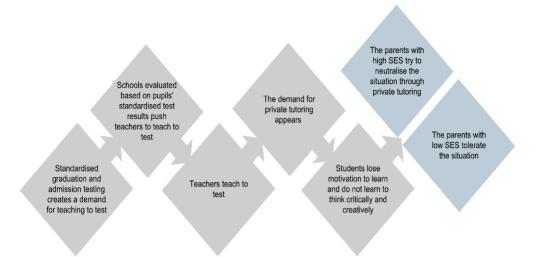


Fig. 3. Expert Perception of the Main Factors Affecting the Low Academic Performance of 9th-grade Graduates

why the system has been producing low performance results for several years is necessary [24]. To achieve this, it is recommended to conduct an analysis of systemic inconsistencies in the interaction between parts of the system, which often lead to education systems failing to achieve learning outcomes [25].

Alignment with Goals Other than Learning

Educational systems provide education when strong relationships are built around the goal of education in all of its elements [4]. For example, in Azerbaijan, the "point of the curriculum was to replace the traditional approach that focused on acquiring academic knowledge and that was primarily oriented toward students with scientific abilities... to promote the development of students' creativity, critical thinking..." [16, p. 126]. However, this reform was not accompanied by an exam reform that would

"measure" the very "soft skills" that the new curriculum was developing; instead, the previously introduced exam system of 1995 continued to measure academic knowledge, performing the task of final student assessment [12].

Another example of systemic inconsistency could be the professional role of teachers. Within the curriculum reform, teachers were supposed to adapt to a new vision of students as active participants in the learning process, having their own interests and needs, characterized by an individual learning style [16]. However, the curriculum reform was not accompanied by a reform of the teacher training system that would prepare the new teacher for their new role.

Another example of inconsistency at the education system level could be teacher professional development. "Curriculum reform also envisaged innovations in teacher professional development... Monitoring

the process of implementing the new curriculum showed that teachers encountered numerous difficulties..." [16, p. 127]. The curriculum reform was accompanied by the continuous reform of the teacher professional development system, which eventually led to its elimination at the systemic level in the form inherited from Soviet times and its replacement with various training programs or courses offered by various providers, mainly on a commercial basis. At the same time, the idea of professional development for more effective student learning was gradually replaced by the idea of obtaining the right to be a teacher (certification) and the idea of employment (placement).

As a result of these systemic inconsistencies, teachers and schools in the country, aware of the importance of graduation exams, focus on academic content and aim at academically successful students, as was revealed in the case of curriculum reform in other countries [2].

Alignment with selectivity regarding students

The system in the country works to select the best-performing students for further education at the next level, thus operating as a "filtering" system [25], that considers exam scores as the main argument for filtering. To ensure better selectivity for their children, parents with high and medium socio-economic status enter the process by paying for the services of private tutors.

It is possible that as a result of these identified intra-system inconsistencies, the country faces difficulties in ensuring successful learning for all students.

Conclusion

The analysis of expert assessments of the factors influencing the low success of 9th-grade graduates in Azerbaijan indicates that the quality of teachers, their pedagogical education, continuous professional development, the use of standardized testing for graduation exams, and the existing school evaluation system are considered priority factors. As a result, the public school system, unable to fulfill its primary task of ensuring teaching quality and achieving successful learning outcomes, loses the trust of parents, students' motivation, and their ability to learn. Concurrently, a "shadow" school is emerging, based on private tutoring, which, unlike the public school, is only accessible to students from families with higher socio-economic status. Consequently, this situation creates and perpetuates inequality among students.

This study, due to its limited number of participants and its qualitative nature, cannot serve as an objective analysis of the overall situation. However, it can serve as a foundation for further, more comprehensive research. In particular, it opens the possibility of continuing the initiated research with the involvement of a larger number of participants representing all the stakeholders in the educational process and considering a wider range of possible influence factors. Additionally, a more comprehensive diagnosis of the education system can provide a better understanding of how to transform it to provide a quality education for all students.

The analysis of the results and recommendations can be used to inform education policymakers.

References/ Литература

Психологическая наука и образование. 2020. Т. 20.

1. Mikayilova U.T. Opit Azerbaydjana [Experience of Azerbaijan]. Book "School assessment in post-Soviet countries". In Bolotov V., Gorbovskiy R.V., Lenskaya E.A. (eds.). Moscow: Higher School of Economics Publishing House, 2020.

Микаилова У.Т. Опыт Азербайджана // В сборнике «Оценка работы школ в постсоветских странах» / Составители и научные редакторы В.А. Болотов, Р.В. Горбовский, Е.А. Ленская. М.: Издательский дом Высшей школы экономики, 2020. 2. Anand G. Entrepreneurship Education and Teacher Training in Rwanda: Findings of the Qualitative Research Study. 2019.

- 3. Cochran-Smith M. et al. Researching Teacher Education in Changing Times: Politics and Paradigms of New Hampshire // Studying Teacher Education. Routledge, 2009. P. 81—122.
- 4. Crouch L. Systems implications for core instructional support lessons from Sobral (Brazil), Puebla (Mexico), and Kenya // RISE Insight Note. 2020.
- 5. *De Ree J*. et al. Double for nothing? Experimental evidence on an unconditional teacher salary increase in Indonesia // The Quarterly Journal of Economics. 2018. Vol. 133. № 2. P. 993—1039.
- 6. *Darling-Hammond L*. Target Time Toward Teachers // Journal of staff Development. 1999. Vol. 20. № 2. P. 31—36.
- 7. Darling-Hammond L. Teacher quality and student achievement // Education policy analysis archives. 2000. Vol. 8. P. 1—1.
- 8. Glewwe P., Kremer M., Moulin S. Many children left behind? Textbooks and test scores in Kenya // American Economic Journal: Applied Economics. 2009. Vol. 1. № 1. P. 112—135.
- 9. Harlen W., Crick R.D. Testing and Motivation for Learning // Assessment in Education: Principles, Policy & Practice. 2003. Vol. 10(2). P. 169—207. DOI:10.1080/0969594032000121270
- 10. *Horn C.* High-Stakes Testing and Students: Stopping or Perpetuating a Cycle of Failure? // Theory Into Practice. Published by Ohio State University College of Education. 2003. Vol. 42. № 1. P. 30—41.
- 11. E-Qanun [E-Law]. Education Reform Program of the Republic of Azerbaijan. 1999. Available at: https://e-qanun.az/framework/5363
- 12. E-Qanun [E-Law]. On the approval of the Regulation on the State Commission for Student Admission of the Republic of Azerbaijan. 2005. Available at: https://e-qanun.az/framework/9510
- 13. E-Qanun [E-Law]. A Recommended Charter of Public General Schools. 2011. Available at: https://e-qanun.az/framework/21148
- 14. E-Qanun [E-Law]. On Increasing the Teaching Load And Salary of Teachers Whose Knowledge and Skills are Assessed Diagnostically in State General

- Educational Institutions. 2015. Available at: https://e-ganun.az/framework/29132
- 15. E-Qanun [E-Law]. On the creation of a public legal entity, the State Examination Center of the Republic of Azerbaijan. 2016. Available at: https://e-qanun.az/framework/32559
- 16. Klas C.P. Expert evaluation methods // Dobreva et al. 2012. P. 75—84.
- 17. Kellaghan T., Madaus G., Raczek A. The Use of External Examinations to Improve Student Motivation. Washington DC, AERA, 1996.
- 18. Madaus G., Russell M. Paradoxes of High-Stakes Testing // The Journal of Education. URBAN EDUCATION and OPPORTUNITY (2009/2010). Vol. 190. № 1/2. P. 21—30. Published by: Sage Publications, Inc. URL: https://www.jstor.org/stable/42744178
- 19. *Meadows D.H.* Thinking in systems: A primer. Chelsea green publishing, 2008.
- 20. Merriam S.B., Tisdell E.J. Qualitative research: A guide to design and implementation. John Wiley & Sons, 2015.
- 21. Mikayilova U., Kazimzade E. Teachers as reflective learners: teacher perception of professional development in the context of Azerbaijan's Curriculum Reform // Вопросы образования. 2016. № 2 (eng). P. 125—145.
- 22. Ministry of Science and Education of the Republic of Azerbaijan [MoSE]. Yearly Report. 2015. Available at: https://edu.gov.az/uploads/Hesabat/TN-hesabat-2015.pdf
- 23. Ministry of Science and Education of the Republic of Azerbaijan [MoSE]. Yearly Report. 2018. Available at: https://edu.gov.az/uploads/Hesabat/TN-hesabat-2018.pdf
- 24. Ministry of Science and Education of the Republic of Azerbaijan [MoSE]. On the Continuation of Diagnostic Assessment of Teachers' Knowledge and Skills. 2017. Available at: https://edu.gov.az/az/esassenedler/13698
- 25. Organization for Economic Cooperation and Development [OECD]. PISA 2006: Volume 2: Data, PISA, OECD Publishing, Paris. 2006.
- 26. Organization for Economic Cooperation and Development [OECD]. Programme for International Student Assessment (PISA) 2018: Teacher Questionnaire, 2018.
- 27. Pritchett L. Creating education systems coherent for learning outcomes // Research on Improving Systems of Education (RISE), Working Paper Series. 15. 2015. Vol. 5. P. 2—47.
- 28. SIGMA. Final observational study. 2012. Available at: http://www.kurikulum.az/index.php/az/tedqiqat/milli 29. *Silberstein J*. When the Devil's Not in the Details: The System Failure of a Large-Scale School Management Reform in India // RISE Programme. 2020.

- 30. *Silberstein J., Spivack M.* Applying Systems Thinking to Education: Using the RISE Systems Framework to Diagnose Education Systems // RISE Insight note. RISE programme, University of Oxford. 2022.
- 31. *Silova I*. Private tutoring in Eastern Europe and Central Asia: Policy choices and implications // Compare. 2010. Vol. 40. № 3. P. 327—344.
- 32. Silova I., Budiene V., Bray M. Education in a hidden marketplace: Monitoring of private tutoring // New York, Open Society Institute, 2006.
- 33. Skinner E.A., Belmont M.J. Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year // Journal of educational psychology. 1993. Vol. 85. № 4. P. 571. 34. Spann P. The Negative Effects of High-Stakes Testing // Education Law and Policy. 2015. URL: https://www.luc.edu/media/lucedu/law/centers/childlaw/childed/pdfs/2015studentpapers/Spann.pdf 35. State Examination Center. Statistical Analysis. Available at: https://dim.gov.az/activities/research/statistika/

- 36. State Examination Center. Available at: https://dim.gov.az/center/
- 37. State Strategy for the Development of Education in the Republic of Azerbaijan. 2013. Available at: https://president.az/az/articles/view/9779
- 38. The Institute of the Education of of Republic Azerbaijan. Teacher Recruitment Available Competition and Certification. https://arti.edu.az/f%c9%99aliyy%c9%99timiz/ mu%c9%99lliml%c9%99rin-inkisafi/mig-v%c9%99sertifikasiya/
- 39. Wentzel K.R., Wigfield A. Academic and social motivational influences on students' academic performance // Educational Psychology Review. 1998. Vol. 10. P. 155—175.
- 40. *United Nations Summit.* GA Res 70th sess, 4th plen mtg, Agenda Items 15 and 116. TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT, GA UN Doc A/RES/70/1 (21 October 2015).

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Results of a Qualitative Study of Elementary School Teachers' and Parents' Perceptions of Preventing and Overcoming Students' School Failure

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We present the results of a qualitative research of the perceptions, attitudes. experiences of teachers and parents of elementary school students on the practices used to overcome school failure. We comapred these practices with the recommended methods that have been shown to be effective in various studies. The sample consisted of 35 female informants living in big cities, regional centers, districts, and rural areas, with different levels of education: 20 teachers (M=38) and 15 parents (M=29) of primary school-aged children were recruited for this study. We gathered information by in-depth interview method, teachers and parents shared their views on the methods which help to overcome and prevent school failure in the context of elementary school. Collected interviews were studied using the method of content analysis and comparison of the obtained data by using the coding technique (A. Strauss and J. Corbin). The date revealed the attitudes of teachers and parents about the concept of school failure, reasons for its occurrence and ways to overcome it, we compared the results with the results of national and international researches on this topic. Summarizing the results of the study, we can conclude that, in general, teachers and parents use school failure overcoming strategies according to their own experience, intuition and sometimes use tools and approaches described in scientific studies. The results of this study can be used for building strategies of interaction between schools and families and for planning professional development of teachers.

Keywords: school failure; teacher and parental practices; school difficulties; younger students.

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Представлены результаты исследования с применением качественного дизайна для изучения представлений и установок, опыта учителей и родителей учащихся начальной школы по применяемым практикам преодоления школьной неуспешности, их сопоставления с рекомендуемыми методиками, показавшими свою эффективность по результатам различных исследований. Выборку составили 35 информантов женского пола, проживающих в крупных городах, областных центрах, районах области, селе, имеющих разные уровни образования: 20 учителей (М=38) и 15 родителей (М=29) детей младшего школьного возраста. Сбор информации был проведен методом глубинного интервью, в ходе которого были опрошены учителя и родители об их взглядах на подходы к обучению, направленные на преодоление и профилактику школьной неуспешности в контексте начальной школы. Собранные интервью изучались методом анализа контента и сопоставления полученных данных в технике кодирования, в основе которой лежит стратегия А. Страусса и Дж. Корбин. Результаты исследования могут быть полезны для выстраивания стратегий взаимодействия школ с семьями, для планирования работы по повышению квалификации учителей.

Ключевые слова: школьная неуспешность; младшие школьники; учительские и родительские практики; школьные трудности; младшие школьники.

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Introduction

The sustainable direction of the modernization and improvement of the education system in Russia focuses on enhancing the quality and accessibility of education as a whole and on addressing specific challenges. These challenges include increasing motivation for learning, developing new methods and technologies that facilitate the optimal mastery of basic knowledge and skills in educational programs, among others. The attention of state educational policy is increasingly shifting towards the need for conceptualizing educational underachievement and finding practical solutions to the problem of academic failure. There is a growing need for a more comprehensive study of academic failure, its causes, the measures to improve the quality of education, and various practices for overcoming academic failure among all educational actor.

Academic failure refers to the systematic academic underperformance of students, them lagging behind their peers in subjects, which subsequently leads to negative attitudes towards the learning process, such as an unwillingness to study, disciplinary issues, and the avoiding of attending classes [7]. The issue of academic failure occupies a significant place on the research agenda in the field of education. The focus of attention is on the manifestations of academic failure among different social and demographic groups of students, as well as the reasons for difficulties arising [13; 14].

The concept of "academic failure" is interpreted differently by educational actors, depending on their experience, level of involvement in the educational process, and other factors. Therefore, defining the concept, causes, and ways to overcome academic failure requires a complex and multi-aspect analysis, which includes not only statistical data and standard research methods but also a deep immersion into the individual experiences of those who regularly encounter this issue — teachers and parents.

In the context of promoting an evidence-based approach in educational policy and practice [8; 15], research on the effectiveness of various approaches to prevent and overcome academic failure plays a crucial role [8; 15]. Separate attention is given to studying the issues of overcoming academic difficulties among primary school students [14].

Teachers' and parents' beliefs and attitudes are studied as a significant factor in academic success, indicating an understanding of the urgency and causes of the problem of academic failure [18]. In Russia, the beliefs and attitudes of teachers and, partially, parents are regularly investigated within the framework of PISA, TALIS, the Monitoring of the Economy of Education by the Higher School of Economics, the Monitoring of School Effectiveness by RANEPA [10], as well as in separate studies [13].

Among the conducted studies, questions are explored regarding how teachers utilize feedback (including its motivating function) to improve the learning process. A significant portion of research is dedicated to identifying the causes of academic failure [24; 10; 1; 9; 11], highlighting specific teacher practices that contribute to the prevention and overcoming of academic failure [15; 18], and examining how the academic and socio-emotional indicators of students at the beginning of their schooling are related to teachers' expectations of each student's academic success [16].

However, these studies primarily focus on identifying teachers' opinions on specific issues rather than comparing their actual experiences with the recommended practices identified by researchers as the most effective.

The term "practice" refers to the application of proven and regularly used educational tools in pedagogical activities that yields sustainable results in terms of their impact on students' academic achievements. Considering that both teachers and

parents are key figures in the education of primary school students, it is valid to apply the definition of "practice" to parents as well.

The observation of a lack of research of this nature in general, or specifically regarding primary school, necessitates the filling of this gap through the present study, which attempts to describe the beliefs and attitudes of teachers and parents of primary school students regarding existing practices for overcoming academic failure in comparison with the results of studies on the utilization of such practices.

Thus, teachers' knowledge of the causes of learning difficulties among primary school students, pedagogical practices with proven effectiveness in preventing and overcoming academic failure, the transmission of their beliefs to parents, and the effective collaboration between parents and teachers on matters of academic failure represent relevant research directions.

The aim of this study is to investigate the beliefs, attitudes, and experiences of teachers and parents of primary school students regarding the applied practices for overcoming academic failure and to compare their opinions with similar practices described in contemporary domestic and international research. This is particularly important in the context of primary school, where the foundations for further education are established. Students need to be motivated to continue learning, develop their talents and interests, and be prepared for continual self-improvement.

The key research questions are: what beliefs about the causes and possible ways to overcome academic failure exist among primary school teachers and parents of primary school students, and how do the practices utilized by teachers and parents for overcoming academic failure correspond to those described in the scientific literature?

To find answers to the research question, the results of interviews with teachers and parents regarding their beliefs, attitudes, and experiences, as well as the applied practices for overcoming academic failure, were compared with recommended methodologies and described practices for overcoming academic failure, which have demonstrated their effectiveness in various contemporary studies.

Research Program

Design and Methods

A qualitative design using the in-depth interview method was chosen for conducting the re-

search. This method, with its individualized format of interaction with the informant, allows for the establishment of open, trusting relationships and the obtaining of more sincere, comprehensive, and reflective answers. It takes into account the specific nature of the questions that address the positions, perspectives, and experiences of teachers and parents regarding their interactions with primary school students and the practices used to overcome academic failure.

An interview guide was developed for the teachers and parents of primary school students. The duration of each interview ranged from 40 to 80 minutes with each informant.

To develop the interview guide, the results of meta-analyses of teacher and parental practices, which have a positive impact on improving students' educational outcomes, were considered as the theoretical and methodological basis [21; 22; 23]. These studies focused on schools operating in challenging contextual conditions.

The interviews with teachers included questions about their preferred tactics and practices for identifying and addressing failure in schools, as well as preventive practices and interventions to address academic failure.

The interviews with parents documented parental practices in assisting students in adapting to school and resolving the difficulties they encounter, as well as the resources available to students for the successful completion of the school curriculum.

The analysis of the interviews followed the coding technique based on the strategies of A. Strauss and J. Corbin. The analysis consisted of three stages: 1) open coding: searching for categories and extracting meanings; 2) axial coding: identifying relationships between categories; 3) selective coding: identifying key categories.

During the second stage of coding, the following categories were grouped:

- 1) Interpretation of the concept of "academic failure" and its causes.
- Practices for identifying and monitoring students at risk of academic failure in primary school.
- 3) Measures for preventing and overcoming academic failure.

These identified categories correspond to the previously discussed positions on effective parental and educational practices for overcoming academic failure in primary schools: the concept itself, its causes, the practices used, and their effectiveness for further comparison.

Sample

The study involved 35 informants: 20 teachers and 15 parents (100% are female participants). Ethical principles and norms were considered during the research: informed consent was obtained from the informants for audio recording of the interviews, the confidentiality of data collection solely for scientific purposes was ensured, and personal data was anonymized.

The sample was formed randomly using the "snowball" method among teachers and parents who agreed to participate in the interviews. The participating teachers' ages ranged from 20 to 61 years (M=38); 75% of teachers had a higher education, and 25% had a secondary vocational education. 50% of them resided in large cities or regional centers, while the other 50% lived in district areas or villages.

The study involved 15 parents: 8 parents of first-grade students (53.3%) and 7 parents of fourth-grade students (46.7%) from schools in a large city or regional center (11 participants, 72.3%) and district areas (4 participants, 26.7%). The ages of the participating parents ranged from 27 to 52 years old (M=29), and all of them had a higher education.

By utilizing qualitative data collection through interviews, guided by the research objectives and their specific focus, more extensive and reflective responses were obtained from the informants, which were compared with contemporary research findings.

Results

Teachers Definition of academic underachievement and its causes

In their approaches to defining academic failure, teachers primarily rely on identifying the characteristics of students: a lack of attention, a lack of perseverance, impulsiveness, a fear of answering, introversion. Unlike the most commonly encountered definitions of academic failure in scientific literature, teachers often do not solely correlate academic failure with academic performance. Instead, they are more willing to provide more detailed answers regarding the definition of academically successful children, where the main indicator of success becomes students' engagement in the classroom.

For the formation of academic success, teachers emphasize the importance of preparing children for school, placing primary responsibility for this process on parents.

"Successful children are primarily a result of a supportive family. A good foundation for starting school. They engage with the child, foster their development, communicate with them, and read to them. Such a child has a good foundation and continues to develop successfully" (4th-grade teacher, 50 years old, higher education; rural area).

The reasons for academic failure, as indicated by teachers, include the parents' lack of interest in their children's education, a lack of parental supervision over homework completion and knowledge acquisition, family factors, as well as low levels of academic motivation, health issues, and the developmental characteristics of primary school students.

Similar reasons for academic failure are identified in research. Researchers highlight the attitudes of significant adults (parents, caregivers, teachers) towards primary school students. Increased control over task completion, the desire to accelerate a child's development, the non-acceptance of the individual learning processes, the denial of the right to make mistakes, and the suppression of children's willpower [13] affect the emotional perception of the learning process and worsen the problems of underperformance [7], leading to a decrease in students' motivation and cognitive mechanisms in primary school.

Practices for Identifying and Monitoring Students at Risk in Primary School

According to the interviews with teachers, the situation regarding the identification of failing students and monitoring the measures for working with this category of students is ambiguous.

Teacher surveys indicate that targeted actions to overcome academic failure generally begin to be implemented after the administration takes control of the situation with each specific student.

In scientific literature, the diagnostic competence of the teacher, which includes the ability to assess the impact, monitor the methods and practices used on the dynamics of students' educational outcomes, is considered one of the main factors for overcoming and preventing academic failure [8].

Measures for Preventing and Overcoming Academic Failure

The main measures for preventing and overcoming failure in schools, as highlighted in scientific literature, include differentiated approaches, group-based learning, providing detailed feedback (including the use of formative assessment tools), tracking the impact of teaching practices on student learning, and collaborative research among educational professionals on learning difficulties in primary school students [21; 22; 23].

During teacher surveys, a set of measures which are used in schools and aimed at overcoming learning difficulties was identified. The development of an individual plan for additional consultations for students during non-class hours can be considered the main measure. However, teachers themselves note the limited effectiveness of such an approach, both due to the high workload of teachers and the lack of motivation among students to attend such sessions.

"It is good if the child themselves understands that they have problems. Then they participate in additional classes, and everything works out for them. But if adults agree, and the child doesn't want to, nothing will work out, the child won't do anything" (4th-grade teacher, 31 years old, higher education, district center).

However, a significant dissemination and implementation of this approach in teaching practices is not observed, despite the fact that the described strategies are presented by researchers as the most effective for improving educational outcomes [19].

Emotional support becomes important, emphasizing the child's successes and praising their achievements. Generally, the younger the child, the more the lack of emphasis on their successes by significant adults tends to foster a growth mindset of academic failure rather than the highlighting of failures.

Differentiated approaches are widespread, but their utilization is noted to be challenging. Teachers acknowledge that students require special attention and a more individualized approach, which is not feasible due to teachers' workload and large class sizes.

All teachers participating in the survey noted the absence of unified developed algorithms or assistance schemes for underperforming children implemented in educational institutions. However, the efforts of support service specialists (speech therapists, educational psychologists, social workers, etc.) in addressing the difficulties are recognized.

The resources utilized by teachers to enhance their competence in working with underperforming children primarily include in-school activities: individual conversations with other teachers, discussions and deliberations on challenging issues during school gatherings, lectures, and consultations with the school psychologist.

Parents Identification of Academic Failure and its Causes

In approaches to identifying academic failure, parents, like teachers, mainly focus on highlighting the individual-personal characteristics of students that may contribute to learning difficulties, such as restlessness, impulsivity, a lack of motivation, inattentiveness, and others.

Difficulties among younger students, as described above, are predominantly associated with the educational environment (the readiness for learning, an insufficient mastery of the curriculum, the completion of homework, classroom participation, etc.). However, parents also note significant challenges that directly or indirectly affect the academic component, such as the motivation for learning ("Well, there was no immediate desire to study. There was no motivation at all," "Initially, he had no interest in studying; it was impossible to make him do it"), which is also supported by research [3; 4]; difficulties related to the child's independence/self-organization ("The biggest problem is self-organization at home," "It's difficult to organize for homework in the evening. It's very hard to convince him to do anything") [3; 4].

The majority of studies focus on the causes of academic failure, coping strategies for school difficulties, and parental interventions and preventive measures to address failure in schools. The causes identified include the family and school environments, inattention, low cognitive activity, a lack of academic motivation, interpersonal relationships, and others [1; 9; 10; 11; 24]. These reasons can be compared to the results of the survey conducted among parents of younger students.

According to parents, the following factors can contribute to their children's success:

- Teachers and the school environment: "A lot depends on the teacher. If the teacher manages to engage the children, it's a big plus. The children will then strive for something new, acquiring new knowledge. Consequently, they will continue going to school with a positive attitude," "It was difficult to adapt to the school routine, to sit in class and not run around, not being allowed to stand up";
- Family circumstances: "Presumably, a lot comes from the family, a lot depends on what has been instilled in the child since childhood, how much they have been shown, and how much they have been able to remember, how much infrastructure surrounds them";

- Individual characteristics of the child: "I think character once again plays a role. There are many different reasons. It depends on the child's characteristics, their development, and motivation... And self-esteem also influences it," "Everyone has a different mentality, and it's not just children. It applies to adults and all living beings. Some people need more time. It depends on their internal state, mentality, and personal qualities":
- Restlessness and inattentiveness (primarily mentioned as causes in responses from the parents of first-grade students): "There is still a lack of patience; sometimes she can get distracted," "We are not very patient, we are active. I think it hinders us, it's not very good during lessons."

When discussing academic success among children, parents emphasize the importance of personal characteristics such as sociability, activity, balance, non-confrontation, patient, responsibility, and a positive attitude towards learning. According to parents, a lot depends on the intellectual abilities and physical development of their children.

Other factors that influence a child's success, as mentioned, include parenting styles, the presence of support from parents, their attitudes, and the nature of the child's relationship with teachers.

The Identification of Groups at Risk and the Monitoring System

The situation regarding parents' recognition of failing students and the monitoring of measures taken to address this category of children is more understandable, regular, and person-oriented compared to the results of teacher interviews.

The primary method for identifying at-risk groups and monitoring the situation, as well as providing the support and assistance to the child from parents, involves conversations and discussions initiated by parents, during which children can talk about their day and any problems they may have encountered. For instance, "I always tell her that if there are any problems, she can come to me, and we'll discuss them. We talk, communicate, and I advise her on how to do things better."

For many parents, it is important to maintain a trusting relationship with their child, which can positively impact the child's success. On one hand, this allows parents to provide support, and on the other hand, it serves as a form of monitoring the situation. It was also noted that some parents try to establish a systematic approach to such conversations, re-

specting the child's personal boundaries, allowing them the freedom to make their own decisions, and avoiding persistent questioning.

Preventive Measures and Overcoming Academic Failure

Scientific literature highlights several key measures taken by parents to influence and prevent academic failure in schools. These measures include showing interest in the child's life, discussing problems and emotions, praising and using other forms of encouragement for academic achievements, creating the conditions for completing homework, and providing assistance when necessary [5; 6; 11]. Many of these practices were reflected in interviews with parents of primary school children. It is worth noting, however, that not all parents were able to articulate and describe the support practices they employ to overcome and prevent academic failure in the context of primary school.

According to parents, the following parental practices stand out in addressing school difficulties and promoting successful learning:

- The home environment, which encompasses the preservation of family values and a comfortable and psychologically calm atmosphere within the family. The home environment is a key factor that positively impacts students' academic outcomes. Children in a positively-oriented home environment develop corresponding behavioral patterns in various areas of life [6].
- The cognitive involvement of parents in their children's education, which involves the providing of various academic and cultural-historical information, engaging in the joint reading of literature, and more.

The joint spending of time, involving the child in socially significant topics, engaging in family leisure activities, and cognitive involvement in joint activities contribute to a trusting and friendly family atmosphere, foster academic motivation, and subsequently, a sustained interest in acquiring new knowledge [12].

The interaction between parents and teachers and a supportive school environment has been proven to be essential and important. Parents recognize the need for and value recommendations from teachers or having discussions with them, as well as the opportunity to seek consultation from teachers [15]. Another study demonstrates the significance not only of parental involvement with teachers for the intellectual and socio-emotional

success of primary school-aged children, but also the engagement of parents in actively participating in their child's school life, such as organizing school events, attending parent meetings, being members of parent committees, and participating in school programs, among others [17].

Showing interest in the child's life through conversations and addressing questions about the child's experiences ("We simply talk and try to encourage him to tell us more. We show interest in everything that happens to him. I have conversations and provide explanations, trying to maintain a positive motivation. I also inquire about his social interactions, whether they are going well or not, and offer advice") helps establish understanding, acceptance, and trust in parents' relationships with primary school children, thereby building a reliable line of relationship development within the family [5; 6].

Assisting with homework, tutoring, and providing additional education ("We explain assignments that she struggles with... We sit down and work through these moments to make it easier for her at school and to prevent her from making such mistakes in the future," "There are different extracurricular activities available. Maybe there's something that interests you. Let's try it out. This is how I help him," "We have a tutor, but she comes to us only 1-2 times a week") have been shown by research to have an impact on students' academic success. Children whose families lack or have limited opportunities for additional activities, including tutoring, tend to show less successful results in school [10; 11].

Praising, encouraging, and recognizing the child's achievements ("I definitely praise him. I say, 'You're doing great!" "I express joy and always tell him, 'You're amazing, keep it up, continue in the same spirit. That's very good.' I support and encourage him") verbal and other forms of support for students' accomplishments catalyze a positive effect on the productivity in academic activities, foster trusting relationships, and promote a sense of overall success.

Conclusion

Based on the conducted research and the formulated research questions, the study examined the perceptions, attitudes, and experiences of teachers and parents of primary school children regarding the practices employed to overcome academic failure.

This study has allowed for a shift in focus towards exploring the current perceptions of teachers and parents of primary school children regarding the causes of academic failure in primary school and analyzing the effectiveness of practices.

Conducting such comparisons allows to identify the deficiencies in teachers' and parents' understanding of the phenomenon of academic failure in primary school, in order to further incorporate the findings of current research into additional professional development programs for educators and the planning of school-family collaboration in student support matters.

During the interviews with teachers, it was revealed that the presented formats of work partially correlate with the description of effective practices in scientific literature. However, their integration into daily teaching practices is complicated by several factors, as indicated by the teachers. These factors include the insufficient methodological preparation of teachers to work with students experiencing learning difficulties in primary school, the high workload of teachers, overcrowded classrooms, and parents' reluctance to fully follow teachers' recommendations.

In turn, as measures towards maintaining academic success, parents rely on teachers (homeroom teachers) and the school as a whole (the organization of school life, school norms and rules, conditions, shared values, etc.). Despite the overall positive school environment and the significance of the teacher figure for younger students, in some cases, interactions with the teacher and the school can become sources of difficulties for primary school students.

The primary tool for monitoring the situation, assistance, and support of the child becomes conversations with parents, during which children talk about their day and any problems that may arise. When unable to influence academic failure, parents attribute the cause not to the ineffectiveness of their support methods but rather to the child's personal qualities (conflictiveness, distractibility, laziness) and the school environment.

The format of in-depth interviews complicates the inclusion of a more significant number of teachers and parents (legal representatives) of students in modern schools in the sample. However, it not only allows for the comparison of teachers' perspectives on effective approaches to overcoming learning difficulties in primary school students but also involves teachers and parents in reflection — contemplating educational practices and extracting personal expe-

riences in working with academically low-performing children, and possibly reforming them [18].

It is also essential to consider the opinions of the educational process participants regarding measures to overcome academic failure, in terms of their predominant experience in working with children already identified and documented as having learning difficulties, as well as more motivated students. Comparing their perceptions of effective practices with those described in scientific literature is crucial. In this case, such a division and comparison of interview participants' opinions among themselves were not conducted and could serve as a continuation of the presented research.

References

- 1. Avraamova E.M. Prichiny neuspeshnosti obucheniya mladshikh shkol'nikov v predstavleniyakh uchitelei i roditelei [Reasons for the failure of younger schoolchildren to learn as perceived by teachers and parents]. *Narodnoe obrazovanie* = National education, 2019, no. 4, pp. 171—176. (In Russ.)
- 2. Busygina N.P., Podushkina T.G., Stanilevskii V.V. Dokazatel'nyi podkhod v obrazovanii: kriticheskii analiz aktual'nykh diskussii [Evidence-Based Education: A Critical Analysis of Current Debates]. *Psikhologo-pedagogicheskie issledovaniya = Psychological and pedagogical research*, 2021. Vol. 13, no. 4, pp. 162—176. DOI:10.17759/psyedu.2021130410& (In Russ.)
- 3. Vavilov Yu.P. Problemy uchebnoi neuspevaemosti shkol'nikov [Problems of educational failure of schoolchildren]. *Yaroslavskii pedagogicheskii vestnik = Yaroslavl pedagogical bulletin*, 2016, no. 2, pp. 19—24. (In Russ.)
- 4. Gordeeva T.O. Pochemu shkol'niki ne khotyat uchit'sya? [Why do schoolchildren not want to study]. *Obrazovatel'naya politika = National education*, 2019, no. 3(79), pp. 38—42. (In Russ.)
- 5. Gorlova E.L. Psikhologicheskii vozrast rebenka kak osnovanie dlya proektirovaniya strategii razvitiya roditel'skoi kompetentnosti [Mental age of a child as a basis for elaborating parental competence development strategies]. *Natsional'nyi psikhologicheskii zhurnal = National Psychological Journal*, 2013, no. 1, pp. 134—141. DOI:10.11621/npj.2013.0217& (In Russ.)
- Goshin M.E., Pinskaya M.A., Grigor'ev D.S.
 Formy uchastiya roditelei v obrazovanii detei v shkolakh raznogo tipa [Foprms of parental participation in education in different types of schools].
 Sotsiologicheskie issledovaniya = Sotsiologicheskie Issledovanija, 2021, no. 5, pp. 70—83, DOI:10.31857/S013216250012685-6& (In Russ.)
- 7. Isaev E.I., Kosaretskii S.G., Mikhailova A.M. Zarubezhnyi opyt profilaktiki i preodoleniya shkol'noi neuspevaemosti u detei, vospityvayushchikhsya v sem'yakh s nizkim sotsial'no-ekonomicheskim statusom [Western European experience of prevention and overcoming school failure among children living in families with low socio-economic status]. Sovremennaya zarubezhnaya psikhologiya = Journal of Modern Foreign Psychology, 2019. Vol. 8, no. 1, pp. 7—16. DOI:10.17759/jmfp.2019080101& (In Russ.)

- 8. Isaev E.I., Margolis A.A., Safronova M.A. Psikhologicheskii analiz kompetentnosti uchitelya nachal'noi shkoly v rabote nad predmetnymi oshibkami obuchayushchikhsya [Psychological Analysis of the Competence of a Primary School Teacher in Working on Students' Subject Mistakes]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2023. Vol. 28, no. 1, pp. 5—24. DOI:10.17759/pse.2023000002& (In Russ.)
- Kantorova E.V., Gorbachevskaya N.L. Predposylki trudnostei shkol'nogo obucheniya u uchashchikhsya nachal'nykhklassov [Background for Cognitive Difficulties in Primary School Students]. Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education, 2020. Vol. 25, no. 6, pp. 113—125. DOI:10.17759/ pse.2020250610& (In Russ.)
- 10. Klyachko T.L., Semionova E.A., Tokareva G.S. Uspeshnost' i neuspeshnost' shkol'nikov: ozhidaniya roditelei, otsenka uchitelei [Success and Failure of School Students: Parental Expectations and Teachers' Perceptions]. *Voprosy obrazovaniya* = Educational Studies, 2019, no. 4, pp. 71—92. DOI:10.17323/1814-9545-2019-4-71-92& (In Russ.)
- 11. Kosaretskii S.G., Mertsalova T.A., Senina N.A. Preodolenie shkol'noi neuspeshnosti: vozmozhnosti i defitistiy rossiiskikh shkol [Improving Low Academic Performance: Opportunities and Deficits in Russian Schools]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2021. Vol. 26, no. 6, pp. 69—82. DOI:10.17759/pse.2021260605& (In Russ.)
- 12. Polivanova K.N., Bochaver A.A., Pavlenko K.V., Sivak E.V. Obrazovanie za stenami shkoly: Kak roditeli proektiruyut obrazovatel'noe prostranstvo detei. Moscow: Izdatel'skii dom NIU VShE, 2020. [Education Outside the School Walls: How Parents Design Children's Educational Environment], Moscow: HSE Publishing house, 2020, pp. 33—36. (In Russ.)
- 13. Sunnatova R.I., Adaskina A.A. Stil' otnosheniya znachimykh vzroslykh k rebenku kak uslovie stanovleniya shkol'noi neuspeshnosti [Types of Attitude Towards the Child in Significant Adults as a Factor Contributing to Learning Difficulties]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2019. Vol. 24, no. 2, pp. 93—103. DOI:10.17759/pse.2019240209& (In Russ.)
- 14. Soboleva A.E., Egorova S.V., Savenko V.V. Metody psikhologicheskoi korrektsii ehmotsional'nykh

- narushenii u detei [Methods of psychological correction of emotional disorders in children]. Kompleksnaya korrektsiya trudnostei obucheniya v shkole. In Glozman ZH.M., Soboleva A.E. ed. 2-e izd., Moscow: Smysl, 2019, pp. 1—15. (In Russ.)
- 15. Yusupova E.M. Na chto orientiruyutsya uchitelya nachal'nykh klassov v svoikh ozhidaniyakh otnositel'no akademicheskoi uspeshnosti uchashchikhsya [What Primary School Teachers Are Guided by in Their Expectations Regarding the Academic Success of Students]. *Voprosy obrazovaniya = Educational Studies Moscow*, 2023, № 1, pp. 273—297. DOI:10.17323/1814-9545-2023-1-273-297. (In Russ.)
- 16. Catalano H., Catalano C. The Importance of the School-family Relationship in the Child's Intellectual and Social Development Procedia. *Social and Behavioral Sciences*, 2014. Vol. 128, pp. 406—414. DOI:10.1016/j.sbspro.2014.03.179

Литература

- 1. *Авраамова Е.М.* Причины неуспешности обучения младших школьников в представлениях учителей и родителей // Народное образование. 2019. № 4. С. 171—176.
- 2. Бусыгина Н.П., Подушкина Т.Г., Станилевский В.В. Доказательный подход в образовании: критический анализ актуальных дискуссий [Электронный ресурс] // Психологопедагогические исследования. 2021. Т. 13. № 4. С. 162—176. DOI:10.17759/psyedu.2021130410
- 3. *Вавилов Ю.П.* Проблемы учебной неуспеваемости школьников [Электронный ресурс] // Ярославский педагогический вестник. 2016. № 2. С. 19—24.
- 4. *Гордеева Т.О.* Почему школьники не хотят учиться? [Электронный ресурс] // Образовательная политика. 2019. № 3(79). С. 38—42.
- 5. *Горлова Е.Л*. Психологический возраст ребенка как основание для проектирования стратегий развития родительской компетентности // Национальный психологический журнал. 2013. № 1. С. 134—141. DOI:10.11621/npj.2013.0217
- 6. *Гошин М.Е., Пинская М.А., Григорьев Д.С.* Формы участия родителей в образовании детей в школах разного типа // Социологические исследования. 2021. № 5. С. 70—83. DOI:10.31857/ S013216250012685-6
- 7. Исаев Е.И., Косарецкий С.Г., Михайлова А.М. Зарубежный опыт профилактики и преодоления школьной неуспеваемости у детей, воспитывающихся в семьях с низким социально-экономическим статусом [Электронный ресурс] // Современная зарубежная психология. 2019. Т. 8. № 1. С. 7—16. DOI:10.17759/jmfp.2019080101
- 8. *Исаев Е.И., Марголис А.А., Сафронова М.А.* Психологический анализ компетентности учителя

- 17. Hattie J. Visible Learning: The Sequel: A Synthesis of Over 2,100 Meta-Analyses Relating to Achievement. 1st Edition, London: Routledge, 2023, pp. 195—197. DOI:10.4324/9781003380542
- 18. Hattie J. Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement. London: Routledge, 2008, pp. 123—129.
- 19. Marzano R.J., Pickering D.J., Pollock J.E. Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement. Alexandria, VA: ASCD, 2001, pp. 12—18.
- 20. Rosenshine B. Principles of Instruction: Research-Based Strategies That All Teachers Should Know. *American Educator*, 2012. Vol. 36(1), pp. 12—19.
- 21. Rush S.M. Functional components of a local and a national profile of elementary school at-risk students as determined through meta-analysis and factor analysis. University of South Dakota, 1992, pp. 87—96.
- начальной школы в работе над предметными ошибками обучающихся // Психологическая наука и образование. 2023. Том 28. № 1. С. 23—25. DOI:10.17759/pse.2023000002
- 9. *Канторова Е.В., Горбачевская Н.Л.* Предпосылки трудностей школьного обучения у учащихся начальных классов // Психологическая наука и образование. 2020. Т. 25. № 6. С. 113—125. DOI:10.17759/pse.2020250610
- 10. Клячко Т.Л., Семионова Е.А., Токарева Г.С. Успешность и неуспешность школьников: ожидания родителей, оценка учителей // Вопросы образования. 2019. № 4. С. 71—92. DOI:10.17323/1814-9545-2019-4-71-92
- 11. *Косарецкий С.Г., Мерцалова Т.А., Сенина Н.А.* Преодоление школьной неуспешности: возможности и дефициты российских школ // Психологическая наука и образование. 2021. Т. 26. № 6. С. 69—82. DOI:10.17759/pse.2021260605
- 12. Поливанова К.Н., Бочавер А.А., Павленко К.В., Сивак Е.В. Образование за стенами школы: Как родители проектируют образовательное пространство детей. М.: Издательский дом НИУ ВШЭ, 2020. С. 33—36.
- 13. Суннатова Р.И., Адаскина А.А. Стиль отношения значимых взрослых к ребенку как условие становления школьной неуспешности // Психологическая наука и образование. 2019. Т. 24. № 2. С. 93—103. DOI:10.17759/pse.2019240209
- 14. Соболева А.Е., Егорова С.В., Савенко В.В. Методы психологической коррекции эмоциональных нарушений у детей // Комплексная коррекция трудностей обучения в школе / Под ред. Ж.М. Глозман, А.Е. Соболевой / 2 изд. М.: Смысл, 2019. С. 1—15.
- 15. Юсупова Э.М. На что ориентируются учителя начальных классов в своих ожиданиях относительно

Овакимян Е.В., Байрамян Р.М., Исаева О.М., Осипова О.С. Результаты качественного исследования представлений учителей и родителей учащихся начальной школы о профилактике... Психологическая наука и образование. 2023. Т. 28. № 5

академической успешности учащихся // Вопросы образования. 2023. № 1. С. 273—297. DOI:10.17323/1814-9545-2023-1-273-297

16. Catalano H., Catalano C. The Importance of the School-family Relationship in the Child's Intellectual and Social Development Procedia // Social and Behavioral Sciences. 2014. Vol. 128. P. 406—414. DOI:10.1016/j.sbspro.2014.03.179

17. *Hattie J.* Visible Learning: The Sequel: A Synthesis of Over 2,100 Meta-Analyses Relating to Achievement. 1st Edition. London: Routledge, 2023. P. 195—197. DOI:10.4324/9781003380542

18. Hattie J. Visible Learning: A Synthesis of Over

800 Meta-Analyses Relating to Achievement. London: Routledge, 2008. P. 123—129.

19. Marzano R.J., Pickering D.J., Pollock J.E. Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement. Alexandria, VA: ASCD, 2001. P. 12—18.

20. Rosenshine B. Principles of Instruction: Research-Based Strategies That All Teachers Should Know // American Educator. 2012. Vol. 36(1). P. 12—19.

21. *Rush S.M.* Functional components of a local and a national profile of elementary school at-risk students as determined through meta-analysis and factor analysis. University of South Dakota, 1992. P. 87—96.

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Senior School Students' Low Perfomance: Teachers' Beliefs

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The article presents the results of a study that explores the teachers' beliefs concerning low-performing senior schoolchildren in one of the regions of Kazakhstan. Until recently, the issue of low-achieving students was largely absent from the agenda of secondary education and has not got attention from Kazakhstani researchers. A case study methodology was applied as the principal research method, facilitating an in-depth examination of teachers' belief systems concerning low-performing students. 22 high school and first-year college teachers participated in a qualitative study in May and June 2022. We analyzed teachers' ideas about low-achieving students within an ecological framework using an inductive thematic analysis of individual interviews and focus group discussions. We identified the categories of teachers' individual, in-school and systemic beliefs. These beliefs collectively contribute to the conceptualisation of a low-performing students, their educational trajectories, and their potential for success or failure in life.

Keywords: teachers' beliefs; low-performing students; ecological model; case study; Kazakhstan.

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Убеждения педагогов о слабоуспевающих учащихся старших классов

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В статье представлены результаты исследования, раскрывающие убеждения педагогов о слабоуспевающих учащихся старших классов в одном из регионов Казахстана. Стоит отметить, что до недавнего времени проблема слабоуспевающих учащихся практически отсутствовала в повестке среднего образования и оставалась вне поля внимания казахстанских ученых. В качестве основного метода исследования был выбран метод кейс-стади, который позволил углубленно изучить систему убеждений учителей относительно слабоуспевающих учеников. В мае июне 2022 года 22 педагога старшей школы и первого курса колледжей приняли участие в качественном исследовании; в результате индуктивного тематического анализа индивидуальных интервью и фокус-групп с учителями в рамках экологической модели были изучены убеждения педагогов в отношении слабоуспевающих учащихся. Были определены категории убеждений индивидуального, внутришкольного и системного характера, формирующие образ слабоуспевающего учащегося, его образовательную траекторию и жизненную (не)успешность.

Ключевые слова: убеждения педагогов; слабоуспевающие учащиеся; экологическая модель; кейс-стади; Казахстан.

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Introduction

As the results of the PISA-2018 study showed, Kazakhstan, along with the signifi-

cant successes of gifted students, is experiencing a notable lag in functional literacy among adolescents from regular schools

compared to their peers in OECD countries and even neighbouring countries [34]. However, despite a general understanding of the relevance of the problem of low academic achievement, its causes and socioeconomic consequences at the national level remain insufficiently studied.

Among the most significant reasons for the increase in the number of low-performing students, scholars highlight socio-economic factors [16; 38], an underdeveloped system of support for children with special educational needs [24], an unfavourable school climate [33], as well as issues related to teaching methods and assessment in secondary schools [39]. In Kazakhstan, the most likely factors for the low academic performance of school students include their socio-economic status, the culture and system of values in the region and students' environment, the language of instruction, and teacher qualifications [26].

The theory of human capital describes the relationship between a high proportion of low-performing schoolchildren and the socio-economic development of the country, which is confirmed by numerous studies [22; 35; 36]. Increased percentages of low-performing school students have long-term negative economic and social consequences for the country [21; 28; 33; 37].

The conceptual framework for this study of the reasons behind the increase in the proportion of low-performing students was the OECD classification of factors contributing to low performance [29; 33], grounded in the ecological model [17], as well as the frame for the relationship between teachers' beliefs and practices [18]. Teachers' beliefs shape their interpretation of educational content and school events. their ability to define problems and solutions, and also influence their self-efficacy [23]. Thus, M. Gasinets, A. Kapuza, and M. Dobryakova found that Russian teachers attribute a more significant role in students' academic success to the family and the students themselves, with 50 to 75% of teachers convinced that schools are incapable of ensuring high levels of student achievement. As a result, they demonstrate low levels of agency and a reluctance to change their practices [1]. Conversely, the school's context and climate also affect teachers' beliefs. For example, teachers in schools with a high number of academically unsuccessful children tend not to feel responsible for student outcomes [8].

In this article, we propose examining teachers' beliefs about low-performance students on three levels: beliefs concerning individual student characteristics, teachers' beliefs about the school and systemic aspects of the problem.

The first group encompasses teachers' beliefs regarding students' socio-economic backgrounds and behaviour, including their motivation for learning and involvement in school life [13], health status, and the social and financial situations of their families. In this context, teachers can either downplay the issues of academic failure or become a source of "pedagogical stigma" [2].

At the school level, educators' beliefs reveal reasons related to school policies, practices, and resources. The reasons for the increase in the number of low-performing students at the educational organization level include the school climate, classroom environment, availability of opportunities for extracurricular education in the school, the quality of teaching staff, and the resource provision of the school.

Teachers' beliefs at the system level in our analysis include beliefs about the entire educational system of the country, as well as the national education agenda [11]. These beliefs include those on curricula and final qualification exams. Additionally, teachers' beliefs about the structure of the region's labour market, which partially determine the professional orientation of high school students and their career expectations, play an important role here [7; 26].

In this paper, we focus on the following questions: What are teachers' beliefs about low-performing secondary school students? How, according to educators, can the individual characteristics of students, the school, the education system,

society, and the state as a whole shape this agenda?

Context and Research Methods

As a case study to examine the challenges faced by low-performing students, a specific area in southern Kazakhstan was selected: the Turkestan region and the city of Shymkent. Until 2018, Shymkent served as the administrative centre of the South Kazakhstan region, now renamed Turkestan. In Shymkent, the issue of a large number of low-performing students is particularly serious. The city records some of the lowest average scores in the country for external student achievement assessments (ESAA1). Additionally, it has a notably high proportion of young individuals not in employment, education, or training (NEET2). Both the Turkestan region and Shymkent are prominent for their high number of school graduates who do not pursue further studies. Notably, as of November 2022, the percentage of lowperforming students in grades 5—11 in the region was 39%, which is 5% above the national average.

As of 2020, the Turkestan region was characterized by a predominantly agricultural workforce, minimal industrial employment, low-income levels, and a substantial shadow economy, where 50-70% of the income comes from sources outside wages, pensions, and state benefits. Importantly, the region exemplifies how high employment in unproductive sectors is not necessarily linked to educational levels but rather to a lack of economic opportunities for the populace. In contrast to other regions, leaving the agricultural sector (which employed 23% of the workforce in 2020) often results in an income decline. Meanwhile, the more lucrative industrial sector offers limited employment opportunities (accounting for only 5% of the workforce). In 2021, the percentage of self-employed individuals in the Turkestan region was 46%.

Shymkent is distinguished by its high population density and elevated birth rates, coupled with a significant influx of residents from rural areas. This migration contributes to the socio-economic diversity of the city's population. The region accommodates schools that provide education to ethnic groups including Uzbeks, Uyghurs, and Tajiks, in their native languages, alongside the Kazakh and Russian languages.

These factors, inter alia, crucially impact the level of secondary education in the area. Notably, during Kazakhstan's participation in the Programme for International Student Assessment (PISA), the Turkestan region and the city of Shymkent recorded some of the lowest results in reading literacy. However, it's important to acknowledge the region's marginal positive development in this period.

Methods. Within the framework of the constructivist paradigm, the case study method was employed, enabling a comprehensive examination of the phenomenon within its "real-life" context [32; 40]. The case was constructed through a thorough study of the region's individual characteristics. Detailed interview protocols and focus group guidelines were developed, drawing from analysed regulations and literature pertinent to the issue of low student performance.

To investigate the factors contributing to the rise in the proportion of low-achieving students, qualitative data was gathered in May-June 2022 from four secondary schools and two colleges in and around Shymkent. These institutions represent both urban and rural environments. Participants were selected using the purposive non-representative and snowball sampling methods [19; 20]. The study aimed to deeply understand the social ramifications

¹ External Students'Achievement Assessment (ESAA) — a kind of teaching and learning quality monitoring independent of educational organizations.

² NEET — young people who are not in employment, education or training due to a number of factors of economic, social, and political nature.

of poor academic performance. Therefore, participants included not only educational organization administrators, teachers, and students but also class teachers, social educators, psychologists, and members of the parent community [12]. This article discusses the perspectives of 18 subject teachers who participated in focus groups and 4 class teachers who engaged in individual interviews.

Findings of the Study

Teachers' beliefs about low-performing students. Teachers' beliefs about students play a crucial role in the educational process and significantly influence student development. Studies indicate that teachers' expectations considerably affect students' academic performance. Furthermore, there is a tendency for teachers to adopt a more positive attitude towards students who exhibit higher levels of success in their educational pursuits.

The findings of the research, derived from interviews and focus group discussions with teachers, corroborate this viewpoint. Teachers tend to allocate more attention towards students who perform well academically, reasoning that assisting low-performing students is often more time and energy consuming. Additionally, there is a prevailing belief among teachers that concentrating excessively on lower-performing students may detrimentally impact the academic achievements of their higher-performing counterparts.

Teacher 3: "I typically offer this advice: If student is aware that they are unlikely to pass the UNT3, why should they waste their time? It would be more beneficial to acquire a skill or master a craft during this period. However, I do not coerce anyone into making this choice. Ultimately, it is the parents who decide. As a teacher, I do not have the authority to instruct a student to leave school. The school's doors are always open, regardless of a student's academic

performance. For instance, I had a student, an exemplary performer, who expressed a desire to leave. In response, I suggested considering taking the UNT".

Teacher 2: "Why should a student, who is not engaging in their studies, waste time? Such students are likely to skip classes in grades 10—11 anyway. They might as well be working. We would require them to attend classes. This will lead to conflict with the parents. Wouldn't it be more sensible for the student to learn a profession during this time?" (focus group with teachers_54).

While discussing the causes of students' underperformance, teachers often attribute it to the personal characteristics of the students, such as their socio-economic status (SES), behavioural traits, and their parents' education levels. Specifically, they identify a challenging family socio-economic situation as the primary factor in academic failure. Financial constraints experienced by students from lower-income households restrict their access to extracurricular activities and private tutoring. In more severe instances, these economic hardships necessitate early employment for some students, resulting in frequent school absences.

Children with low academic performance often struggle to communicate effectively with teachers and peers. They fail to grasp the material and are unable to respond to questions. When we inquire about these students with the class teacher, we typically find that they come from challenging backgrounds. Many are from single-parent families or families facing financial difficulties. Essentially, these children are dealing with familial issues (participant 6, focus group with teachers_31)

In this region, children are accustomed to assisting their parents from a young age, especially in large families. The necessity to work and contribute to their family's needs often leaves them with insufficient time to combine work and study. This dual responsibility might also be a contributing

 $^{^3}$ Unified National Test — the type of test taken by school graduates to enter Kazakhstani universities.

factor to their academic challenges (class teacher 30).

Teachers' beliefs also influence the parents of low-performing students, whom teachers perceive as being less involved in the educational process. This lack of involvement is often attributed to parents with heavy workloads and those with multiple children. Teachers typically view these parents as shifting responsibility to the school and label them as "problematic." They observe that low parental involvement is more common among students who exhibit low motivation, anxiety, and deviant behaviour. According to teachers, it is these students who are at risk of becoming chronically unsuccessful.

Teacher 3: "High-achieving students often have parents who closely monitor their education. For instance, students who bring the necessary materials to class usually have parents who are more involved and demanding in their learning process. Conversely, students performing at a lower level often have parents who do not pay much attention to their education. They may lack the time or inclination to oversee their children's academic responsibilities. When such children are pushed to achieve more, their parents tend to complain. The key difference lies in the level of parental involvement".

Teacher 2: "Absolutely. It largely depends on the parents. Children whose parents do not control their academic activities often fail to bring even the basic necessities, like textbooks, to school. While all children are provided with textbooks, some consistently neglect to bring them. This lack of oversight sometimes extends to school uniforms as well" (focus group with teachers_54).

"More likely, it is not the children who influence society, but rather their educational deficiencies and those of their parents. For instance, when I analyzed the academic performance in my class, I found a correlation with the parents' educational backgrounds. Many parents lack higher or even secondary education, typically resulting in their employment in lower-paid jobs" (class teacher 30).

Educators categorize these students as "children at risk," attributing their challenging behaviours to underlying emotional, behavioural, and psychological issues. Addressing these issues is essential for sustained academic progress. Such students often struggle with adhering to school discipline, by frequently violating norms, provoking conflicts, and encountering difficulties in relationships with both teachers and peers. The study's results highlight a lack of teacher preparedness for working with these children. This finding aligns with the observations of S. Kosaretsky, T. Mertsalova, and N. Senina, who note that teachers often perceive expulsion as the solution for children who disrupt discipline [8].

Students with poor motivation and insecurity also face an increased risk of academic failure, necessitating specialist intervention [25]. A lack of interest in learning may stem from psychological factors. Teachers observe that students, particularly in grades 5—7, encounter pivotal and crisis moments linked with the transition to secondary school and developmental changes. During this phase, students may experience a waning interest and motivation for their studies, adversely affecting their academic performance.

Teachers also recognize that students with special educational needs (SEN) are at risk of underperforming academically. Despite the availability of tutors and the option of home-based learning, the physical and cognitive conditions of children with SEN can significantly impede their academic achievement.

There is a student with hearing difficulties. We are preparing specialised materials and simpler tasks for him. Additionally, we tend to assign higher grades (participant 3, focus group with teachers 43).

Furthermore, teachers generally harbour scepticism regarding the capabilities of these students. Almost all teachers participating in the study expressed the belief that academic underperformance is a common attribute of students with special educational needs.

Teachers' beliefs in the school context. The study highlighted educators' perceptions of low-performing students, revealing a notable absence of standardized guidelines for schools and educators. This deficiency hampers teachers' ability to swiftly identify and assist students requiring additional help and support. Additionally, not all teachers possess the required professional skills and competencies to effectively engage with low-performing students. Teachers acknowledge that working with such students is often the domain of highly specialized experts: school psychologists and social pedagogues. This indicates that the responsibility for assisting these children typically rests with specialists and is approached predominantly through "corrective activities."

One might question why schools should bear this responsibility. Schools fulfil their role by providing education. In my view, parents and the state should play a larger part. Why should the burden fall solely on schools? Schools are not mandated to educate children in the broader sense; their primary function is to teach. Other institutions or families should have a more significant role in the broader education and upbringing of children (class teacher 30).

At the elementary level, interactions among students are generally harmonious, but this dynamic changes with teenagers, particularly in the 9th grade, where disputes and conflicts become more common. In such cases, we often seek assistance from a psychologist... requesting their intervention (participant 3, focus group with teachers 43).

While highly specialized professionals are indeed capable of effectively working with low-performing students through sessions, tests, and individual lessons, it is crucial to acknowledge that students spend the most of their time with subject teachers and class teachers. Therefore, it is vital for these teachers to grasp and apply psychological principles in their teaching [15]. Teachers

tend to view school psychologists more as support for themselves rather than as specialists dedicated to helping children. This perspective is prevalent in Kazakhstan [9] and other post-Soviet countries [10], where the role of a school psychologist is often limited to "correcting" children with problems.

The lack of necessary professional skills among teachers, coupled with their negative attitudes towards low-performing students, leads to the intentional simplification of the curriculum and the setting of low expectations for these students. A significant consequence of such school practices is the educational stigmatisation and labelling of students as "failed," which influences their future educational paths, including the risk of becoming part of the NEET youth group [2].

There are students who enroll in tuitionfree education programs but are unable to complete them. If a child is unable to attend college, they face the challenge of earning a living through physically demanding work. This situation undoubtedly impacts society. It is beneficial when children pursue university education or at least obtain a vocational education, where they can develop skills in areas such as cooking or electrical work. It is not necessary for everyone to pursue higher education (class teacher_31).

Teachers' beliefs at the system level. At the systemic level, the beliefs of teachers regarding poor academic performance, as identified in our research, are influenced by multiple factors. First, many teachers in our study directly associate students' poor academic achievements with the regional socio-economic context. Specifically, in this region, a substantial portion of the population is engaged in family businesses or works in family-owned agricultural enterprises. Consequently, children's involvement in these businesses or their need to contribute financially is a frequent occurrence in local communities.

There are those who choose their parents' profession. A lot depends on the parents. If their parents had forbidden them to leave [the school], they would have stayed.

If your parents say, 'that's it, just leave, you will work with me', for example, they leave [the school] (participant 1, focus group with teachers_109).

From the teachers' perspective, this poses a significant barrier to the educational progress of low-performing students. This view is based on observations that students engaged in out-of-school activities often lack the sufficient time for studying and completing homework. The dependency of academic achievement on sociodemographic circumstances underscores the link between educational outcomes and students' living conditions. Therefore, teachers argue that addressing and fostering the development of low-performing students cannot be effectively achieved within the educational system alone; it requires consideration of a broader spectrum of social and economic factors.

Moreover, the interviewed teachers highlighted the role of Kazakhstan's current educational system in the issue of low academic performance. Many educators believe that the system fails to adequately address this problem, hindering effective support for low-performing students. Supporting their viewpoint, teachers cite the insufficient time allocated to assisting students with learning difficulties. This is closely linked to the emphasis on preparing high-achieving students for various Olympiads and Unified National Tests, which considerably adds to the teachers' workload. Furthermore, the present teacher certification system evaluates performance based on the number of competition and Olympiad winners and medallists they teach. However, the demanding task of working with low-performing students, often seen as more challenging, remains unrecognized. Teachers also note a lack of competencies in dealing with low-performing students, which is not remedied by the state's system of advanced training or other professional development opportunities available to educators.

"There's not enough time and sometimes the desire to spend it on them [lowperforming students]... I think it's better to pay [attention] to children with high motivation... Sometimes I want to work with a good student, but I have to teach low-performing students so that they don't fall behind [high-performing students]" (class teacher_30).

Educators have raised concerns regarding the structure of curricula and teaching materials. They believe that these resources are primarily designed for gifted children and fail to facilitate effective learning for low-performing students.

"I have a recommendation regarding the selection of textbooks. They are excellent and engaging. However, they are specifically designed for gifted children and can be exceedingly challenging for students with average or below-average academic abilities. If these students receive different materials, they might feel disadvantaged" (participant 1, focus group with teachers_109).

Furthermore, according to some participants of the study, the discontinuation of repeatedteaching for lower-performing students has exacerbated the issue. This practice was previously seen as a way for students to catch up and prevent the widening of the educational gap.

Another systemic belief identified in our research concerns the societal view of Technical and Vocational Education and Training (TVET) institutions. These are often seen as the default path for students with lower academic performance. Interviews with educators revealed two perspectives: some believe that the fear of failing in high school drives students to choose TVET, while others noted pressure from school management to guide low-performing students towards TVET.

A class teacher mentioned, "In some schools, they openly suggest to children that 'you'd be better off going to college.' They recommend it, anyway" (class teacher 30).

Another teacher observed, "Some students fear they won't get into university because they might not pass the UNT; they also can't afford the fees for paid programmes. So, they opt for tuition-free college education. Nowadays, with the challenging [UNT] questions, not everyone can pass" (class teacher 109).

This stereotyping becomes an obstacle in recognizing and addressing underachievement. Low-performing students are often viewed as candidates for TVET rather than being supported within the school system. This stereotype contributes to social inequality by perpetuating negative perceptions of low-performing students, thereby influencing their educational and social advancement opportunities.

Conclusions

Research into teachers' beliefs has highlighted several critical issues regarding the perception and treatment of low-performing students in educational settings. Specifically, studies indicate that teachers often view academic achievement as an attribute inherent to students, influenced by factors such as their family's socio-economic status and their own physical and cognitive characteristics [1; 30; 31]. Furthermore, the task of working with low-performing students is commonly perceived as falling under the purview of highly specialized professionals, such as school psychologists and social workers, who employ various corrective methods [9; 10]. This viewpoint fosters diminished expectations for the academic success of low-performing children, erecting barriers to teachers' engagement for additional work with these students and the cultivation of a stimulating educational environment for all. Consequently, children facing learning challenges frequently experience marginalization and stigmatization within the school environment [2].

These beliefs are compounded by systemic factors, including the socio-economic traits of the region, the education system's focus on nurturing gifted students, and the perception of Technical and Vocational Education and Training (TVET) as a predetermined pathway for low-performing students. Consequently, educational practices emerge that chart a distinct trajectory for these students. From elementary and

middle grades, they are often labelled as a separate group of "problem" children, a categorization that acts as a precursor to their eventual removal from mainstream schooling in higher grades and transition to TVET institutions [12].

Examining this case draws parallels with the medical model of disability in inclusive education theory [27], where the focus is on identifying and rectifying deficits and deviations, rather than nurturing each student's potential and social integration. This approach exacerbates social inclusion issues and deprives students of developmental and learning opportunities tailored to their unique abilities and interests. Furthermore, it poses substantial barriers to social mobility, perpetuating social inequality and diminishing the economic potential of a significant portion of the young population.

In this context, the creation of a more inclusive educational environment is imperative. Such an environment would embrace student diversity and individuality, respect and accommodate children's varied learning needs in teaching methods, and eliminate the stigmatization of low performers. Adhering to the social model of disability in inclusive education theory, this can be achieved if educators reevaluate their beliefs, moving away from the notion of low performance as an immutable student trait and acknowledging their part in the social formation of low-performing students.

On one hand, this requires a targeted development of teachers' competencies, encompassing changes in teaching approaches, assessment, and the provision of resources and methodological support. On the other, it necessitates a reassessment of current educational policies to motivate teachers to work not only with gifted students but also with those who are low-performing.

However, it is crucial to acknowledge that the findings of this study, based on one region, are not generally applicable, given the limited sample size and focus on an in-depth understanding of individual cases. While the case study method and qualitative research methodology play a vital role in gaining deep insights into social phenomena, they also have inherent limitations, such as subjectivity, limited generalizability, challenges in data analysis, and restricted representativeness, all of which can affect the validity of the findings.

Therefore, to enhance the representativeness and generalizability of the results, a more comprehensive approach to study-

References

- 1. Gasinets M., Kapuza A., Dobryakova M. Agentnosť uchiteley v formirovanii uchebnogo uspekha shkol'nikov: roli i ubezhdeniya [Teacher agency in shaping schoolchildren's educational success: roles and beliefs]. Voprosv obrazovaniva = Educational Studies, 2022, no. 1, pp. 75—97. DOI:10.17323/1814-9545-2022-1-75-97 (In Russ.).
- 2. Zborovsky G., Ambarova P. Obrazovateľnaya stigmatizatsiya kak sotsial'nyy sotsiologicheskiy analiz [Educational stigmatization as a social phenomenon: a sociological analysis]. Mir Rossii = World of Russia, 2023, no. 2(32), pp. 6-29. DOI:10.17323/1811-038X-2023-32-2-6-29 (In Russ.).
- 3. IAC. Natsional'nyy doklad o sostoyanii i razvitii sistemy obrazovaniya Respubliki Kazakhstan (po itogam 2020 goda) [National report on the state and development of the education system of the Republic of Kazakhstan (based on the results of 2020)]. Nur-Sultan. JSC Information analytical centre, 2021. (In Russ.).
- 4. Isavev E.. Kosaretsky S.. Koroleva Sovremennyye modeli profilaktiki i korrektsii trudnostey v obuchenii v rabote shkol'nykh sluzhb podderzhki v zarubezhnykh stranakh [Modern models of prevention and correction of learning difficulties in the work of school support services in foreign countries]. Sovremennaya zarubezhnaya psikhologiya = Journal of Modern Foreign Psychology, 2022. Vol. 11, no. 3, pp. 17—26. DOI:10.17759/jmfp.2022110302 (In Russ.). 5. Isaev E., Kosaretsky S., Mikhailova Zarubezhnyv opyt profilaktiki i preodoleniva shkol'nov neuspevayemosti u detey, vospityvayushchikhsya v sem'yakh s nizkim sotsial'no-ekonomicheskim statusom [Western European experience of prevention and overcoming school failure among children living in families with low socio-economic status]. Sovremennaya zarubezhnaya psikhologiya = Journal of Modern Foreign Psychology, 2019. Vol. 8, no. 1, pp. 7-16. (In Russ.).
- 6. Isekeshev A.O., Buranbayev A.B., Zhaikov K.M., Kabdualiyeva M.A., Pazylkhairova G.T., Sadiyeva S.S. Rekomendatsii po rezul'tatam analiticheskogo

ing the problem of low academic performance is needed. Specifically, conducting research using quantitative methodologies across all regions of Kazakhstan would allow for the consideration of cultural and socio-economic variances between regions and to statistically identify predictors of low student performance. This would facilitate the timely identification and addressing of factors impeding children's academic success in Kazakhstan.

- issledovaniya po teme: Razvitiye chelovecheskogo kapitala Respubliki Kazakhstan [Recommendations based on the results of an analytical study on the topic: Development of the human capital of the Republic of Kazakhstan]. Nur-Sultan, 2020. (In Russ.).
- 7. Kersha Y. Shkol'nava kompozitsiva na temu neravenstva [School composition on the theme of regarding inequality]. Vesti obrazovaniya = News on Education, 2021. Available at: https://vogazeta.ru/ articles/2021/3/23/Neravenstvo/16754-shkolnaya_ kompozitsiya_na_temu_neravenstva (Accessed 12.04.2023). (In Russ.).
- 8. Kosaretsky S.G., Mertsalova T.A., Senina N.A. Improving Low Academic Performance: Opportunities and Deficits in Russian Schools. Psikhologicheskava nauka i obrazovanie = Psychological Science and Education, 2021. Vol. 26, no. 6, pp. 69-82. DOI:10.17759/pse.2021260605 (In Russ.).
- Krylova Y. Problemy shkol'nogo psikhologa v Kazakhstane [Problems of the school psychologist in Kazakhstan], 2018. Available at: https://ogu-zaman. kz/?p=22361 (Accessed 20.02.2023). (In Russ.).
- 10. Miroshnikova A. Chto ne tak s psikhologicheskimi sluzhbami v ukrainskikh shkolakh [What is wrong with psychological services in Ukrainian schools]. Available https://osvitoria.media/ru/experience/chto-ne-taks-psyhologycheskymy-sluzhbamy-v-ukraynskyhshkolah (Accessed 20.12.2022). (In Russ.).
- 11. Murzalinova A., Zhanbekov Kh., Kornilova T., Galimzhanova M., Baydaliyev D. Aspekty deyatel'nosti pedagoga dlya profilaktiki i preodoleniya zatrudneniy uchashchikhsva v obuchenii [Aspects of the teacher's activity for the prevention and overcoming of students' learning difficulties]. Pedagogika i psikhologiya = Pedagogy and Psychology, 2022, no. 4(53), pp. 152— 164. DOI:10.51889/7693.2022.29.23.020 (In Russ.).
- 12. Tazabek Sh., Tursunbayeva X., Chsherbakov Slabouspevayushchiye obuchayushchiyesya: diagnostika, faktory riska, podderzhka [Low achieving students: characteristics, risk factors, and support.]. 2022. Astana. (In Russ.).
- 13. Khavenson T., Sergeyeva T. Vospriyatiye kontingenta [Perception of the contingent]. In

- Alekseyeva K., Vergeles K., Zakharov A., Karnoy M., Larina G., Markina V. ... Khavenson T. (Eds.). (Ne) obychnyye shkoly: raznoobraziye i neravenstvo [(Un)conventional Schools: Diversity and Inequality]. Moscow: Publishing House of the Higher School of Economics, 2019, pp. 62—76. (In Russ.).
- 14. Tsentr razvitiya trudovykh resursov [Center for Human Resources Development]. Rynok truda Kazakhstana v 2021 godu [The labor market of Kazakhstan in 2021]. Available at: https://iac.enbek.kz/ru/node/1328 (Accessed 10.12.2022). (In Russ.).
- 15. American Psychological Association. Top 20 principles from psychology for PreK-12 teaching and learning: Coalition for Psychology in Schools and Education, 2015.
- 16. Bornstein M.H., Bradley R.H. Socioeconomic status, parenting, and child development. Routledge, 2014
- 17. Bronfenbrenner U. Ecological systems theory. In R. Vasta (Ed.). Annals of child development. Greenwich, CT: JAI Press, 1989, pp. 187—251.
- 18. Buehl M.M., Beck J.S. The relationship between teachers' beliefs and teachers' practices. In Fives H., Gill M.G. (Eds.). International handbook of research on teachers' beliefs. New York: Routledge, 2015, pp. 66—84. 19. Cohen L.M., Manion L., Morrison K. Research methods in education. UK: Routledge, 2011.
- 20. Creswell J.W. Educational research. Planning, conducting, and evaluating quantitative and qualitative research, 2012.
- 21. Darling-Hammond L. Evaluating teacher effectiveness: How teacher performance assessments can measure and improve teaching. Center for American Progress, 2010.
- 22. Erikson R., Goldthorpe J.H., Jackson M., Yaish M., Cox D.R. On class differentials in educational attainment. *Proceedings of the National Academy of Sciences*, 2005. Vol. 102(27), pp. 9730—9733.
- 23. Fives H., Buehl M.M. Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us. *APA educational psychology handbook*, 2012. Vol. 2, pp. 471—499. DOI:10.1037/13274-019
- 24. Gilmour A.F., Henry G.T. A comparison of teacher quality in math for late elementary and middle school students with and without disabilities. *The Elementary School Journal*, 2018. Vol. 118(3), pp. 426—451.
- 25. Kaniuka T. Reading achievement, attitude toward reading, and reading self-esteem of historically low achieving students. *Journal of Instructional Psychology*, 2010. Vol. 37(2), pp. 184—188. URL: https://www.researchgate.net/publication/309347646

Литература

1. Гасинец М.В., Капуза А.В., Добрякова М.С. Агентность учителей в формировании учебного успеха школьников: роли и убеждения [Электронный

- 26. Kopeyeva A. Understanding factors behind regional inequality in education in Kazakhstan. *Central Asian Affairs*, 2020. Vol. 7(1), pp. 38—79. DOI:10.1163/22142290-0701002
- 27. Masuku M. Restoring inclusive education: Paradigm shift from a medical to social model among learners with disability. *Journal of Sociology & Social Anthropology*, 2021. DOI:10.31901/24566764.2021/12.3-4.370
- 28. Leach M.T., Williams S.A. A Social Inequality Perspective. African American Behavior in the Social Environment: New Perspectives, 2013.
- 29. Lyche C. Taking on the completion challenge: A literature review on policies to prevent dropout and early school leaving, *OECD Education Working Papers*. OECD Publishing, Paris, 2010. 53. DOI:10.1787/5km4m2t59cmr-en
- 30. Namrata E. Teachers' beliefs and expectations towards marginalized children in classroom setting: a qualitative analysis. *Procedia Social and Behavioral Sciences*, 2010. Vol. 15(1), pp. 850—853.
- 31. National Center for Learning Disabilities. Early Detection of Learning Difficulties: From "Recognizing Risk" to "Responding Rapidly", 2020.
- 32. Njie B., Asimiran S. Case study as a choice in qualitative methodology. *Journal of Research & Method in Education*, 2014. Vol. 4(3), pp. 35—40.
- 33. OECD. Low-Performing Students: Why they fall behind and how to help them succeed. PISA, OECD Publishing, Paris, 2016.
- 34. OECD. PISA 2018 results (Volume I-III): Kazakhstan: What 15-year-old students in Kazakhstan know and can do. OECD Publishing, 2019.
- 35. Rose H., Betts J.R. The effect of high school courses on earnings. *Review of Economics and Statistics*, 2004. Vol. 86(2), pp. 497—513.
- 36. Schleicher A. The economics of knowledge: Why education is key for Europe's success. 2006.
- 37. Schleicher A. Teaching excellence through professional learning and policy reform: Lessons from around the world, international summit on the teaching profession. 2016.
- 38. Sirin S.R. Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 2005. Vol. 75(3), pp. 417—453.
- 39. Yeh S.S. Solving the achievement gap: Overcoming the structure of school inequality. Palgrave Macmillan, 2017.
- 40. Yin R.K. Introducing the world of education: A case study reader. Thousand Oaks: Sage Publications, 2005.

ресурс] // Вопросы образования. 2022. № 1. С. 75— 97. DOI:10.17323/1814-9545-2022-1-75-97

2. *Зборовский Г.Е., Амбарова П.А.* Образовательная стигматизация как социальный

- феномен: социологический анализ [Электронный ресурс] // Мир России. 2023. № 2(32). С. 6—29. DOI:10.17323/1811-038X-2023-32-2-6-29
- 3. *ИАЦ*. Национальный доклад о состоянии и развитии системы образования Республики Казахстан (по итогам 2020 года). Нур-Султан: Министерство образования и науки Республики Казахстан, АО «Информационно-аналитический центр», 2021.
- 4. Исаев Е.И., Косарецкий С.Г., Королева Я.П. Современные модели профилактики и коррекции трудностей в обучении в работе школьных служб поддержки в зарубежных странах [Электронный ресурс] // Современная зарубежная психология. 2022. Том 11. № 3. С. 17—26. DOI:10.17759/imfp.2022110302
- 5. Исаев Е.И., Косарецкий С.Г., Михайлова А.М. Зарубежный опыт профилактики и преодоления школьной неуспеваемости у детей, воспитывающихся в семьях с низким социально-экономическим статусом [Электронный ресурс] // Современная зарубежная психология. 2019. Том 8. № 1. С. 7—16. DOI:10.17759/imfp.2019080101
- 6. Исекешев А.О., Буранбаев А.Б., Жаиков К.М., Кабдуалиева М.А., Пазылхаирова Г.Т., Садиева С.С. Рекомендации по результатам аналитического исследования по теме: Развитие человеческого капитала Республики Казахстан. г. Нур-Султан, 2020.
- 7. Керша Ю. Школьная композиция на тему неравенства [Электронный ресурс] // Вести образования. 2021. URL: https://vogazeta.ru/articles/2021/3/23/Neravenstvo/16754-shkolnaya_kompozitsiya_na_temu_neravenstva (дата обращения: 12.04.2023).
- 8. *Косарецкий С.Г., Мерцалова Т.А., Сенина Н.А.* Преодоление школьной неуспешности: возможности и дефициты российских школ // Психологическая наука и образование. 2021. Том 26. № 6. С. 69—82. DOI:10.17759/pse.2021260605
- 9. *Крылова Е.* Проблемы школьного психолога в Казахстане [Электронный ресурс]. 2018. URL: https://oqu-zaman.kz/?p=22361 (дата обращения: 20.02.2023).
- 10. Мирошникова А. Что не так с психологическими службами в украинских школах [Электронный ресурс]. URL: https://osvitoria.media/ru/experience/chto-ne-tak-s-psyhologycheskymy-sluzhbamy-v-ukraynskyh-shkolah/ (дата обращения: 20.12.2022).
 11. Мурзалинова А.Ж., Жанбеков Х.Н.,
- 11. Мурзалинова А.Ж., Жанбеков Х.Н., Корнилова Т.Б., Галимжанова М.А., Байдалиев Д.Д. Аспекты деятельности педагога для профилактики и преодоления затруднений учащихся в обучении [Электронный ресурс] // Педагогика и психология. 2022. № 4(53). С. 152—164. DOI:10.51889/7693.20 22.29.23.020

- 12. Тазабек Ш.О., Турсунбаева К.А., Щербаков А.А. Слабоуспевающие обучающиеся: диагностика, факторы риска, поддержка. г. Астана, 2022.
- 13. Хавенсон Т., Сергеева Т. Восприятие контингента. В Алексеева К.В., Вергелес К.П., Захаров А.Б., Карной М., Ларина Г.С., Маркина В.М. ... Хавенсон Т.Е. (Не)обычные школы: разнообразие и неравенство. М.: Издательский дом Высшей школы экономики, 2019. С. 62—76.
- 14. Центр развития трудовых ресурсов. Рынок труда Казахстана в 2021 году [Электронный ресурс]. URL: https://iac.enbek.kz/ru/node/1328 (дата обращения: 10.12.2022).
- 15. American Psychological Association. Top 20 principles from psychology for PreK-12 teaching and learning: Coalition for Psychology in Schools and Education. 2015.
- 16. Bornstein M.H., Bradley R.H. Socioeconomic status, parenting, and child development. Routledge, 2014
- 17. Bronfenbrenner U. Ecological systems theory. In R. Vasta (Ed.). Annals of child development. Greenwich, CT: JAI Press, 1989. 6. P. 187—251.
- 18. Buehl M.M., Beck J.S. The relationship between teachers' beliefs and teachers' practices / In Fives H., Gill M.G. (Eds.) // International handbook of research on teachers' beliefs. New York: Routledge, 2015. P. 66—84.
- 19. Cohen L.M., Manion L., Morrison K. Research methods in education. UK: Routledge, 2011.
- 20. Creswell J.W. Educational research. Planning, conducting, and evaluating quantitative and qualitative research. 2012.
- 21. Darling-Hammond L. Evaluating teacher effectiveness: How teacher performance assessments can measure and improve teaching. Center for American Progress, 2010.
- 22. Erikson R., Goldthorpe J.H., Jackson M., Yaish M., Cox D.R. On class differentials in educational attainment // Proceedings of the National Academy of Sciences. 2005. Vol. 102(27). P. 9730—9733.
- 23. Fives H., Buehl M.M. Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us // APA educational psychology handbook. 2012. Vol. 2. P. 471—499. DOI:10.1037/13274-019
- 24. *Gilmour A.F.*, *Henry G.T.* A comparison of teacher quality in math for late elementary and middle school students with and without disabilities // The Elementary School Journal. 2018. Vol. 118(3). P. 426—451.
- 25. Kaniuka T. Reading achievement, attitude toward reading, and reading self-esteem of historically low achieving students // Journal of Instructional Psychology. 2010. Vol. 37(2). P. 184—188. URL: https://www.researchgate.net/publication/309347646 26. Kopeyeva A. Understanding factors behind regional inequality in education in Kazakhstan //

- Central Asian Affairs. 2020. Vol. 7(1). P. 38—79. DOI:10.1163/22142290-0701002
- 27. Masuku M. Restoring inclusive education: Paradigm shift from a medical to social model among learners with disability // Journal of Sociology & Social Anthropology. 2021. DOI:10.31901/24566764.2021/12.3-4.370
- 28. Leach M.T., Williams S.A. A Social Inequality Perspective. African American Behavior in the Social Environment: New Perspectives, 2013.
- 29. Lyche C. Taking on the completion challenge: A literature review on policies to prevent dropout and early school leaving, OECD Education Working Papers. OECD Publishing, Paris 2010. 53. DOI:10.1787/5km4m2t59cmr-en
- 30. *Namrata E*. Teachers' beliefs and expectations towards marginalized children in classroom setting: a qualitative analysis // Procedia Social and Behavioral Sciences. 2010. Vol. 15(1). P. 850—853.
- 31. National Center for Learning Disabilities. Early Detection of Learning Difficulties: From "Recognizing Risk" to "Responding Rapidly". 2020.
- 32. Njie B., Asimiran S. Case study as a choice in qualitative methodology // Journal of Research & Method in Education. 2014. Vol. 4(3). P. 35—40.

- 33. *OECD*. Low-Performing Students: Why they fall behind and how to help them succeed. PISA, OECD Publishing, Paris, 2016.
- 34. *OECD*. PISA 2018 results (Volume I-III): Kazakhstan: What 15-year-old students in Kazakhstan know and can do. OECD Publishing, 2019.
- 35. Rose H., Betts J.R. The effect of high school courses on earnings // Review of Economics and Statistics. 2004. Vol. 86(2). P. 497—513.
- 36. Schleicher A. The economics of knowledge: Why education is key for Europe's success. 2006.
- 37. Schleicher A. Teaching excellence through professional learning and policy reform: Lessons from around the world, international summit on the teaching profession. 2016.
- 38. Sirin S.R. Socioeconomic status and academic achievement: A meta-analytic review of research // Review of educational research. 2005. Vol. 75(3). P. 417—453.
- 39. Yeh S.S. Solving the achievement gap: Overcoming the structure of school inequality. 2017. Palgrave Macmillan.
- 40. Yin R.K. Introducing the world of education: A case study reader. Thousand Oaks: Sage Publications, 2005.

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Relations Between Early Educational and Family Experiences and Academic Results of Elementary School Students

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This article focuses on the issues of low academic results. Research on the role of children's early educational experiences highlights the important role of kindergartens, socioeconomic status (SES1), cultural capital (CC2), and other family characteristics for future educational outcomes. The goal of this paper is to investigate the relationship of SES and CC with academic achievement of children in elementary school, using a sample of 5235 students of the first (n=2574) and fourth (n=2661) grades of secondary schools from the Nizhny Novgorod region of Russia. The academic results were measured using the "Start" and "Progress" tests; the information about family and educational experiences was collected using family surveys. The results suggest that children with low academic achievement typically reside in in rural areas and mostly come from families with low SES. The results indicated that in the fourth grade, the academic results of the children who didn't attend a kindergarten are higher than the results of the children who did. Nevertheless, this result refers only to a sample of fourth graders with medium and high academic achievement, coming from families with high SES and CC. These results contradict the findings from Russian and foreign studies on the role of early educational experiences. Therefore, the results from this study should be interpreted with caution and require additional rigorous examination.

Keywords: early educational experience; academic achievement; school failure; school success; elementary school.

¹ Socio-economic status includes such indicators as level of education of parents, place of residence, family wealth, etc. 117: 191.

² Cultural capital includes social attitudes, values, knowledge and educational qualifications [10].

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Связь раннего образовательного и семейного опыта с академическими результатами детей в младшем школьном возрасте

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Статья посвящена проблеме низких академических результатов. Исследования предпосылок данного явления говорят о позитивной роли раннего образовательного опыта, социально-экономического статуса (далее — СЭС³), культурного капитала (далее — КК⁴) и других характеристик семьи. Авторы поставили цель изучить связь указанных факторов с академическими результатами детей в младшей школе на выборке 5235 учащихся первых (n=2574) и четвертых (n=2661) классов общеобра-

³ Социально-экономический статус включает такие показатели, как уровень образования родителей, место проживания, достаток семьи и пр. [17; 19].

 $^{^4}$ Культурный капитал включает социальные установки, ценности, знания и образовательные квалификации [10].

зовательных школ Нижегородской области. Академические результаты измерены инструментами «Старт» и «Прогресс»; информация о семейном и образовательном опыте получена через опрос родителей школьников. Показано, что дети с низкими результатами чаще живут в сельской местности, а их семьи обладают более низким СЭС. Академические результаты в 4-х классах выше у детей, не посещавших детский сад, однако такой эффект характерен только для подвыборки со средними и высоткими академическими результатами, как правило, из семей с высоким СЭС и КК. Данный результат является дискуссионным и не согласуется со значительным числом отечественных и зарубежных исследований, его интерпретация и осмысление требуют дальнейшего изучения.

Ключевые слова: ранний образовательный опыт; академические результаты; школьная неуспешность; младшие школьники.

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Introduction

Low academic results may indicate that children do not receive sufficient knowledge in a certain subject area, which negatively affects their current well-being and becomes a barrier to continuing educational and professional development, the inclusion in economic and social relations. This problem is a consequence of several multi-level factors: education policy and labor market conditions, school characteristics, family context, child behavior, and so on [25].

In this publication, we examine the possible role of early educational experience⁴. A great deal of studies demonstrate its importance for the well-being and future of the child; on the other hand, there are few direct links between early educational experiences with academic results.

Ensuring the availability of high-quality preschool education is the starting point of national goals and modern education policy at the state level [10; 14]. The preschool education of children presupposes the acquisition of cognitive and behavioral skills that can contribute to academic success at an older age [24]. At the same time, it is important to consider that future academic success may be affected not only by early educational experience or the attendance of preschool educational institutions, but also by contextual factors and external environmental conditions (family's SES, CC, and context) [3; 4; 18; 20; 33]. A multidimensional combination of educational, family, and social conditions in which a preschooler lives can determine academic success or failure in the future.

Academic results⁶ and ways to improve or predict them draw the attention of researchers and practitioners. Research shows that students' characteristics (such as motivation, resilience, cognitive, and non-cognitive development), the family's SES, as well as the experience of diverse interactions with society (significant adults, peers, educational organizations, etc.) might affect academic results [15].

⁵ Early educational experience implies a cycle of educational and educational measures aimed at the child, with the aim of comprehensive development until the moment of his admission to school [11].

⁶ Academic results are understood as the total indicator of the results of existing knowledge and/or skills in a particular subject area, characterizing compliance with the standards of the Federal State Educational Standard of a given age [12].

Modern Preschool Education and its Characteristics

Preschool education has a variety of positive effects on children's cognitive and social development, the development of executive functions, psychological well-being, the quality of the transition to school, academic achievement and academic success [1].

Research indicated that the educational environment of a preschool contributes to children's successful adaptation to school, while the conditions of homeschooling do not fully enhance adaptation [7].

Longitudinal studies of the role of preschool experience show its impact on children's development and success in the future: the duration of the attendance of a preschool contributes to a higher level of intellectual development; hence, children from vulnerable families benefit significantly from a high-quality preschool educational experience [32].

The state of the education system for children of an early and preschool age is the subject of attention of most countries of the world [26]. One of the central tasks of preschool education is to overcome the inequality of children's starting opportunities before school. According to parents, kindergarten attendance also makes a significant contribution to children's academic success [12].

Thus, the available research evidence suggests that preschool attendance makes a significant contribution to children's success at school. However, it seems that this relationship may be mediated by several factors. These include the goals and qualitative characteristics of preschool education, the characteristics of the family context, and the individual characteristics of the child, to name a few.

Characteristics of Preschool Education that can Affect Children's Success in Primary School

At the level of educational organizations, the quality of education can vary significantly (educational practices and environment, teacher-child interaction, communication with parents, etc.) [26].

Studies examining the relations between an early educational experience and well-being at

school have shown that students in the first grade are more independent, when they have been in a preschool environment where teachers encourage communication, respect between children and adults, promote independent conflict resolution, and focus on positive behavior [8].

The content of programs implemented in preschool affects first-graders attitudes toward learning activities, the teacher, classmates, and the degree of satisfaction with school attendance [6].

The conditions for rest and relaxation in groups, the development of large motor skills, and the encouragement of interaction between children are associated with a higher level of development of the executive functions of preschoolers and are important preschool predictors of academic results at school [1]. Studies have shown that an increase of the teacher's emotional support of children is associated with the development of language skills and speech [27].

Child's Success and the Family Context

The characteristics of the home learning environment are reflected in the cognitive and social development of children, their behavior, readiness for school, and educational achievement, along with the level of parents' education and the family's SES [30].

Parents may not consider themselves as important participants in the children's development, which may reduce their motivation and involvement in primary school [21]. The mechanism underlying this connection is dual — on the one hand, the children of educated parents have higher intelligence; on the other, parents with higher education use more effective communicative and upbringing practices with their children [31].

Constellation of Factors of Early Educational and Family Experience

The combination of family and educational conditions in a preschool creates a special context for children development, which can affect success at school.

Children from families that are less prosperous in terms of SES and CC, for instance, are in

need of a high-quality educational experience. According to researchers, a high-quality preschool education can prevent the development of special needs [29]. At the same time, it is children from low-income families who most often find it difficult to access a high-quality preschool education [19].

As a result, it seems necessary to examine the complex interaction of family and preschool experience and their relation to the academic results of schoolchildren. Thus, the key *goal of this study is* to understand how the academic achievement of primary school children varies depending on early educational and family experiences.

The *purpose of this study* is to identify the relationship of academic results in primary school with early educational and family experiences.

This study put forward the following hypotheses: Hypothesis 1. There are significant differences in the academic results of children who attended and who did not attend preschool in mathematics and reading in the first grade.

Hypothesis 2. There are significant differences between children with preschool experience and without preschool experience in math and reading in the fourth grade.

Hypothesis 3. Early educational experience relates to academic performance at the primary school age.

Method

The study was conducted as part of the "Longitudinal Study of Academic Failure Factors" (https://ioe.hse.ru/failure-factors /) project. In this article, we used the results of surveys of first and fourth grade students, and the parents of each child (mother or father) filled out a questionnaire.

Sample. The testing of academic results involved 1,248 responses from first graders

(49,0% — girls, 51,0% — boys) and 1,152 responses from fourth graders (50,2% — girls, 49,8% — boys) as well as their parents.

Procedures. To evaluate academic results in the first grade, the "Start" standardized assessment was used, and in the fourth grade — "Progress". On average, students filled out questionnaires for one lesson or about 40 minutes. The adults entered the first-graders' answers into the online platform when filling out the questionnaires. While filling out the questionnaires in the fourth grades, adults were present — a teacher and/or coordinator — in case students had questions or for possible technical difficulties.

Instruments. To measure academic results in mathematics and reading, students used the "Start" (1st grade) and "Progress" (4th grade) assessment procedures, based on computer adaptive testing, which automatically selects tasks depending on students' responses (https://ioe.hse.ru/failure-factors/).

Data from the parental questionnaires was used to study preschool experience. For the purposes of this study, we used the answers to the following questions: "Did the child attend preschool?". A group of children with low academic results was also identified and data describing such characteristics of the family as location (urban/rural), SES, CC and parental employment status was also used. At the same time, we define the family SES as an integral indicator of social status (education, profession) and financial status (income, expenses), which determine early and further children development⁷ [16; 18]. The cultural capital (CC) of the family is an indicator of the worldview and cultural identity of the family, including values, social attitudes, knowledge, and educational qualifications, which are presented

⁷ To determine the family SES respondents were asked to answer the following question: "How would you assess the financial situation of your family?". The respondents could choose from the following options: 1 — We do not have enough money for necessary food sometimes. 2 — We do have enough money for food, but we have to limit ourselves in other daily expenses. 3 — We do have enough money for daily expenses, but buying clothes can be difficult. 4 — We do have enough money for food and clothes, but buying a TV, a refrigerator or other home appliances can be difficult. 5 — We are financially secure enough, but we cannot afford to buy a car or an expensive trip without a loan. 6 — We are financially secure, we can afford an expensive trip or the purchase of a car.

as a basis for children in the process of their upbringing, education, and development⁸ [9].

Data analysis. The analyses were done in the R Studio statistical analysis program. The *psych* package was used to calculate descriptive statistics and a statistical analysis of *t* test [28], and linear regression in the *stats* (R, n.d.) and *rstatix* packages were used to run other parametric tests [22].

Results

Hypothesis 1 was not confirmed. The results did not reveal significant differences between a child's preschool attendance and the academic achievement in mathematics and reading of first

graders. As a result, we assumed that the difference in academic results could be explained by different family experiences. As indicators, we identified SES, CC, and the mother's employment. At the same time, we assumed that high SES, CC, and the ability of a parent to stay at home with children may be the factors of higher academic results for children who attended and did not attend preschool.

The results of a detailed analysis through the categories of SES, CC, and parental employment status are presented in Table 1.

The academic performance of children from two groups was checked: 1) from families with low SES, CC and with a working parent

Table 1
Results of First Graders in Math and Reading Based on Preschool Experience

Family Socio-Economic Status (SES) of Children with Preschool Experience						
Subject	Average score Average score Subject Low SES High SES (n = 81) (n = 649)		t test (df)	p-value	Cohen's D	
1. Mathematics	44.94	48.77	-3.52(100.63)	0.00076	-0.42	
2. Reading	50.39	52.04	-1.88 (100.08)	0.12	-	
Fami	ly Socio-Economic S	Status (SES) of Chile	dren without Pres	school Experie	nce	
Subject Low SES High SES		Average score High SES (n = 46)	t test (df)	p-value	Cohen's D	
1. Mathematics	Mathematics 44.17 49.39		-1.18 (6.37)	0.28	-	
2. Reading 43.50		50.70		-		
	Cultural Capita	I (CC) of a Family w	ith Preschool Exp	perience		
Subject	Average score Low CC (n = 423)	Average score High CC (n= 309)	t test (df)	p-value	Cohen's D	
1. Mathematics	46.54	50.84	-6.19 (590.29)	0.0001	-0.48	
2. Reading	50.16	54.14	-6.34 (689.94)	0.0001	-0.47	
	Cultural Capital (CC) of a Family with	out Preschool E	xperience		
Subject	Average score Low CC (n = 31)	Average score High CC (n = 21)	t test (df)	p-value	Cohen's D	
1. Mathematics	46.81	51.71	-1.84 (49.62)	0.07		
2. Reading 47.22 53.76		- 2.37 (50)	0.02	-0.62		

⁸ To determine the CC respondents were asked to answer the following question: "How many hardcover books do you have at home? One standard shelf holds approximately 25 books." The respondents could choose from the following options: 1 — 0-10 books. 2 — 11-25 books. 3 — 26-100 books. 4 — 101-200 books. 5 — 201-500 books. 6 — More than 500 books.

Parental Employment for Children with Preschool Experience								
Subject Average score Works (n = 579)		Average score Does not work (n = 152)	t test (df)	p-value	Cohen's D			
1. Mathematics	48.50	47.83	0.78 (234.5)	0.44	-			
2. Reading 52.13		50.77 1.49 (203.28) 0.14		0.14	-			
	Parent Employment for Children without Preschool Experience							
Subject	Average score		t test (df)	p-value	Cohen's D			
1. Mathematics 49.93		47.46	0.86 (46.06)	0.40	-			
2. Reading	48.54 51.41		-0.96(49.87)	0.34	-			

Group 1 (Low SES, KG and a Working Parent) and Group 2 (High SES, K and a Non-Working Parent) of Children with Preschool Experience

Subject	Average score Group 1 (n = 30)	Average score Group 2 (n = 56)	t test (df)	p-value	Cohen's D
1. Mathematics	45.33	51.38	-3.05 (58.55)	0.003	-0.69
2. Reading	51.00	55.14	-2.24 (58.68)	0.03	-0.51

Group 1 (Low SES, KG and a Working Parent) and Group 2 (High SES, K and a Non-Working Parent) of Children without Preschool Experience

Subject	Average score Group 1 (n = 4)	Average score Group 2 (n = 8)	t test (df)	p-value	Cohen's D		
1. Mathematics	44.50	55.13	-1.64(6.01)	0.15	-		
2. Reading	40.00	54.63	-2.06(3.80)	0.11	-		

and 2) from families with high SES, CC and with a non-working parent. The results of the analysis revealed that the children who attended preschool from the second group received higher scores in mathematics [t(58.548) = -3.0527, p = 0.003, d = -0.69] and reading [t(58.678) = -2.2359, p = 0.03, d = -0.51], the effect size is average, than children from the first group. The difference in academic results in children who did not attend preschool was not significant.

In fact, a high level of SES and family CC are associated with the academic results of children, and the availability of free time of parents allows them to devote more time to teaching and raising children of preschool age, which also affects their learning ability [15; 20]. The feeling of social inequality, financial deprivation, in terms of psychoemotional influence, can act as a stress factor. As a result, children in these families may experience anxiety, and this experience can be associ-

ated with a negative image of the family and can affect various spheres of children's lives [16].

Hypothesis 2 was confirmed, however, in a peculiar way. The results of the statistical analyses indicated that children who did not attend preschool have higher results in mathematics [t(76.32) = -3.21, p = 0.0002, d = -0.44] and in reading [t(79.08) = -3.45, p = 0.0002, d = -0.41] in fourth grade, than children who attended preschool. The effect size is average. In order to understand to what extent preschool attendance and family experiences contribute to academic results, a further analysis was performed.

The results of a detailed analysis through the categories of SES, CC and parental employment are presented in Table 2.

The academic indicators of children from two groups of the fourth graders were compared: 1) from families with low SES, CC and a working parent and 2) from families with high SES, CC and a non-working parent. The

TTable 2
Results of Fourth-Graders in Math and Reading, Depending on Preschool Experience

Fam	ily's Socio-Economi	ic Status (SES) of Ch	nildren with Preso	chool Experier	nce				
Subject	Average score Low SES (n = 96)	Average score High SES (n = 580)	t test (df)	p-value	Cohen's D				
1. Mathematics	48.12	50.78	-2.35(131.32)	0.02	-0.25				
2. Reading	47.81	51.24	-3.12(127.18)	0.002	-0.35				
Family's Socio-Economic Status (SES)of Children without Preschool Experience									
Subject	Average score Low SES (n = 10)	Average score High SES (n = 35)	t test (df)	p-value	Cohen's D				
1. Mathematics	50.7	58.11	- 1.85(16.71)	0.08	-0.61				
2. Reading	49.7	57.11	-2.7(20.29)	0.01	-0.8				
	Cultural Capita	I (CC) of a Family wi	th Preschool Exp	erience					
Subject	Average score Low CC (n = 385)	Average score High CC (n= 289)	High CC t test (df) p-va		Cohen's D				
1. Mathematics	47.43	54.35	-8.72(560.37)	0.0001	-0.69				
2. Reading 48.89		53.18	-5.62(609.52)	0.0001	-0.44				
	Cultural Capital ((CC) of a Family with	out Preschool Ex	cperience					
Subject	Average score Low CC (n = 22)	Average score High CC (n = 25)	t test (df)	p-value	Cohen's D				
1. Mathematics	50.95	61.80	-3.24(38.83)	0.002	-0.97				
2. Reading 51.45		58.840 –2.85(41.5)		0.006	-0.84				
	Parental Employ	ment for Children w	ith Preschool Ex	perience	•				
Subject	Average score Works (n = 561)	Average score Does not work (n = 112)	t test (df)	p-value	Cohen's D				
1. Mathematics	50.69	49.64	0.77(144.87)	0.44	-				
2. Reading	51.08	49.00	1.77(142.19)	0.08	-				
	Parental Employn	nent for Children wit	hout Preschool E	xperience					
Subject	Average score Works (n = 34)	Average score Does not work (n = 13)	t test (df)	p-value	Cohen's D				
1. Mathematics	57.00	56.00	0.27(27.67)	0.79	-				
2. Reading	55.70	54.53	0.41(27.62)	0.68	-				
Group 1 (Low SE	ES, CC, and a Workir of C	ng Parent) and Grou hildren with Prescho		C, and a Non-\	Vorking Paren				

Subject	Average score Group 1 (n = 62)	Average score Group 2 (n = 38)	t test (df)	p-value	Cohen's D
1. Mathematics	46.78	55.57	-4.28(59.94)	0.0001	-0.95
2. Reading	47.43	53.63	-2.92(63.98)	0.005	-0.64

Group 1 (Low SES, CC, and a Working Parent) and Group 2 (High SES, CC, and a Non-Working Parent) of Children without Preschool Experience

Нисская А.К., Ахмеджанова Д.Р., Байрамян Р.М., Лизунова Е.Г. Связь раннего образовательного и семейного опыта с академическими результатами детей в младшем школьном возрасте Психологическая наука и образование. 2023. Т. 28. № 5

Subject	Average score Group 1 (n = 4)	Average score Group 2 (n = 8)	t test (df)	p-value	Cohen's D
1. Mathematics	42.00	60.38	-6.91 (9.65)	0.0001	-3.19
2. Reading	50.25	59.13	-3.75(6.11)	0.009	-2.29

results of the analysis revealed that the children who attended preschool from the second group received higher scores in mathematics [t(59.939) = -4.2796, p < 0.001, d = -0.95]and reading [t(63.982) = -2.9216, p = 0.04,d = -0.64], the effect size is high and above average, than children from the first group. For children who have not attended preschool, the size of the effect is very high. Thus, the 4th grade students who did not attend preschool had higher academic results than the students who attended preschool, thus hypothesis 2 was fully confirmed. The results of this study show that children who did not attend preschool study a little better than children who attended preschool, but it should be noted that this group of children is small. Such an abnormal result requires additional investigation.

Hypothesis 3 was partially confirmed. The results of regression analysis show that children's non-attendance of preschool significantly predicts academic achievement in mathematics [β = 4.525, t(1150) = 3.543, p = 0.0004, d = -0.44] and in reading in the fourth grade, [β = 3.992, t(1140) = 3.328, p = 0.0009, d = -0.41], the effect size is average.

The absence of a positive contribution of preschool attendance to the academic results of primary school children contradicts the results of a wide range of studies demonstrating the positive effect of preschool attendance. In this regard, it was suggested that the negative effect may not be total, but characteristic only for certain groups of respondents.

To characterize a group potentially vulnerable to academic failure, the family and educational experience of children with low cumulative academic results was analyzed.

It is shown that unsuccessful first graders more often live in rural areas, less often in a big

city (p < 0.0001). Their mothers and fathers have a lower level of education (p < 0.0001), their families have a generally lower SES (p= 0.006) and cultural capital (p = 0.0006). However, it is important to note that preschool attendance does not differ between children with low results and the entire sample.

The group of respondents who showed low academic results in 4^{th} grades show similar features: They live in rural areas, less often in a big city (p < 0.0001), their mothers and fathers have a lower level of education (p < 0.001), in the families with low CC (p < 0.0001). Preschool attendance does not differ between children with low results and the entire sample. The family's socio-economic status in fourth grades does not differ among children with low results and the entire sample.

These results are consistent with the results of studies of academic failure conducted in different countries: children from families with low cultural capital and socio-economic status living in rural areas may be at risk for low academic results at school, regardless of early educational experience [20; 21; 30, 32; 34]. Perhaps a detailed study of the features of this experience, the child's attitude towards it could show certain connections, but this research question remained outside the scope of this study.

Discussion

According to the results of this study, students with low academic results more often than in the sample as a whole:

- live in rural areas, less often in a big city;
- are brought up in families with low socioeconomic status and cultural capital.

At the same time, the academic results of the selected group of unsuccessful students are not affected by attending /not attending preschool.

Based on the purposes of this study, and guided by the hypotheses, it was established:

- 1. There were no differences in academic results (in mathematics and reading) among first graders who did and did not attend preschool. At the same time, children who attended preschool from families with high SES and CC, as well as with non-working parents, received higher scores on academic results (in mathematics and reading) than children from families with low SES, CC and working parents.
- The fourth graders who did not attend preschool had higher academic results (in mathematics and reading) than children who attended kindergarten.
- 3. For the first and fourth-grade students, educational experience at the preschool age predicts their academic performance in primary school. Presumably, receiving preschool education during the COVID-19 pandemic and data collection in September (the adaptation period) could have offset both the positive and negative effects in this study.
- 4. First and fourth grade students from families with low socio-economic status and cultural capital living in rural areas may be at risk of academic failure in school, regardless of early educational experience.

Conclusion

Within the framework of this study, we saw a contradictory result about the absence and even the presence of a negative connection between the experience of attending preschool and academic results, which does not support findings from international and domestic research studies. It should be emphasized that this result should not be interpreted as if the preschool is a factor leading to failure, since the group of children with low academic results did not differ from the entire sample in the degree of involvement in preschool education.

A negative effect is observed for children from families with high SES and CC, demonstrating average and high academic results. The study of the nuances of this connection involves studying the role of parental involvement, their

employment status, and other factors that lead children from more resourced families without preschool experience to the highest results in the sample.

Another possible reason for the results could be the peculiarity of the educational experience of children whose preschool education fell on the coronavirus pandemic. Limited access to preschool education could have offset the positive effects [23]. In urban families with a non-working parent, high SES and CC, children could have access to significant and diverse developmental resources, unlike families living in rural areas with fewer starting opportunities, where children could not fully take advantage of preschool education. In such cases, the features of academic results will be determined more by the family context, the quality of education in the first grade, and the characteristics of the student-teacher relationship, rather than preschool experience.

In addition, the quality of preschool education received by the child might not always be high, especially in rural areas and for families with low SES and CC, which could have impacted the academic results.

Studies focused on the deficits of modern preschool education suggest that low-quality education may not help, but harm the development of a child and their future academic results. One of the risk factors is that educators often fail to build educational work considering the specifics of age, to create conditions for the amplification of development [2]. Also, the quality of preschool experience may decrease due to the transformation of the game into a didactic tool for acquiring new skills, ideas, for the formation of useful skills, due to the impoverishment of the "natural" environment for preschool childhood, caused by the desire for the complete safety of children, restrictions to the physical activity of children etc., which can lead to "a reduction of independence, initiative and, as a result, a deficit of self-control" [13]. Finally, the preschool experience can become extremely negative if its conditions are unsafe, adults show cruelty, aggressiveness, and intolerance [5].

Families of children with low academic results live in rural areas and have low cultural capital, and parents do not have a higher education. These children, more than others, should receive a high-quality early educational experience. To solve this problem, it is necessary both to support and develop preschool education in rural areas and small towns, and to organize a diverse, accessible, and attractive additional education for children of an early and preschool age.

Limitations

Beyond the scope of this study, there were a number of additional variables that could affect the educational results of primary school children. These include the quality and regularity of the educational experience before school, the individual and psychological characteristics of children, the well-being of the adaptation to learning in the first grade, the characteristics

References

- 1. Belolutskaya A.K., Veraksa A.N., Almazova O.B., Bukhalenkova D.A., Gavrilova M.N., Shiyan I.B. Svyaz' kharakteristik obrazovatel'noi sredy detskogo sada i urovnya razvitiya regulyatornykh funktsii doshkol'nikov [Association between Educational Environment in Kindergarten and Executive Functions in Preschool Age]. *Psikhologicheskaya nauka i obrazovanie* = Psychological Science and Education, 2018. Vol. 23, no. 6, pp. 85—96. (In Russ.).
- 2. Burlakova I.A. Teoriya i praktika sovremennogo otechestvennogo doshkol'nogo obrazovaniya [Theory and Practice of Modern Domestic Preschool Education]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2015. Vol. 20, no. 3, pp. 35—43. DOI:10.17759/pse.2015200305 (In Russ.).
- 3. Dvoinin A.M., Savenkov A.I., Postavnev V.M., Trotskaya E.S. Kognitivnye prediktory akademicheskoi uspeshnosti u doshkol'nikov i mladshikh shkol'nikov [Cognitive Predictors of Academic Success in Preschool and Primary School Children]. *Voprosy psikhologii = Questions of Psychology*, 2020. Vol. 66, no. 6, pp. 106—116. (In Russ.).
- 4. Dvoinin A.M., Trotskaya E.S. Kognitivnye prediktory akademicheskoi uspeshnosti: kak obshchie zakonomernosti «rabotayut» na rannikh etapakh obrazovaniya? [Cognitive Predictors of Academic Success: How Do the General Patterns Work in the Early Stages of Education?]. *Psikhologicheskaya nauka i obrazovanie* = Psychological Science

of child-parent relations, and the impact of the pandemic on the early educational experience of a child, including the practices of parents to fill its deficit. There is no data on the experience of obtaining additional education (developmental classes, preparation for school, etc.) by children who did not attend preschool. We collected data at the beginning of the school year, when children face the challenges of the adaptation period. During this period, the psychological climate in the classroom, the behavior of the teacher, the age-psychological and individual characteristics of the child could affect academic results. These and other factors should be considered in future studies of the role of preschool experience in the study of academic success and failure. Nevertheless, the results of this study can contribute to the expansion of research experience in the study of academic failure in general and can be useful to experts in the field of preschool and primary school education.

- and Education, 2022. Vol. 27, no. 2, pp. 42—52. DOI:10.17759/pse.2022270204 (In Russ.).
- Ivanova A.E., Kuznetsova M.I., Semenov S.V., Fedorova T.T. Faktory, opredelyayushchie gotovnost' pervoklassnikov k shkole: vyyavlenie regional'nykh osobennostei [School Readiness of First-Graders and Its Factors: Identifying Region-Specific Characteristics]. *Educational Studies Moscow*, 2016, no. 4, pp. 84—105. DOI:10.17323/1814-9545-2016-4-84-105 (In Russ.)
- 6. Mirimanova M.S. Rannee prognozirovanie sotsial'no-psikhologicheskikh riskov i ikh profilaktika v doshkol'nykh obrazovatel'nykh uchrezhdeniyakh [Early prediction of psychosocial risks and their prevention in preschools]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2013. Vol. 5, no. 1. URL: https://psyjournals.ru/journals/psyedu/archive/2013_n1/59150 (Accessed 25.05.2023). (In Russ.).
- Nisskaya A.K. Problema perekhoda k obucheniyu Obzor shkole. mezhdunarodnykh praktik podgotovki detei, organizatsii preemstvennosti obrazovateľ nogo soderzhaniya, vzaimodeistviva roditelei i obrazovateľnykh organizatsii [The Challenge of Transition to School. Overview of International Practice of Children's Training, Ensuring Continuity of Educational Content, Interaction Between Parents and Educational Organization]. Modern Preschool Education, 2019. Vol. 1, no. 91, pp. 18-31. DOI:10.24411/1997-9657-2019-10037 (In Russ.).

- 8. Nisskaya A.K. Sotsial'naya situatsiya razvitiya v doshkol'nom uchrezhdenii kak faktor adaptatsii pervoklassnikov k shkole [Social situation of development in a preschool educational institution as a factor of school adaptation in first-graders]. *Psikhologicheskie issledovaniya = Psychological Studies*, 2012. Vol. 5, no. 23, pp. 8. DOI:10.54359/ps.v5i23.777 (Accessed 25.05.2023). (In Russ.).
- 9. Ochkina A.V. Kul'turnyi kapital sem'i kak faktor sotsial'nogo povedeniya i sotsial'noi mobil'nosti (na materialakh issledovaniya v provintsial'nom rossiiskom gorode) [Family's Cultural Capital as a Factor of Social Behavior and Social Mobility (an empirical study in a provincial Russian city)]. *Universe of Russia*, 2010. Vol. 19, no. 1, pp. 67—88. (In Russ.).
- 10. Praviteľstvo Rossiiskoi Federatsii. Edinyi plan po dostizheniyu natsionaľnykh tselei razvitiya Rossiiskoi Federatsii na period do 2024 g. i na planovyi period do 2030 g. 2021 [The Russian Federation government. Unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030]. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celey_razvitiya_do 2024q.pdf (In Russ.).
- 11. Prikaz Ministerstva obrazovaniya i nauki Rossiiskoi Federatsii ot 17 oktyabrya 2013 g. № 1155 «Ob utverzhdenii federal'nogo gosudarstvennogo obrazovatel'nogo standarta doshkol'nogo obrazovaniya» [About the approval of the federal state educational standard of preschool education]. URL: https://docs.edu.gov.ru/document/7dcd2fd1d14f608ec 97e9ef6699f99ae/ (In Russ.).
- 12. Proshkova Z.V. Vlivanie obucheniya detskom sadu na obrazovateľnuvu uspeshnosť mladsheklassnikov ٧ otsenkakh roditelei [Kindergartens education influence on primary school students' educational success in the parent's assessments]. Mir nauki. Pedagogika i psikhologiya = World of Science. Pedagogy and Psychology, 2021. Vol. 9, no. 5. DOI:10.15862/22PSMN521 (In Russ.).
- 13. Smirnova E.O. Razvivayushchee doshkol'noe obrazovanie:klyuchevyeusloviyai prepyatstvuyushchie faktory [Developing Preschool Education: Promoting and Preventing Factors]. *Psikhologo-pedagogicheskie issledovaniya = Psychological-Educational Studies*, 2019. Vol. 11, no. 4, pp. 79—89. DOI:10.17759/psyedu.2019110406 (In Russ.).
- 14. Ukaz Prezidenta Rossiiskoi Federatsii ot 21 iyulya 2020 g. № 474 «O natsional'nykh tselyakh i strategicheskikh zadachakh razvitiya Rossiiskoi Federatsii na period do 2024 g.» [On the national goals and strategic objectives of the development of the Russian Federation for the period up to 2024]. URL: http://kremlin.ru/acts/bank/45726 (In Russ.).
- 15. Khukhlaev O.E., Chibisova M.Yu. Obrazovatel'nye dostizheniya uchashchikhsya v shkolakh s vysokoi

- chislennost'yu detei-migrantov [Academic Achievement of Students in Schools with High Numbers of Migrant Children]. *Psikhologicheskaya nauka i obrazovanie* = Psychological Science and Education, 2022. Vol. 27, no. 5, pp. 46—56. DOI:10.17759/pse.2022270504 (In Russ.).
- 16. Shvedovskaya A.A., Zagvozdkina T.Yu. Sotsial'no-ekonomicheskii status sem'i i psikhicheskoe razvitie rebenka: zarubezhnyi opyt issledovaniya [The concept "socio-economic status of a family" (SES): A review of international research]. *Psikhologicheskaya nauka i obrazovanie* = Psychological Science and Education, 2013. Vol. 18, no. 1, pp. 65—76. (In Russ.).
- 17. Anderson S., Phillips D. Is pre-K classroom quality associated with kindergarten and middle-school academic skills? *Dev Psychol.*, 2017. Vol. 53(6), pp. 1063—1078. DOI:10.1037/dev000031
- 18. Davis-Kean P.E., Tighe L.A., Waters N.E. The Role of Parent Educational Attainment in Parenting and Children's Development. *Current Directions in Psychological Science*, 2021. Vol. 30. Issue 2. DOI:10.1177/0963721421993116
- 19. Fenech M., Skattebol J. Supporting the inclusion of low-income families in early childhood education: an exploration of approaches through a social justice lens. *International Journal of Inclusive Education*, 2019. Vol. 25, pp. 1—19. DOI:10.1080/13603116.2019.1597929
- 20. Fitzpatrick C., McKinnon R.D., Blair C.B., Willoughby M.T. Do preschool executive function skills explain the school readiness gap between advantaged and disadvantaged children? *Learning and Instruction*, 2014. Vol. 30, pp. 25—31. DOI:10.1016/j. learninstruc.2013.11.003
- 21. Karam R., Zellman G., Perlman M. Child Cognitive Development and Parent Roles: A Preliminary Comparison of Moroccan Parents to United States and United Kingdom Benchmarks. *Journal of Child and Family Studies*, 2023, pp. 1—12. DOI:10.1007/s10826-023-02542-y
- 22. Kassambara. Package "rstatix" [R package] [Electronic resource]. 2023. Available at: https://cran.r-project.org/web/packages/rstatix/index.html (дата обращения: 10.03.2023)
- 23. Lynch K., Lee M., Loeb S. An investigation of Head Start preschool children's executive function, early literacy, and numeracy learning in the midst of the COVID-19 pandemic. *Early Childhood Research Quarterly*, 2023. Vol. 64, pp. 255—265. DOI:10.1016/j.ecresq.2023.04.002 24. Mengdi Qi, Yuhan Luo, Fumei Chen, Xin Xuan, Yanfang Li, Yun Wang. Longitudinal trajectories of approaches to learning among Chinese preschoolers: Family predictors and academic outcomes. *Early Childhood Research Quarterly*, 2023. Vol. 64, pp. 345—354. DOI:10.1016/j.ecresq.2023.04.011
- 25. OECD. Equity and Quality in Education: Supporting Disadvantaged Students and Schools. OECD Publishing, Paris, 2012. DOI:10.1787/9789264130852-en
- 26. OECD. Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care,

- Starting Strong, OECD Publishing, Paris, 2017. DOI:10.1787/9789264276116-en
- 27. Rankin P., Staton S., Potia A., Houen S., Thorpe K. Emotional quality of early education programs improves language learning: A within-child across context design. *Child Development*, 2022. Vol. 93(6), pp. 1680—1697. DOI:10.1111/cdev.13811
- 28. Revelle W. et al. Package "psych" [R package] [Electronic resource]. 2022. Available at: https://cran.r-project.org/web/packages/psych/psych.pdf (Accessed 10.03.2023)
- 29. Ringsmose Ch. Gaps in Care: (E)quality ECEC in Nordic Early Childhoods. 2022. DOI:10.1007/978-3-030-91297-0 5
- 30. Sammons P., Toth K., Sylva K., Melhuish E., Siraj I., Taggart B. The long-term role of the home learning environment in shaping students' academic

- attainment in secondary school. *Journal of Children's Services*, 2015. Vol. 10(3), pp. 189—201. DOI:10.1108/JCS-02-2015-0007
- 31. Tamayo N., Xerxa Y., Law J., Serdarevic F., Jansen P., Tiemeier H. Double advantage of parental education for child educational achievement: the role of parenting and child intelligence. *European Journal of Public Health*, 2022. Vol. 32. Issue 5, pp. 690—695. DOI:10.1093/eurpub/ckac044
- 32. UNICEF. A World Ready to Learn: Prioritizing Quality Early Childhood Education. 2019. URL: http://dx.doi.org/www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief2019.pdf
- 33. Zhiling M.Sh. Do Prekindergarten benchmarks affect fourth-grade academic outcomes? *Early Childhood Research Quarterly*, 2021. Vol. 57, pp. 285—297. DOI:10.1016/j.ecresq.2021.07.003

Литература

- 1. Белолуцкая А.К., Веракса А.Н., Алмазова О.Б., Бухаленкова Д.А., Гаврилова М.Н., Шиян И.Б. Связь характеристик образовательной среды детского сада и уровня развития регуляторных функций дошкольников // Психологическая наука и образование. 2018. Том 23. № 6. С. 85—96.
- 2. *Бурлакова И.А*. Теория и практика современного отечественного дошкольного образования // Психологическая наука и образование. 2015. Том 20. № 3. С. 35—43. DOI:10.17759/pse.2015200305
- 3. Двойнин А.М., Савенков А.И., Поставнев В.М., Троцкая Е.С. Когнитивные предикторы академической успешности у дошкольников и младших школьников // Вопросы психологии. 2020. Том 66. № 6. С. 106—116.
- 4. Двойнин А.М., Троцкая Е.С. Когнитивные предикторы академической успешности: как общие закономерности «работают» на ранних этапах образования? // Психологическая наука и образование. 2022. Том 27. № 2. С. 42—52. DOI:10.17759/pse.2022270204
- 5. Иванова А.Е., Кузнецова М.И., Семенов С.В., Федорова Т.Т. Факторы, определяющие готовность первоклассников к школе: выявление региональных особенностей // Вопросы образования. 2016. № 4. C. 84—105. DOI:10.17323/1814-9545-2016-4-84-105 6. Мириманова М.С. Раннее прогнозирование социально-психологических рисков ИΧ профилактика в дошкольных образовательных учреждениях [Электронный pecypc] Психологическая наука и образование. 2013. Том 5. № 1. URL: https://psyjournals.ru/journals/psyedu/ archive/2013 n1/59150 (дата обращения: 25.05.2023). 7. Нисская А.К. Проблема перехода к обучению в школе. Обзор международных практик подготовки детей, организации преемственности образовательного

взаимодействия

родителей

- образовательных организаций // Современное дошкольное образование. 2019. № 1(91). С. 18—31. DOI:10.24411/1997-9657-2019-10037
- 8. Нисская А.К. Социальная ситуация развития в дошкольном учреждении как фактор адаптации первоклассников к школе // Психологические исследования. 2012. Том 5. № 23. С. 8. DOI:10.54359/ ps.v5i23.777 (дата обращения: 25.05.2023).
- 9. Очкина А.В. Культурный капитал семьи как фактор социального поведения и социальной мобильности (на материалах исследования в провинциальном российском городе) // Мир России. 2010. Т. 19. № 1. С. 67—88.
- 10. Правительство Российской Федерации. Единый план по достижению национальных целей развития Российской Федерации на период до 2024 г. и на плановый период до 2030 г. 2021 [Электронный pecypc]. URL: https://www.economy.gov.ru/material/ file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan po dostizheniyu_nacionalnyh_celey_razvitiya_do_2024g.pdf 11. Приказ Министерства образования и науки Российской Федерации от 17 октября 2013 г. 1155 «Об утверждении федерального государственного образовательного стандарта дошкольного образования» [Электронный ресурс]. URL: https://docs.edu.gov.ru/document/7dcd2fd1d14f 608ec97e9ef6699f99ae/
- 12. *Прошкова З.В.* Влияние обучения в детском саду на образовательную успешность младшеклассников в оценках родителей // Мир науки. Педагогика и психология. 2021. Том 9. № 5. DOI:10.15862/22PSMN521
- 13. Смирнова Е.О. Развивающее дошкольное образование: ключевые условия и препятствующие факторы [Электронный ресурс] // Психологопедагогические исследования. 2019. Том 11. № 4. С. 79—89. DOI:10.17759/psyedu.2019110406
- 14. Указ Президента Российской Федерации от 21 июля 2020 г. № 474 «О национальных целях

содержания,

- и стратегических задачах развития Российской Федерации на период до 2024 г.» [Электронный ресурс]. URL: http://kremlin.ru/acts/bank/45726
- 15. *Хухлаев О.Е., Чибисова М.Ю.* Образовательные достижения учащихся в школах с высокой численностью детей-мигрантов // Психологическая наука и образование. 2022. Том 27. № 5. С. 46—56. DOI:10.17759/pse.2022270504
- 16. Шведовская А.А., Загвоздкина Т.Ю. Социально-экономический статус семьи и психическое развитие ребенка: зарубежный опыт исследования // Психологическая наука и образование. 2013. Том 18. № 1. С. 65—76.
- 17. Anderson S., Phillips D. Is pre-K classroom quality associated with kindergarten and middle-school academic skills? // Dev Psychol. 2017. Vol. 53(6). pp. 1063—1078. DOI:10.1037/dev000031
- 18. Davis-Kean P.E., Tighe L.A., Waters N.E. The Role of Parent Educational Attainment in Parenting and Children's Development // Current Directions in Psychological Science. 2021. Vol. 30. Issue 2. DOI:10.1177/0963721421993116
- 19. Fenech M., Skattebol J. Supporting the inclusion of low-income families in early childhood education: an exploration of approaches through a social justice lens // International Journal of Inclusive Education. 2019. Vol. 25. pp. 1—19. DOI:10.1080/13603116.2019.1597929
- 20. Fitzpatrick C., McKinnon R.D., Blair C.B., Willoughby M.T. Do preschool executive function skills explain the school readiness gap between advantaged and disadvantaged children? // Learning and Instruction. 2014. Vol. 30. pp. 25—31. DOI:10.1016/j. learninstruc.2013.11.003
- 21. Karam R., Zellman G., Perlman M. Child Cognitive Development and Parent Roles: A Preliminary Comparison of Moroccan Parents to United States and United Kingdom Benchmarks // Journal of Child and Family Studies. 2023. pp. 1—12. DOI:10.1007/s10826-023-02542-y
- 22. Kassambara. Package "rstatix" [R package]. 2023 [Электронный ресурс]. Available at: https://cran.r-project.org/web/packages/rstatix/index.html (дата обращения: 10.03.2023)
- 23. Lynch K., Lee M., Loeb S. An investigation of Head Start preschool children's executive function, early literacy, and numeracy learning in the midst of the COVID-19 pandemic // Early Childhood Research

- Quarterly. 2023. Vol. 64. pp. 255—265. DOI:10.1016/j. ecresq.2023.04.002
- 24. Mengdi Qi, Yuhan Luo, Fumei Chen, Xin Xuan, Yanfang Li, Yun Wang. Longitudinal trajectories of approaches to learning among Chinese preschoolers: Family predictors and academic outcomes // Early Childhood Research Quarterly. 2023. Vol. 64. pp. 345—354. DOI:10.1016/j.ecresq.2023.04.011
- 25. OECD. Equity and Quality in Education: Supporting Disadvantaged Students and Schools. OECD Publishing, Paris, 2012. DOI:10.1787/9789264130852-en
- 26. OECD. Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care, Starting Strong, OECD Publishing, Paris, 2017. DOI:10.1787/9789264276116-en
- 27. Rankin P., Staton S., Potia A., Houen S., Thorpe K. Emotional quality of early education programs improves language learning: A within-child across context design // Child Development. 2022. Vol. 93(6). pp. 1680—1697. DOI:10.1111/cdev.13811
- 28. Revelle W. et al. Package "psych" [R package]. 2022 [Электронный ресурс]. Available at: https://cran.r-project.org/web/packages/psych/psych.pdf (Available at: 10.03.2023)
- 29. Ringsmose Ch. Gaps in Care: (E)quality ECEC in Nordic Early Childhoods. 2022. DOI:10.1007/978-3-030-91297-0 5
- 30. Sammons P., Toth K., Sylva K., Melhuish E., Siraj I., Taggart B. The long-term role of the home learning environment in shaping students' academic attainment in secondary school // Journal of Children's Services. 2015. Vol. 10(3). pp. 189—201. DOI:10.1108/JCS-02-2015-0007
- 31. Tamayo N., Xerxa Y., Law J., Serdarevic F., Jansen P., Tiemeier H. Double advantage of parental education for child educational achievement: the role of parenting and child intelligence // European Journal of Public Health. 2022. Vol. 32. Issue 5. pp. 690—695. DOI:10.1093/eurpub/ckac044
- 32. UNICEF. A World Ready to Learn: Prioritizing Quality Early Childhood Education. 2019. URL: http://dx.doi.org/www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief2019.pdf
- 33. Zhiling M.Sh. Do Prekindergarten benchmarks affect fourth-grade academic outcomes? // Early Childhood Research Quarterly. 2021. Vol. 57. pp. 285—297. DOI:10.1016/j.ecresq.2021.07.003

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Нисская А.К., Ахмеджанова Д.Р., Байрамян Р.М., Лизунова Е.Г. Связь раннего образовательного и семейного опыта с академическими результатами детей в младшем школьном возрасте Психологическая наука и образование. 2023. Т. 28. № 5

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Multivariance of Factors of Personal Resilience and its Impact on the Academic Performance of Schoolchildren

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There recently started researches of the personal and organizational resilience in the sphere of education that significantly enriched studies of the school successes/ failures and consequently actualized the big range of issues related to the subject of studied phenomenon. They included the questions that had key importance from the pedagogical point of view that covered the major factors of students' personal resilience development, its correlation with traditions and peculiarities of the school, interdependence of resilience and academic performance of the students. The overall research of the outlined interdependences assumed that the students characterized by the higher personal resilience possessed higher study motivation and actively utilized support of the society while solving the problems and more inclined to the democratic style of the study cooperation, actively attended optional classes. Response analyses of the 722 questioned students of the 5-9 grades of 8 schools of 2 municipal regions of Republic of Tatarstan gave the unexpected results. The students referred to the resilient category demonstrated different personal characteristics. Among those there were academically successful students and the middle range ones, that ones who refused support of the society and actively accepted that, the ones who normally demonstrate study independence and those who prefer external control. The identified diversity of the resilient students allowed to assume existence of different styles of resilience and defined the necessity to consider those styles when performing deeper analysis of the studied phenomenon. Results of the research of correlation of the personal resilience of the students and the set of internally aligned characteristics of the educational process given in this article allowed to look at the studied phenomenon from a different angle. It became almost imperative to perform deeper analysis of dependance of personal resilience upon the external conditions and also upon the inner personal characteristics of the individual and relation of the resilience with independence and emotionality of the student in regards to the study process.

Keywords: school failure; academic success; personal resilience; educational activity; educational traditions; interaction style; educational outcomes.

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Поливариантность факторов личностной резильентности и ее влияние на академическую успешность школьников

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Результаты исследований личностной и организационной резильентности в образовании, начавшихся сравнительно недавно и существенно обогативших работы в области школьной успешности/неуспешности, закономерно актуализировали целый комплекс вопросов, касающихся сути исследуемого феномена. В их числе наиболее важными с педагогических позиций являются вопросы о наиболее значимых факторах развития у школьников личностной резильентности, ее взаимосвязи с традициями и особенностями самой школы, взаимообусловленности резильентности и академической успешности обучающихся и ряд других. Комплексное исследование обозначенных зависимостей предполагало, что обучающийся, характеризующийся повышенной личностной резильентностью, обладает более высокой учебной мотивацией, активно пользуется помощью окружающих в решении возникающих проблем; склонен к демократическому стилю учебного взаимодействия; посещает какой-либо факультатив, кружок или секцию. Проведенный анализ ответов 722 опрошенных обучающихся 5—9-х классов 8-ми общеобразовательных организаций 2-х муниципальных районов Республики Татарстан показал неожиданные результаты. Обучающиеся, отнесенные к категории резильентных, продемонстрировали различные личностные качества. Среди них оказались как академически успешные ученики, так и «середнячки»; отказывающиеся от помощи окружающих и активно ее принимающие; характеризующиеся учебной самостоятельностью и отказавшиеся от нее в пользу внешнего контроля и т.п. Очерченная разнородность резильентных школьников позволяет предположить различие стилей резильентности, определяет необходимость учитывать эти стили при проведении более глубокого анализа исследуемого феномена. Представленные в статье результаты исследования взаимосвязи личностной резильентности школьников и комплекса внутренне согласованных характеристик образовательного процесса позволяют взглянуть на исследуемый феномен под новым углом зрения. Утверждается необходимость более глубокого анализа зависимости проявлений личностной резильентности как от внешних по отношению к обучающемуся условий, так и от его внутренних, личностных характеристик; связи резильентности с самостоятельностью и эмоциональностью школьников в отношении учебной деятельности.

Ключевые слова: школьная неуспешность; академическая успешность; личностная резильентность; образовательная деятельность; образовательные традиции; стиль взаимодействия; результаты образования.

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Introduction

Being, among other things, an attractive resource for improving the results of school education in general, the solution of school failure problems found itself in the focus of multiple domestic and foreign studies. The term "academic failure" was presumably identified in domestic pedagogical science and practice as "academic underperformance", meaning a student's habitual educational lag in mastering the content of education. This lag, in turn, caused many side effects, such as a decrease in learning motivation and discipline, an absenteeism or refusal to attend school [6]. The reasons for this were explained in Russian research tradition mainly by the psycho-physiological, psychological and professional characteristics of the actors of education: failing students, teachers and parents.

On the contrary, in foreign psycho-pedagogical tradition, the main cause of academic failure was explained by socio-economic factors. For instance, the connection between the academic success of students and the socio-economic characteristics of families and their social well-being is deemed as obvious [18].

In the context of the approaches above, special attention has been drawn to cases that stand out of the general logic and involve situations of the failure of psychologically stable students caused by the change in the educational activity context, and, conversely, the examples of the academic success of learners that stay in unfavourable conditions. The undertaken comprehensive pedagogical and psycho-pedagogical studies of academic failure, which explored the relationship between external educational conditions (in relation to the learner) and his/her internal (personal) state, made it possible to assume the connection of academic failures with personal resilience [6].

The concept of "personal resilience" is still interpreted ambiguously in modern science. The theoretical analysis of "resilience" as a concept, performed by Selivanova, Bystrova, Derech, Mamontova, Panfilova, led these researchers to the conclusion that both domestic and foreign scientists consider it as viability and vitality at the same time [5]. In particular, Makhnach is of the opinion that the English-language term "resilience" (flexibility, tenacity, elasticity, resistance to external influence) would be more correctly applied in the Russian language as a synonym for the word "viability" — i.e. personal resilience means the ability to stay alive, to preserve one's life, to exist and develop, of being adapted to life [8]. This opinion is confirmed in the work by Valieva who states that resilience is the ability for quick adaption in unpredictable and difficult life situations [1, p. 97]. S. Maddi writes that the path to viability (in this context — resilience) is a vital capacity which increases the potential for viability in difficult circumstances [26]. In addition to "personal resilience", pedagogical studies actively discuss the phenomenon of "academic resilience" that means the ability of a learner or an educational organisation to demonstrate high academic results in difficult circumstances [4, p. 36].

In spite of their abundance, the studies of resilience so far do not let one unambiguously answer the questions on the relationship between students' personal resilience and their academic success; on the impact of the dominant style of pedagogical interaction practiced at school on resilience; on the orientation of the teaching and learning processes at the achieving of educational results or towards a demonstration of the indicators of academic freedom provided to students, along with a number of other factors. The answer to these questions determines the possibility of an efficient introduction of the results of theoretical research into educational practice [2; 8].

The set of pressing issues that touch upon various aspects of resilience as a personal phenomenon that has organisational and pedagogical support makes relevant the need for a comprehensive study aimed at identifying the most common and explicit dependencies of personal resilience to the diverse characteristics of the educational process. Obviously, research of this kind is quite extensive, cannot be carried out simultaneously and requires a sequence of exploratory studies represented, among others, by the present essay.

According to its goals, the research can be classified as a pilot study. Its first stage concerned a primary search of dependencies and was carried out using a simplified programme based on the cluster analysis of relationships. At the same time, the study also included a more serious analysis of interrelations (based on correlation analysis), which made it possible to draw more in-depth conclusions on its grounds.

Key Research Questions:

- 1) How is personal resilience related to the learner's other characteristics and his/ her academic success?
- 2) What characteristics of the educational process influence the learner's personal resilience and academic success?

The **methodological** basis for the quantitative and qualitative analysis of the research findings was as follows:

1) the concept of the unity of politics and nature [24; 25] that turned the authors to the consideration of various situations related to the disturbance of the psychological and social balance of schoolchildren, with regard to the variety of their internal and external interrelations and interdependence. From

these positions, the phenomenon of student's personal resilience is interpreted as a characteristic of the process of revision of his/her relations with the elements of the significant environment in a non-equilibrium situation towards ensuring its sustainability.

- 2) the synergetic approach [21; 22; 23] to the analysis of developmental processes, asserting the openness of the system to be its main condition. In accordance with this approach, a student's personal resilience, as a characteristic of the sustainability of his/her development, should be ensured by his/her vigorous interaction with various education actors in a broad sense.
- 3) the activity approach [3; 20] to the organisation of educational process, focusing on the leading role of activity in the formation of schoolchildren's personal qualities.

The above approaches cover in the aggregate the main problem areas of research in the field of resilience and make it possible to consider it from the perspective of the unity of teachers, students and the educational organisation treated as interrelated and, at the same time, independent subjects of consolidated educational activity that integrates a multitude of separate actions. This, in turn, makes it possible to identify, on the basis of the quantitative and qualitative analysis of the research findings, the most significant factors of personal resilience development in schoolchildren in the context of their academic success/failure.

The survey **sample** comprised 791 students from 8 general education organisations representing 2 municipal districts of the Republic of Tatarstan. After culling, 722 questionnaires were admitted for further processing, which secured the due level of the statistical reliability of the obtained results.

The survey involved 5th—9th grade schoolchildren; the sample frame selection method was random sampling. The use of a more complex sample frame estimation method, with regard for the objectives of the study, was not required.

Methods. The survey was based on a specially designed questionnaire that included a module for assessing personal resilience, a module for assessing a set of characteristics of the educational process, potentially relevant for personal resilience and learners' academic success, a module for assessing deception in answering, and hard data.

The module for assessing personal resilience was developed on the basis of the "Brief resilience scale" method [27]. Testing the module for internal consistency of the characteristics describing personal resilience, with the use of standardised Cronbach alpha coefficient dently of the other modules), showed the result α_{ct} =0.927. The module included six statements offered for evaluation by the students on a 10-point scale. Three of them characterised a pupil as resilient and three — as non-resilient. To evaluate personal resilience, an integral coefficient was calculated as a ratio of resilience to nonresilience. The respondents with the coefficient above being equal to three or higher were referred to as the cluster of learners possessing due resilience.

The module assessing educational process made it possible to evaluate the emotional attitude towards learning, the level of pupils' academic independence and activity, their disposition to help on the part of teachers, parents and friends in a problem situation, their preferred style of learning interaction, plans for the future, as well as the level of self-esteem towards learning achievement.

The module assessing deception included mutually exclusive answer options and, on the conversely, identical response options. Depending on the received answers, a conclusion was made on the extent of risk of the pupil's inattentive completion of the questionnaire and his/her admission to further processing.

Additionally, the study involved the method of focused interviews with the

heads of educational organizations who took part in the study. The method was used to obtain the necessary clarifications to explain the identified dependencies.

Discussion. At the first stage of the research findings analysis, the authors engaged in the clustering of the surveyed schoolchildren on the basis of "personal resilience" and compared the characteristics of the outlined clusters. A total of 42.8% of the respondents turned out to be resilient. The comparison of answers by pupils representing "resilient" and "non-resilient" clusters showed the following results (Table 1).

The resilient pupils were characterised by more vivid emotional attitude towards learning. Most of them said they definitely "liked learning" (33.3% vs. 14.3%), but a significant share of the respondents definitely "disliked learning" (16.7% vs. 3.1%). Less than one per cent of resilient learners found it difficult to answer the question about their attitude to studying, while the respective number among the non-resilient pupils was 15.2%.

The resilient schoolchildren are more independent in solving arising problems. A total of 67.0% of them are not inclined to turn to anyone for help — "these are my problems". The corresponding share of the non-resilient schoolchildren is 13.7%.

Similar differences are observed with respect to academic independence. The statement "If the teacher does not control the students, they will be inactive" is generally rejected by 71.3% of the resilient pupils against 29.9% of the non-resilient ones. Those who disagreed principally constituted a share of 2.8% and 6.5% respectively.

In the case of appealing to a teacher for help in working with the learning material, the help options also differed for the analysed groups. As for the resilient pupils, the teacher "Explains how I can sort out the material on my own" almost three times more often (17.1% vs. 6.1%). As for the non-resilient ones, the teacher more often

Table 1

The Most Significant Differences between Resilient and Non-resilient Learners*

Variable parameter	Resilient (%)	Non-resilient (%)
They like to learn	33.3	14.3
They do not like to learn	16.7	3.1
They do not tend to turn to anyone for help	67.0	13.7
Academic independence	71.3	29.9
The teacher explains how one can work out independently	17.1	6.1
The teacher tries to help right away	7.9	85.7
The parents are always responsive to requests	31.9	68.3
The parents handle only a small share of requests	37.7	7.1
They are orientated towards continuing their education	68.7	34.9
They are orientated towards getting a job	16.8	14.3
They attend an elective course, study group or club	50.1	63.9
They think they can learn better	35.4	64.3
Academic performance	score 4.17	score 3.96

^{*} The probability of null hypothesis on random nature of differences is H<5%

"Tries to help immediately if he/she has time" (85.7%) or even "Finds time for an additional class" (7.9%). The share of such options for the resilient pupils is 49.9% and 1.6%, respectively.

The parents help resilient schoolchildren in their studies to a significantly lesser extent as well. Answering the corresponding question, the option "The parents always respond to my requests" was checked by 31.9% of the resilient pupils and by 68.3% of the non-resilient schoolchildren; and on the contrary, the option "The parents handle only a small share of my requests" was marked by 37.7% and 7.1% respectively. To the parents' credit, it should be noted that the option "The parents can never help me" was checked by only 2.5% of the surveyed schoolchildren.

The obtained data generally agrees with the results of the survey by Kosaretsky, Mertsalova and Senina which shows that parents of the least performing children note more often the lack of the school's attention to pupils' learning problems, while teachers working at schools with a high proportion of failing children demonstrate a low level of responsibility for the academic success of pupils [7].

The majority of resilient learners are more oriented towards continuing their studies at higher educational establishments (68.7% vs. 34.9%), which is quite natural, given their higher academic performance on the average (score 4.17 vs. 3.96). However, the number of those oriented to "start working" is also higher among resilient learners (16.8% vs. 14.3%), which is evident of heterogeneity of the "resilient" group. This is also evidenced by a fairly even distribution of resilient learners in terms of the need to stay at an extended day group at school. Although the "I doubt it, but why not?" answer option was the most popular (31.7% of all responses), all other response options, from definitely positive to unambiguously negative, scored approximately 16% with minor deviation. The group of non-resilient schoolchildren did not show such unanimity.

The non-resilient students proved to be more active when in concern to additional education. A total of 63.9% of them attended some elective course or a club/section. The respective share among resilient learners was slightly more than half — 50.1%.

Non-resilient schoolchildren also are more optimistic about their ability to learn better. A total of 64.3% of them noted that they "could learn much better", and 28.6% — that "generally, they could learn better, but not really by much". The respective proportion among resilient pupils was 35.4% and 48.9%.

The differences between the analysed groups in terms of preferred interaction style (autocratic, democratic, liberal) and learning orientation (formal indicators or formed competences) proved to be statistically insignificant.

The generalization of cluster analysis results points towards the presence of statistically reliable differences between the explored groups of schoolchildren in the above-considered parameters and, at the same time, towards significant internal differences. In particular, despite the predominantly higher academic performance of resilient schoolchildren this cluster also includes stable low-performers, the same way that one can see quite successful pupils in the cluster of non-resilient students.

In order to clarify the specific features of resilient learners and the educational process characteristics that influence personal resilience, a correlation analysis of the results was carried out. When preparing the study, the authors hypothetically assumed, relying on multiple publications, that a learner characterized by a stronger personal resilience has the following features: a higher learning motivation (likes to study) and demonstrates higher academic performance; resorts to help of the parents. class teacher, teachers and schoolmates in solving his/her problems; is inclined to the democratic style of educational interaction; is focused on the formation of personal competencies, not formal indicators of his/ her efficiency; is independent in studies and does not need the teacher's control; is orientated towards continuing his/her studies at a university; does not need to stay at extended day group; attends some elective, workshop or special classes; is confident that he/she can learn even better. As a result, an attractive image was formed — of a person who is resilient towards life difficulties, is able to actively use the resources provided by the personal environment in order to overcome any obstacles effectively. However, not all of these assumptions were confirmed during the course of the correlation analysis.

Based on the revealed significant correlations (p<0.05), the following model of the personal resilience of schoolchildren was observed (Fig. 1).

When speaking of the most important characteristics of personal resilience, it is necessary, firstly, to note the autonomy of a resilient learner, which largely contradicts the initial assumptions on one's orientation to help of his/her immediate environment and the ability to use it effectively. This said autonomy is determined by the following groups of objective and subjective factors/features:

1. Self-dependence in learning and in solving school problems — two aspects of the general personal independence of schoolchildren — overlapping, but not identical — objectively it is conditioned by the absence or the minimal meaningful help in studies from the parents, as well as problems with help on the part of the teachers.

Resilient pupils do not seek help from anyone in case of any problems at school (not only academic ones) — not from the class teacher nor from other teachers, nor from the parents/relatives, not even from their friends — "I will not turn to anyone — these are my problems".

Independence in resolving school problems, like academic independence, correlates with schoolchildren's confidence in the achieved maximum of their own educational resources. However, in this case, this confidence is manifested against the background of the denial of one's real educational results in favour of formal indicators. Objectively, this type of independence is "supported" by the lack of clear instructions from the teachers on the performing of learning assignments, against the backdrop of children's unwillingness to appeal for help. Considering that, talking of academic independence, this was associated with "teacher refusal", one should realise that independence in solving school problems correlating with "no appeals" can be considered an extreme expression of general personal independence and can be evident of the formed attitude towards a "non-cooperation" with teachers. A.S. Fomichenko in her research addresses the role of the emotional support of pupils and guidance of their academic achievements. She substantiates the relevance of the assumption that the relationship between the teacher and the learners is a significant motivational factor affecting schoolchildren's academic performance [15]. She also explores thoroughly the effect of teachers' expectations on learner performance.

In general, the correlation analysis results confirm the preliminary conclusions drawn on the basis of cluster analysis. It should be recognised that the outlined correlations point at significant problems in the organisation of the educational process, and, as a result, at schoolchildren's actualised need to rely on their own resources in solving educational and extracurricular problems. The latter obviously is an important factor (among other conditions) in the formation of resilience as the ability to maintain a personal stability contrary to circumstances.

The mentioned correlations confirm that providing pupils with the possible maximum, a pedagogically justified academic freedom (both on the part of the teachers and parents) is a key factor in the formation of their academic independence. Incidentally, this approach is fully consistent with the requirements of personality-oriented

education [17] and the guidelines of modern educational standards.

- 2. Internal motivation of learning activity manifested in the denial of the teacher's control - as a leading condition of students' academic activity; this group naturally denies the need for an extended day group as a form of additional help in the solution of academic problems. Given that the presence of such a group can act as a serious mechanism compensating for a negative contextual influence, the indicated correlation seems to be important. In other respects, correlation analysis showed the same significant dependencies as those observed in relation to learners' independence: the development of pupils' intrinsic learning motivation can be facilitated by no help or by minimal assistance on the part of teachers and parents. Also, a developed internal motivation is accompanied by the learners' confidence that they cannot learn better than they do now.
- 3. The ability to recover quickly after various incidents at school — this, according to correlation analysis, is the most significant component of personal resilience. The presence of significant correlations between the described ability and the ability to quickly recover from quarrels and troubles, as well as to cope with problems without unnecessary worries, testifies to its system-forming role in a set of personal resilience indicators. However, of special attention is the correlation of this ability with the learner's orientation at high academic performance indicators (Unified State Examination, high grades, an impressive portfolio) rather than educational results (the due-quality performance of educational tasks, the maximum assimilation of learning topics, their correlation with personal experience).

Since the learners' revealed orientation contradicted the authors' initial assumption on the preference of their own competencies rather than of formal indicators of efficiency by resilient pupils, a focused interview with the heads of relevant educational organizations was undertaken in order to find out the reasons for this state of affairs. The interview yielded expected results, confirming that all educators, without exception, used the managerial method based on key performance indicators. At the same time, the main KPIs rest on results of the Basic State Examination. the Unified State Examination, All-Russian test papers, school victories in competitions/olympiads of various levels as well as some derived indicators that position the school within the municipal education system. The corresponding attitudes are transmitted by teachers to learners, which in turn shapes the higher stability of those who accept the "rules of the game" to a due extent.

The presence of both high performing learners and low performers among resilient pupils actualised the issue of the associated factors of academic success/ failure. In order to identify them, the authors identified two respective clusters of learners. The poor performers were those who demonstrated a grade point average of 3.5 or less during the past year, and the high performers were those who had a grade point average above 3.5. The results of the correlation analysis held within the clusters, with a further comparison of the findings, showed the presence of statistically significant differences in the academic success of the outlined groups of schoolchildren.

Both groups of pupils improve their academic performance if they feel in the process of learning "that they now know more than before" and that "they have not lived this day in vain, having achieved something". In addition, efficient pupils have social motivation added to intellectual and meaning-based motivations — "classmates, teachers and parents recognise my success and respect me more". Material incentives ("they buy me good things") and psychoemotional stimuli ("everyone praises me") in both cases do not provide the expected result in the form of a steady improvement of academic performance.

The meaning of educational activity for low performing and high performing schoolchildren also differs. The academic performance in the low performers cluster correlates exclusively with an understanding of the fact that the future depends "on how I study today, whether I will have a worthy place in the society". The correlation range for high performers is much broader. Statistically significant correlations in this case show the dependence of one's academic performance on the understanding of its coherence, in addition to the social position with "material wellbeing", the possibility to engage in "intellectual labour" in the future. "to do something worthy in life, to be of a high benefit to people".

The achievements of low performers correlate exclusively with a certain type of learning activity in class and when doing homework — aimed at memorisation: "reading, memorising texts and definitions". The correlations for high achievers are much richer. In addition to the orientation on the acquisition of knowledge, learning efficiency is determined by the urge for understanding ("I explain why this is so and not otherwise"), practical application ("I apply acquired knowledge for solving new challenges"), analysis ("I single out the most important of what I have learnt; I reveal the logic of the interrelation of the parts and the whole") and synthesis ("I conclude how new knowledge is connected with what I already know; I prepare presentations, essays").

High performing pupils view academic achievement as correlating with the fact that they "always get an assessment of what they do". At the same time, the assessment "always corresponds to academic achieve-

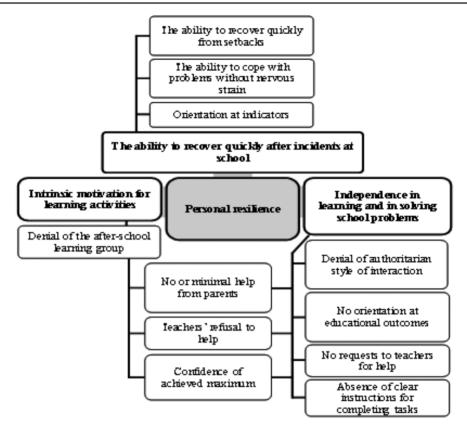


Fig. 1. Model of Schoolchildren's Personal Resilience

Table 2 Significance of Correlations between Personal Resilience Constituents

	Р		b.	
	0,000 Ability to quickly recover		0,006	Ability to quickly recover from accidents
		after school incidents	0,029	Ability to tackle problems without worrying
_ n			0,030	Focus on the performance indicators
resilience	0,006 Independence in learning	0,001	Denial of the authoritarian manner of interaction	
Sille		and in solving school	0,009	Lack of focus on the educational outcome
_	- 1 .	problems	0,006	Absence of support requests to teachers
Personal			0,022	Lack of precise instructions for the implementation of tasks
ers	0,002 Intrinsic motivation to		0,000	Denial of the extended-day groups
"		study	0,000	Absence or minimal help from parents
			0,002	Refusals to help from teachers
			0,000	Confidence in the accomplished maximum

^{*} P-value (2-sided).

ments", and pupils are "always satisfied with their academic results". The above-mentioned dependencies are not traced for low performers; however, the improvement of their academic success correlates with "receiving individual assignments in class and for homework". The common feature for all pupils is the dependence of their success on the "extent their assignments match their interests and abilities".

Thus, the undertaken analysis makes it possible to state that, in general, while the success of resilient pupils is higher, the differences among them in terms of academic success/failure are conditioned by the differing degree of their involvement in the educational process under the influence of both internal and external factors. The internal reasons for resilient learners' success include a deeper understanding of the meaning of education and its impact on life prospects. The external factors include the impact of academic performance on the learner's sociometric status, the diversity of educational activities and their goals, the extent to which educational assignments match the learner's individual characteristics, the adequacy of the evaluation of their fulfilment.

Taking into account that the same group of resilient learners included the pupils differing in academic performance, attitude to studies, as well as the nature of interaction with other educational activity actors, it is logical to assume that the high degree of resilience towards the problem situations that unites them has different grounds. This not only explains the absence of statistically confirmed correlations, but also points to the existence of different "individual styles" of resilience. These styles represent a more or less coherent set of methods (forms, tools and methods) used by the learners to return to a temporarily lost equilibrium from the urge to meet the teachers' requirements to a maximum extent to, conversely, manifestations of protest against them.

The difference in individual resilience styles, in turn, allows one to assume the presence of a certain "equilibrium point" in a learner as the basis of the above — as a complex of the most significant subjective values that determine the learner's evaluation of the context of their own activities and self-assessment in some given circumstances. The pupil's state matching the indicated values is perceived by him/her as comfortable, and it motivates the pupil to return to the "equilibrium point" in case of a violation of the equilibrium state. Obviously, learners differ significantly from each other on this basis. For instance, a "satisfactory" rating is guite comfortable for some pupils, while for others it is critically low.

Similarly, the individual differences of resilient learners will manifest themselves in relation to an educational activity context perceived by them as a deviation from some norm. If, for instance, rudeness on the part of an adult can permanently bring one learner out of balance, this attitude can be perceived by another pupil as a quite familiar pattern.

Undoubtedly, these hypotheses require additional research for their scientific substantiation. At the same time, being based on the fundamental provisions of the science on individuals' differing subjective reactions to comparable objective impacts, and on the internal changes being influenced by external factors, the proposed hypotheses might be deemed to be viable.

Conclusions

- 1. Personal resilience, as a learner's ability to quickly recover from various incidents at school, to recover after quarrels and troubles, to cope with challenging (academic and extracurricular) circumstances without excessive nervous strain, may have different manifestations in similar conditions, which requires a differentiated approach to its analysis and targeted formation.
- 2. Resilient students differ from nonresilient ones by a range of features, in-

cluding a more emotional attitude towards learning, independence in solving arising problems in life and at school: they are more orientated towards continuing their education; the number of high achievers among them is higher. Non-resilient learners are more active in terms of additional education, more optimistic about their ability to study better. However, in case of pronounced differences between the surveyed groups of learners, it would be premature to assert their personal resilience as a basis for academic success or to consider resilience as a certain system-forming quality of the individual which forms a space of unambiguously positive attending qualities.

3. With a pronounced similarity in terms of "resilience", the surveyed groups of learners are quite heterogeneous in their characteristics, which is reflected in weak correlations between resilience and certain characteristics of schoolchildren. This can be explained by the difference in learners' "resilience styles", accounted for by the individuality of their states perceived as "comfortable", as well as the individual perception of the context of their activities and the difference in the ways used to return to the initial state after being forced to leave it. At the same time, correlation analysis results suggest that the key feature of a resilient learner is his/her autonomy, manifested in: 1) the independence in solving academic and other school problems as a reaction to the absence or insufficiency of meaningful help from parents and teachers, and 2) an expressed intrinsic motivation for learning shown through the students' rejection of teacher control as a major condition of academic activity.

- 4. The differences in resilient pupils' academic success/failure are caused by their differing involvement in the educational process under the influence of internal and external factors (the former an increased awareness of the purpose/importance of education and its influence on life prospects; the latter the influence of academic achievements on the pupil's sociometric status, the diversity of educational activities and their goals, compliance of educational assignments with the learners' individual characteristics and adequacy in the evaluation of their performance).
- 5. The formation of personal resilience in students is principally influenced by the frequently arising need to solve their problems independently, as well as by the variety of educational interaction styles offered by the teachers that makes the pupils continually adapt to changing conditions. At the same time, the nature of resilience is determined by educational traditions dominating the school and its target orientations.

References

1. Valieva F.I. Individual'no-lichnostnye predposylki rezil'entnogo povedeniya [Individual and personal prerequisites of resiliency behavior]. *Vestnik Severo-Osetinskogo gosudarstvennogo universiteta im. K.L. Khetagurova. Obshchestvennye nauki = Bulletin of the K.L. Khetagurov North Ossetian State University. Social sciences*, 2016, no. 4, pp. 97—100. (In Russ.). 2. Gaifullina N.G., Talysheva I.A. Psikhologicheskii klimat obshcheobrazovatel'noi shkoly kak uslovie formirovanie rezil'entnosti obuchayushchikhsya [The psychological climate of a secondary school as a condition for the formation of the formation of resilience

of students]. Kategoriya "sotsial'nogo" v sovremennoi

- pedagogike i psikhologii: Materialy 10-i vserossiiskoi nauchno-prakticheskoi konferentsii s distantsionnym i mezhdunarodnym uchastiem [The category of "social" in modern pedagogy and psychology: Materials of the 10th All-Russian Scientific and Practical Conference with remote and international participation]. *Ul'yanovsk: Zebra*, 2022, pp. 124—127. (In Russ.).
- 3. Davydov V.V. Teoriya razvivayushchego obucheniya [Theory of developmental learning]. Moscow: INFO, 1996. 554 p. (In Russ.).
- Zvyagintsev R.S. Lichnostnye kharakteristiki uchashchikhsya rezil'entnykh i neblagopoluchnykh shkol: raznye deti ili raznye shkoly [Personality characteristics of students of the formation of resilience

- and disadvantaged schools: different children or different schools]. *Voprosy obrazovaniya* = *Educational Studies Moscow*, 2021, no. 3, pp. 33—61. (In Russ.).
- 5. Selivanova O.A., Bystrova N.V., Derecha I.I., Mamontova T.S., Panfilova O.V. Izuchenie fenomena rezil'entnosti: problemy i perspektivy [Elektronnyi resurs] [Studying the phenomenon of resilience: problems and prospects]. *Mir nauki. Pedagogika i psikhologiya = The world of science. Pedagogy and psychology*, 2020. Vol. 8, no. 3. Available at: https://cyberleninka.ru/article/n/izuchenie-fenomena-rezilientnosti-problemy-i-perspektivy (Accessed 19.01.2023). (In Russ.).
- 6. Isaev E.İ., Kosaretskii S.G., Mikhailova A.M. Zarubezhnyi opyt profilaktiki i preodoleniya shkol'noi neuspevaemosti u detei, vospityvayushchikhsya v sem'yakh s nizkim sotsial'no-ekonomicheskim statusom [Foreign experience in preventing and overcoming school failure in children raised in families with low socio-economic status]. Sovremennaya zarubezhnaya psikhologiya = Modern foreign psychology, 2018. Vol. 8, no. 1, pp. 7—16. DOI:10.17759/jmfp.2019080101 (In Russ.).
- 7. Kosaretskii S.G., Mertsalova T.A., Senina N.A. Preodolenie shkol'noi neuspeshnosti: vozmozhnosti i defitsity rossiiskikh shkol [Overcoming school failure: opportunities and deficits of Russian schools]. *Psikhologicheskaya nauka i obrazovanie = Psychological science and education*, 2021. Vol. 26, no. 6, pp. 69—82. DOI:10.17759/pse.2021260605 (In Russ.).
- 8. L'dokova G.M., Shaqivaleeva Konfliktologicheskaya kompetentnosť uchitelya kak faktor akademicheskoi uspeshnosti uchashchikhsya [Conflictological competence of a teacher as a factor of academic success of students]. Rossiiskie i zarubezhnye praktiki povysheniya rezil'entnosti obrazovateľnykh organizatsii: Materialy Mezhdunarodnoi nauchno-prakticheskoi konferentsii [Russian and foreign practices of increasing the resilience of educational organizations: Materials of the I International Scientific and Practical Conference]. Kazan': KFU, 2022, pp. 110-116. (In Russ.).
- 9. Makhnach A.V. Zhiznesposobnost' kak mezhdistsiplinarnoe ponyatie [Viability as an interdisciplinary concept]. *Psikhologicheskii zhurnal = Psychological Journal*, 2012. Vol. 33, no. 6, pp. 84—98. (In Russ.).
- 10. Pinskaya M.A., Kosaretskii S.G., Frumin I.D. Shkoly, effektivno rabotayushchie v slozhnykh sotsial'nykh kontekstakh [Schools that work effectively in complex social contexts]. *Voprosy obrazovaniya = Educational Studies Moscow*, 2011, no. 4, pp. 148—177. DOI:10.17323/1814-9545-2011-4-148-177 (In Russ.).
- 11. Pinskaya M.A., Khavenson T.E., Kosaretskii S.G., Zvyagintsev R.S., Mikhailova A.M., Chirkina T.A. Poverkh bar'erov: issleduem rezil'entnye shkoly [Over

- the Barriers: Exploring resilient schools]. *Voprosy obrazovaniya = Educational Studies Moscow*, 2018, no. 2, pp. 198—227. DOI:10.17323/1814-9545-2018-2-198-227 (In Russ.).
- 12. Rusakova A.V. Potentsial razvitiya avtonomii uchashchikhsya v srednei shkole [The potential for developing students' autonomy in secondary school]. *Psikhologicheskaya nauka i obrazovanie = Psychological science and education*, 2022. Vol. 27, no. 3, pp. 28—38. DOI:10.17759/pse.2022270303 (In Russ.).
- 13. Ryl'skaya E.A. K voprosu o psikhologicheskoi zhiznesposobnosti cheloveka: kontseptual'naya model' i empiricheskii opyt [On the question of psychological viability of a person: a conceptual model and empirical experience]. *Psikhologiya. Zhurnal Vysshei shkoly ekonomiki = Psychology. Journal of the Higher School of Economics*, 2011. Vol. 8, no. 3, pp. 9—38. (In Russ.).
- 14. Ryl'skaya E.A. Nauchnye podkhody k issledovaniyu zhiznesposobnosti cheloveka v zarubezhnoi psikhologii [Scientific approaches to the study of human viability in foreign psychology]. *Teoriya i praktika obshchestvennogo razvitiya = Theory and practice of social development*, 2014, no. 8, pp. 57—58. (In Russ.).
- 15. Fomichenko A.S. Vzaimootnosheniya v sisteme «uchitel'-uchenik» kak uslovie uspeshnosti uchebnoi deyatel'nosti shkol'nikov [Relationships in the "teacherstudent" system as a condition for the success of students' educational activities]. *Psikhologicheskaya nauka i obrazovanie = Psychological science and education*, 2017. Vol. 22, no. 5, pp. 39—47. DOI:10.17759/pse.2017220505 (In Russ.).
- 16. Baronenko E.A., Bystrai E.B., Raisvikh Yu.A., Shtykova T.V., Belova L.A. Formirovanie pedagogicheskoi rezil'entnosti budushchikh uchitelei v sovremennykh usloviyakh [Formation of pedagogical resistance of future teachers in modern conditions]. Perspektivy nauki i obrazovaniya = Prospects of science and education, 2021, no. 3(51), pp. 140—154. (In Russ.). 17. Khutorskoi A.V. Sovremennaya didaktika: Ucheb. Posobie [Modern Didactics: Textbook]. Moscow: Vysshaya shkola, 2007. 639 p. (In Russ.).
- 18. Bourdieu P. The forms of capital. In: Richardson, J. Handbook of Theory and Research for the Sociology of Education. Westport, CT: Greenwood, 1989, pp. 241—258.
- 19. Eachus P. Community Resilience: Is it greater than the sum of the parts of individual resilience? 4th International Conference on Building Resilience, Building Resilience 2014, 8-10 September 2014, Salford Quays, United kingdom. *Procedia Economics and Finance*, 2014. Vol. 18, pp. 345—351. DOI:10.1016/S2212-5671(14)00949-6
- 20. Dewey J. Experience and Education. New York: Touchstone (Simon & Schuster) (first published

- 1938), 2007. Available at: https://archive.org/stream/ ExperienceAndEducation-JohnDewey/dewey-eduexperience_djvu.txt (Accessed 12.02.2023).
- 21. Fuller R.B. R. Buckminster Fuller on education. *University of Massachusetts Press*, 1979. 192 p.
- 22. Fuller R.B. Synergetics. Explorations in the Geometry of Thinking by R. Buckminster Fuller in collaboration with E.J. Applewhite. *First Published by Macmillan Publishing Co. Inc.* 1975, 1979. Available at: http://www.triviumeducation.com/texts/SYNERGETICS-BuckminsterFuller.pdf (Accessed 16.01.2023).
- 23. Haken H. Synergetik. New York: Springer-Verlag Berlin Heidelberg, 1978. 355 p.
- 24. Latour B. Politics of nature: how to bring the

Литература

- 1. Валиева Ф.И. Индивидуально-личностные предпосылки резильентного поведения // Вестник Северо-Осетинского государственного университета им. К.Л. Хетагурова. Общественные науки. 2016. № 4. С. 97—100.
- 2. Гайфуллина Н.Г., Талышева Психологический климат общеобразовательной школы как условие формирование резильентности обучающихся // Категория «социального» в современной педагогике и психологии: Материалы 10-й всероссийской научно-практической конференции дистанционным и международным участием. Ульяновск: Зебра. 2022. С. 124—127.
- 3. *Давыдов В.В.* Теория развивающего обучения. М.: ИНФО, 1996. 554 с.
- 4. Звягинцев Р.С. Личностные характеристики учащихся резильентных и неблагополучных школ: разные дети или разные школы // Вопросы образования. 2021. № 3. С. 33—61.
- 5. Изучение феномена резильентности: проблемы и перспективы [Электронный ресурс] / О.А. Селиванова, Н.В. Быстрова, И.И. Дереча, Т.С. Мамонтова, О.В. Панфилова // Мир науки. Педагогика и психология. 2020. Т. 8. № 3. URL: https://cyberleninka.ru/article/n/izucheniefenomena-rezilientnosti-problemy-i-perspektivy (дата обращения: 19.01.2023).
- 6. Исаев Е.И., Косарецкий С.Г., Михайлова А.М. Зарубежный опыт профилактики и преодоления школьной неуспеваемости у детей, воспитывающихся в семьях с низким социально-экономическим статусом [Электронный ресурс] // Современная зарубежная психология. 2018. Том 8. № 1. С. 7—16. DOI:10.17759/jmfp.2019080101
- 7. Косарецкий С.Г., Мерцалова Т.А., Сенина Н.А. Преодоление школьной неуспешности: возможности и дефициты российских школ // Психологическая наука и образование.

- sciences into democracy. Translated by Catherine Porter. Cambridge, Massachusetts: Harvard University Press, 2004. 307 p.
- 25. Latour B. Reassembling the social: an introduction to actor-network-theory. Oxford New York: Oxford University Press, 2005. 325 p.
- 26. Maddi S.R. On hardiness and other pathways to resilience. *American Psychologist*, 2005. Vol. 60, no. 3, pp. 261—262. DOI:10.1037/0003-066x.60.36.261
- 27. Smith B.W., Dalen J., Wiggins K., Tooley E., Christopher P., Bernard J. The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 2008. Vol. 15(3), pp. 194—200. DOI:10.1080/10705500802222972
- 2021. Tom 26. № 6. C. 69—82. DOI:10.17759/pse.2021260605
- 8. Льдокова Г.М., Шагивалеева Г.Р. Конфликтологическая компетентность учителя как фактор академической успешности учащихся // Российские и зарубежные практики повышения резильентности образовательных организаций: Материалы I Международной научно-практической конференции. Казань: КФУ, 2022. С. 110—116.
- 9. *Махнач А.В.* Жизнеспособность как междисциплинарное понятие // Психологический журнал. 2012. Т. 33. № 6. С. 84—98.
- 10. Пинская М.А., Косарецкий С.Г., Фрумин И.Д. Школы, эффективно работающие в сложных социальных контекстах // Вопросы образования / Educational Studies Moscow. 2011. № 4. С. 148—177. DOI:10.17323/1814-9545-2011-4-148-177
- 11. Поверх барьеров: исследуем резильентные школы / М.А. Пинская, Т.Е. Хавенсон, С.Г. Косарецкий, Р.С. Звягинцев, А.М. Михайлова, Т.А. Чиркина // Вопросы образования / Educational Studies Moscow. 2018. № 2. С. 198—227. DOI:10.17323/1814-9545-2018-2-198-227
- 12. *Русакова А.В.* Потенциал развития автономии учащихся в средней школе // Психологическая наука и образование. 2022. Том 27. № 3. С. 28—38. DOI:10.17759/pse.2022270303
- 13. *Рыльская Е.А.* К вопросу о психологической жизнеспособности человека: концептуальная модель и эмпирический опыт // Психология. Журнал Высшей школы экономики. 2011. Т. 8. № 3. С. 9—38.
- 14. *Рыльская Е.А.* Научные подходы к исследованию жизнеспособности человека в зарубежной психологии // Теория и практика общественного развития. 2014. № 8. С. 57—58.
- 15. *Фомиченко А.С.* Взаимоотношения в системе «учитель-ученик» как условие успешности учебной деятельности школьников // Психологическая

- наука и образование. 2017. Т. 22. № 5. С. 39—47. DOI:10.17759/pse.2017220505
- 16. Формирование педагогической резильентности будущих учителей в современных условиях / Е.А. Бароненко, Е.Б. Быстрай, Ю.А. Райсвих, Т.В. Штыкова, Л.А. Белова // Перспективы науки и образования. 2021. № 3 (51). С. 140—154.
- 17. *Хуторской А.В.* Современная дидактика: Учеб. пособие. М.: Высшая школа, 2007. 639 с.
- 18. Bourdieu P. The forms of capital // In: Richardson, J. Handbook of Theory and Research for the Sociology of Education. Westport, CT: Greenwood, 1989. P. 241—258.
- 19. Eachus P. Community Resilience: Is it greater than the sum of the parts of individual resilience? // 4th International Conference on Building Resilience, Building Resilience 2014, 8-10 September 2014, Salford Quays, United kingdom. Procedia Economics and Finance. 18 (2014). P. 345—351. DOI:10.1016/S2212-5671(14)00949-6
- 20. Dewey J. Experience and Education. New York: Touchstone (Simon & Schuster), 2007. URL: https://archive.org/stream/ExperienceAndEducation-JohnDewey/dewey-edu-experience_djvu.txt (Accessed 12.02.2023).

- 21. *Fuller R.B.* R. Buckminster Fuller on education. University of Massachusetts Press, 1979. 192 p.
- 22. Fuller R.B. Synergetics. Explorations in the Geometry of Thinking by R. Buckminster Fuller in collaboration with E.J. Applewhite. First Published by Macmillan Publishing Co. Inc. 1975, 1979. Available at: http://www.triviumeducation.com/texts/SYNERGETICS-BuckminsterFuller.pdf (Accessed 16.01.2023).
- 23. *Haken H.* Synergetik. New York: Springer-Verlag Berlin Heidelberg, 1978. 355 p.
- 24. Latour B. Politics of nature: how to bring the sciences into democracy. Translated by Catherine Porter. Cambridge, Massachusetts: Harvard University Press, 2004. 307 p.
- 25. *Latour B*. Reassembling the social: an introduction to actor-network-theory. Oxford New York: Oxford University Press, 2005. 325 p.
- 26. Maddi S.R. On hardiness and other pathways to resilience // American Psychologist. 2005. Vol. 60(3). P. 261—262. DOI:10.1037/0003-066x.60.36.261
- 27. Smith B.W., Dalen J., Wiggins K., Tooley E., Christopher P., Bernard J. The brief resilience scale: assessing the ability to bounce back // International journal of behavioral medicine. 2008. Vol. 15(3). P. 194—200. DOI:10.1080/10705500802222972

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The Impact of Students' Attitudes and Learning Activities on the Chess Academic Achievements in Primary Schools

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The purpose of the current research is to reveal the mechanisms of the influence of teaching and learning strategies and students' motivation on the chess knowledge in elementary schools. The sample of the study consists of 476 pupils from 42 schools, 476 parents, 42 teachers. The survey was conducted by random sampling with the participation of all regions of the Republic of Armenia, including the capital Yerevan. During the research, the following methods and tools of quantitative and qualitative research have been applied: questionnaire, test, action research. The results of the study demonstrate that developing new strategies by combining game playing and solving chess problems will stimulate students' learning interests and increase chess knowledge and skills. The positive attitudes towards the subject prevails, as well as the indicators of the students' self-determination manifestation. The solution of complex tasks by the students is more related to internal effort and abilities, allocating less attention to the success factor, as in the instance of a game of chess. On the other hand, considering the subject as complex has a negative effect on the results of the chess knowledge test.

Keywords: chess education; teaching and learning strategies; self-determination theory; intrinsic motivation; extrinsic motivation; attitudes; problem solving; game playing.

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Влияние учебной деятельности и установок учащихся начальной школы на учебные достижения по шахматам

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Целью настоящего исследования является выявление механизмов влияния стратегий преподавания и обучения, а также мотивации учащихся на шахматные знания в начальной школе. Выборка исследования состоит из 476 учеников из 42 школ. 476 родителей. 42 учителей. Опрос проводился методом случайной выборки с участием всех регионов Республики Армения, включая столицу Ереван. В ходе исследования были применены следующие методы и инструменты количественного и качественного исследования: анкетирование, тест, «исследование в действии» (action research). Результаты исследования демонстрируют, что разработка новых стратегий, сочетающих игру в шахматы и решение шахматных задач, будет стимулировать интерес учащихся к учебе и расширять шахматные знания и навыки. Было выявлено, что среди учащихся преобладают позитивное отношение к предмету, а также показатели проявления самоопределения. Решение учащимися сложных задач в большей степени связано с внутренними усилиями и способностями, при этом фактору успеха уделяется меньше внимания, как в случае с игрой в шахматы. С другой стороны, рассмотрение предмета как сложного негативно сказывается на результатах теста на знание шахмат.

Ключевые слова: шахматное образование; стратегии преподавания и обучения; теория самоопределения; внутренняя мотивация; внешняя мотивация; установки; решение проблем; игра.

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Introduction

The problem of chess in education and the effectiveness of its application as a tool for students' development have been studied from many perspectives. "Chess and Cognitive Development" study has been conducted by Johan Christiaen [1]. Expanding this research Ferguson's study focused mainly on "Developing Critical and Creative Thinking Through Chess" [2]. All these and many other research projects have found many evidences about the effectiveness of chess in education

Armenian scientists have conducted several studies devoted to chess in education since chess has been implemented as a compulsory subject in elementary schools curricula in the Republic of Armenia. Research papers are devoted to the impact of chess on cognitive and intellectual development [9, 12], quantitative analysis of the efficacy of chess in education [5], socio-psychological analysis of factors influencing Chess Education [3, 10], the connection of chess knowledge with the indicators of progress in mathematics and native language [11]. typical Expression of Cognitive Dissonance and Consonance among Primary-School Children playing chess [6], problem of chess and critical thinking [4, 8], the social value of chess [13], etc.

Summarizing the results and assumptions of these studies, we can state that chess as an educational subject has a huge impact and potential for students' cognitive, social and emotional development. Nowadays, we should not only focus on testing these results but we must also take into account that there are many cultural, environmental, social-psychological factors including teaching and learning strategies, students' motivation etc., which can influence the chess knowledge acquiring process among students. None of the

above-mentioned studies are focused on a deeper analysis of teaching and learning chess, such as defining how teaching and learning strategies and students' motivation can influence student's chess achievements. We tend to explain this by the absence or lack of necessity to study these kinds of problems so far. Actually, these problems are key issues for chess teachers and chess teaching methodologist. Within this context, one of the operational problems was regarding allowing students play chess during the lessons, which has been raised by many Armenian chess teachers during interviews and impersonal conversations. The problem of interactions between game and learning components is among the most important issues of contemporary school education. This problem can mostly be referred to chess education, where the game appears as an educational subject.

The authors point out that "conceptual confusion is particularly acute at the boundaries of these two activities in the establishment of so-called developmental game learning" when analyzing the problems of the transition from play to learning activities [16, p23].

There is another study, conducted by Philip Rifner [7], devoted to **Problem-Solv**ing Skills in Students with Average and Above Average Intelligence, which found that the inter-domain transfer of chess skills can be achieved if teaching for transfer is an instructional goal and that transfer occurs more readily and to a greater extent among students with above average ability. What can we learn from this study? From the point of view of our research purpose, we mostly focus on the study results to show that teaching goals and other factors (or independent variables) should also be taken into account. Moreover, we supposed, that the independent variables have different kinds of impacts on chess achievements, depending on personal characteristics, (including teaching and learning strategies implemented by teachers and students correspondingly, i.e. playing chess during the lessons; students' motivational factors, such as attitudes towards the lessons, causal attributions, self-efficacy, etc.).

By teaching and learning strategies we mean techniques and methods that teachers and students use for better learning. Especially within current research we mostly focused on students' game playing and solving chess problems (tasks) on the chessboard during chess lessons.

Among motivational factors which can have an impact on the students' chess knowledge, we are going to analyze attribution and students' attitudes to their lessons.

Weiner [14] identified ability, effort, task difficulty, and luck as the most important factors affecting attributions for achievement. Attributions are classified along three causal dimensions: locus of control, stability, and controllability. The locus of control dimension has two poles: internal versus external locus of control. The stability dimension captures whether causes change over time or not. Controllability contrasts causes one can control, such as skill/efficacy, from causes one cannot control, such as aptitude, mood, others' actions, and luck.

Weiner states: "Causal attributions determine affective reactions to success and failure. For example, one is not likely to experience pride in success, or feelings of competence, when receiving an 'A' from a teacher who gives only that grade, or when defeating a tennis player who always loses...On the other hand, an 'A' from a teacher who gives few high grades or a victory over a highly rated tennis player following a great deal of practice generates great positive affect." [15, p. 362].

Students with higher school achievement attribute success to internal, stable, uncontrollable factors such as ability, while they contribute failure to either internal, un-

stable, controllable factors such as effort, or external, uncontrollable factors like task difficulty.

Concerning the subject of chess learners' attributes, it is important to demonstrate their distinctive significance in educational achievement. It is especially interesting for chess learners to obtain credible information about their own abilities, achievements, failures, and comments on the task's complexity, as they have repeatedly become the subject of discussion after introducing chess as a compulsory subject in elementary schools. Thus, during discussions with teachers and annual trainings, issues concerning how tough or accessible chess activities are for various students, if chess might have a detrimental influence on students' self-confidence, selfefficacy, and so on were frequently raised.

The purpose of the current research is to reveal the mechanisms of the influence of teaching and learning strategies and students' motivation on the chess knowledge in elementary schools.

Research methods: In order to find the impact of many factors on chess education in Armenia, empirical research has been conducted. During the research, the following methods and tools of quantitative and qualitative research have been applied: questionnaire, test, action research.

Questionnaires were prepared for the beneficiaries — pupils, teachers, parents — which included questions about the child's chess experience, parents' attitude towards the chess subject, the teacher's effectiveness in teaching chess. Psychologists, chess players and teachers took part in compiling the questionnaires, which clarified and discussed each task to get a definite version.

The test on the chess knowledge was compiled, the purpose of which was to determine the level of knowledge acquired by pupils during the three years of learning chess.

The sample

The survey was conducted by random sampling with the participation of all regions of the Republic of Armenia, including the capital Yerevan. The total number of selected schools were 42.

Therefore, as a result 476 pupils from 42 schools, 476 parents, 42 teachers participated in the republican research.

The results

To the question "How often do you play chess during lessons?", the students' answers are distributed as follows (Diagram 2).

There is a linear trend: the decrease in the frequency of playing chess in classes raises the average score of the chart solution. Except for the "never" category, which drastically reduces the rating.

The Bold data in the column "Sig." of Table 1 are less than 0.05, indicating that the observed linear trend is statistically significant.

The analysis of the data showed that the average score of chess test solutions is the lowest and is 3.33 points in the case when students "never" play chess during chess lessons, (Diagram 3)

Number in schools in regions involved in current research

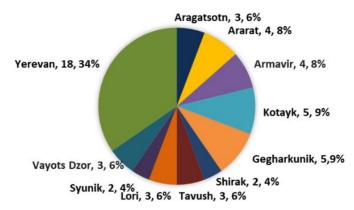


Diagram 1. The number of regional schools involved in the research

How often do you play during chess lessons?

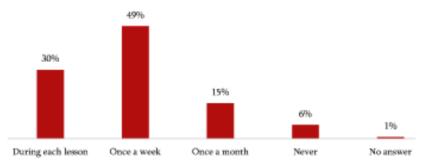
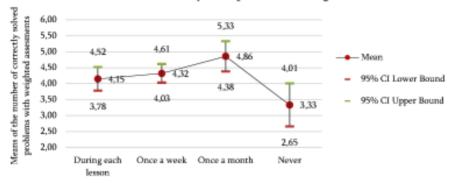


Diagram 2. Frequency of playing chess during chess lessons

Means of the number of correctly solved problems with weighted assesments



How often you solve problems and diagrams during the chess lessons on the chessboard?

Diagram 3. The number of correctly solved problems with weighted assessments

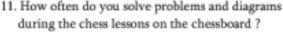
Diagram 3 shows that if the level "Never (they never play chess in class)" is excluded from the analysis, then when the intensity of the chess game is reduced, the average score of the chess test increases from 4.15 to 4.86. Dispersion analysis of three levels of chess playing intensity — "During every lesson", "Once a week" and "Once a month" shows that there is a statistically significant linear trend. decreasing the frequency of playing chess in classes increases the average score of the chess test F(1, 444) = 4.329, p = 0.038.

To the question "How often do you solve problems and diagrams during the chess lessons on the chessboard?", the students' answers are distributed as followнs (Diagram 4)

Visual comparison of the average scores of the chess test at different levels of intensity of solving problems in chess lessons, that increasing the intensity of solving chess problems in lessons increases the average score of the chess test (Diagram 5)

The dispersion analysis showed that the linear trend of increasing the average score of the chess test observed in Diagram 5 is statistically significant — F(1,470) = 8,028, p = 0.005.

Influence of chess lessons on chess skills. To evaluate the influence of chess



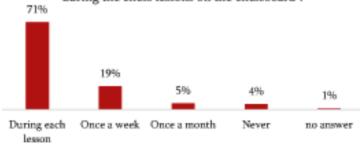
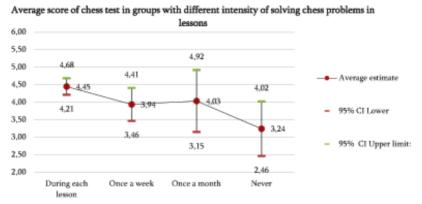


Diagram 4



How often you solve problems and diagrams during the chess lessons on the chessboard?

Diagram 5. Influence of the intensity of solving chess problems in lessons on the average score of the chess test

lesson settings on chess skills, students were given eight statements, from which they had to mark no more than three that they agree with the most. The order of answer selection was not taken into account. Approvals and the percentage of the choice of each of them are shown in Diagram 6.

To evaluate the influence of each of the tested attitudes, the t-criterion was used. For each attitude, the difference between the average scores of the chess test was estimated for two groups — those who marked and those who did not mark this attitude.

All differences in the Table 1 are statistically significant, except the differences conditioned by the factor "d. I learn a lot of useful things during chess lessons".

To the question of "What do you usually do during chess lessons?", there were 3 options. No priority was set between the options. There is a count of how many students cited this choice in any of the three notes.

Diagram 7 Behavioral models of students during chess lessons. It was allowed to mark no more than three answer variants

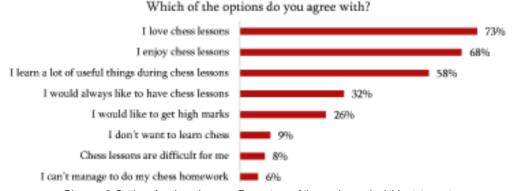


Diagram 6. Settings for chess lessons. Percentage of those who marked this statement.

No more than three statements were allowed to be noted

Table 1
Average values of the chess test for those who marked and did not mark
this setting and the results of t-tests

The number of	a. I enjoy chess lessons	Not mentioned	Mean	3.59
correctly solved prob-		Mentioned	Mean	4.61
lems with weighted assessments	b. I don't want to learn chess	Not mentioned	Mean	4.37
dococomonic		Mentioned	Mean	3.38
	c. I love chess lessons	Not mentioned	Mean	3.84
		Mentioned	Mean	4.45
	lacana	Not mentioned	Mean	4.33
		Mentioned	Mean	4.24
	e. I would like to get high marks	Not mentioned	Mean	4.50
		Mentioned	Mean	3.64
	f. Chess lessons are difficult for me	Not mentioned	Mean	4.41
		Mentioned	Mean	2.61
	g. I can't manage to do my chess homework	Not mentioned	Mean	4.38
		Mentioned	Mean	2.54
	h. I would always like to have chess lessons	Not mentioned	Mean	3.92
		Mentioned	Mean	5.05

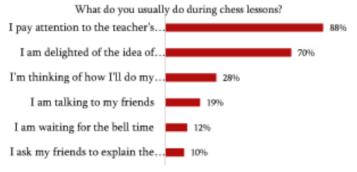


Diagram 7. Behavioral models of students during chess lessons. It was allowed to mark no more than three answer variants

Three behavioral models have a statistically significant effect on chess skills: those students who checked "I'm waiting for the call" have statistically significantly worse chess skills than those who did not check this option. The same is true for those who checked "I talk to my friends." And those who checked "I pay attention to the teacher's explanations of the lesson" statistically significantly have better chess skills than those who did not check this option.

Two possible answers: "b. I'm thinking about how I'm going to do my homework." and "I'm excited about the idea of playing chess" are on the edge of the commonly accepted level of statistical significance of 0.05. The first of them reduces the level of chess skills, and the second increases it.

The only behavioral model for which no statistically significant effect on chess skills was found is "f. I ask my friends to explain this lesson to me."

Table 2

Average values of the chess test for those who noted and did not note this behavioral model and the results of t-tests

Settings for chess lessons		Noted	Values and stats t-test significance
a. I am waiting for a call.	4.45	2.97	t(476) = -4.949 p = .000
b. I think about how I will do my homework.	4.40	3.96	t(476) = -1.947 p = .051
c. I'm talking to my friends	4.41	3.72	t(476) = -2.679 p = .009
d. I pay attention to the teacher's explanation of the lesson	3.06	4.47	t(476) = 5.046 p = .000
e. I'm excited about the idea of playing chess	3.99	4.41	t(476) = 1.920 p = .056
f. I ask my friends to explain this lesson to me	4.30	4.10	t(476) = -0.573 p = .569

The influence of students' self-esteem on chess skills.

To assess the impact of students' self-esteem on their chess skills, students were asked to choose one of three self-esteem options related to chess and chess lessons. In this case, the choice of no more than three options were also allowed. The proposed options for self-assessment and the percentage of students

who marked these options are shown in Diagram 8.

An assessment of the impact of the selfassessment options shown in Diagram 7 on chess skills is given in Table 3.

The data in Table 2 shows that five of the six self-esteem options have a statistically significant effect on chess skills, except for one — "e. My teacher says that I play chess well."

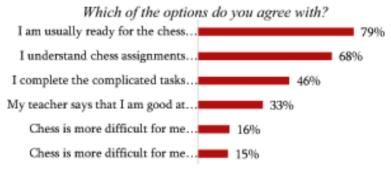


Diagram 8. Student self-assessments. No more than three options were allowed.

Table 3

Self-assessment options	Not checked	Noted	Values and stats t-test significance
a. I'm usually ready for chess lessons	3.83	4.40	t(476) = 2.208 p = .029
b. Chess is more difficult for me than for my classmates	4.52	2.97	t(476) = -5.474 p = .000
c. I quickly understand chess problems	3.63	4.59	t(476) = 4.362 p = .000
d. I successfully complete complex tasks	4.15	4.42	t(476) = 5.046 p = .000
e. My teacher says I'm good at chess	4.09	4.67	t(476) = 1.349 p = .178
f. Chess is more difficult for me than other subjects	4.49	3.06	t(476) =-5.208 p = .000

Statistically significantly increases selfesteem chess skills: "a. I'm usually ready for chess lessons," "c. I quickly understand chess problems" and "d. I successfully complete complex tasks."

Statistically significantly reduce selfesteem chess skills: "b. Chess is more difficult for me than for my classmates" and "f. Chess is more difficult for me than other subjects."

Discussion of the results. The analysis of Diagram 2 shows that almost half of the students play chess once a week. Considering that the students take the chess subject twice a week, this is a quite high index. Discussions with teachers and chess methodologists revealed that such a frequency is not always expedient, as it can lead to a lack of curriculum.

Simultaneously, Diagram 2 shows that, despite the fact that 15% of respondents play chess once a month in class, this relatively low rate has the greatest influence on chess knowledge and skills. According to the experts, allowing students to play once or twice a month as a way to summarize themes is the best option. And considering the revealed linear trend, according to which the decrease in the frequency of playing chess in the classes increases the average grade of the chart solutions except for the "never" category, which drastically reduces the grade. It must be stated that this fully corresponds to the logic of a reasonable construction of a chess program. It must be stated that this fully corresponds to the logic of a reasonable construction of a chess program.

Referring to the sequence of solving problems and diagrams in chess lessons, it should be noted that the absolute majority of respondents solve diagrams and problems during every lesson (71%; Diagram 3). In contrast to the game's frequency indicators, increasing the frequency of solving tasks in lessons improves the average score on the chess test's chart solving. It's

worth noting that, despite the frequency of solving tasks once a week (19%) is significantly higher than the frequency of solving tasks once a month (5%) within the surveyed team, however, solving tasks once a month has a slightly greater impact on the results of a chess test (Figure 5) Although the "once a week" and "once a month" frequencies are statistically different from the chart solution scores only in the "every class " and "never" categories. We assume that this learning technique is being replaced in the classroom by other types of learning activity, which requires additional investigation. However, it becomes clear that solving tasks on the chessboard should be considered a prerequisite for class effectiveness and a learning strategy.

The guestions presented in Diagram 5 were mainly aimed at assessing students' motivation to study chess. The first two questions seek to uncover the emotional component of students' attitudes about chess class, as well as the manifestation of students' self-determination, the choice of which was made by an absolute majority. The question "I learn a lot of interesting things during chess lessons" is more related to the cognitive sphere of interest, but the questions "I don't want to learn chess" and "I would always like to have chess lessons" suggest a specific action. As a result, it may be inferred that they express the qualities of motivation's voluntary components. The desire to get a high grade is expressed by the external motivating factor of the students, in particular ideas about the teacher's assessment. " Chess lessons are difficult for me" and " I can't manage to do my chess homework" describe the manifestations of students' self-efficacy, where the question "Chess lessons are difficult for me" expresses the attribution of the complexity of the task, and the question "I can't manage to do my chess homework" expresses the attribution of abilities.

In the results obtained, it is noteworthy that all the motivational components as a result of the binary analysis provided statistical certainty in terms of the impact on the solution of the chess test. (Tables 3). The only exceptions were responses to the question "I learn a lot of interesting things during chess lessons" for which the lack of statistical certainty is apparently connected to the subject's original content, although this issue needs further clarification. As a result, it's reasonable to state that motivating variables have a big influence on chess knowledge and skills.

Diagram 6 shows the answers to the questions related to the actions of the learners during the lesson (teaching and learning strategy) and their expectations.

In fact, the answers to the question "I pay attention to the teacher's explanation of the lesson" express the directive teaching strategy, in that case "I ask my friends to explain the lesson to me" can be attributed to the interactive strategy in some sense. The question "I am talking to my friends" is mostly related to discipline, but it can also express some aspects of interactivity. Given that the issue of homework has been repeatedly discussed within chess teachers, parents, and educators, the expectation related to "I'm thinking of how I'll do my homework" may characterize students' attitudes toward the issue.

The students 'attitudes on the possibility to play chess can be expressed in their responses to the question "I am delighted of the idea of playing chess." Finally, the question "I am waiting for the bell time" is intended to imply that students are bored. In fact, as can be seen in Diagram 6, incomparably high scores were recorded among the respondents in the answers to the questions "I pay attention to the teacher's explanation of the lesson" and "I am delighted of the idea of playing chess".

This may be the reason for concern in certain ways because when we evaluate

these two questions separately, it turns out that students normally listen to the lesson delivered by the teacher in earnestly, but wait for the playing time. On the other hand, this assumption requires further investigation, and the evidence supplied does not let us conclude that it is correct.

Referring to the influence of these factors on the results of the chess test, it should be noted that the latter are statistically influenced by the negative answers to the questions "I pay attention to the teacher's explanation of the lesson", as well as "I am waiting for the bell time" and "I am talking to my friends", or rather the lack of positive answers (Table 5, 6).

The next set of questions, like the previous one, was mainly aimed at revealing motivational factors.

The answers received were "I am usually ready for the chess lessons", which can be considered as a series of attributes related to the personal efforts (unstable internal attribution), and "I understand chess assignments quickly", which is already an assessment of personal abilities (Stable internal attribution).

Questions such as "I complete the complicated tasks successfully", "Chess is more difficult for me than for my classmates", "Chess is more difficult for me than other subjects" include ideas about complexity. Another question, "My teacher says that I am good at chess" was to expose the attribution of a teacher's external, shaping grade. (Diagram 9).

The effect of each position on the average scores of the chess tasks as a result of the t-test using are statistically significantly different in all pairs, except for the answers to the question "I complete the complicated tasks successfully". (Table 7, 8)

Of particular interest here is the fact that the lack of understanding of complexity, both in comparison with classmates and other subjects, has a significant impact on the results of the chess knowledge test.

Another interesting aspect is that only positive responses to the questions "I am usually ready for the chess lessons" and "I understand chess assignments quickly" have a statistically significant impact on the test's outcomes. In other words, we may say that the ideas about complexity have a negative effect on chess knowledge, which we consider obvious, as those ideas have a negative effect on self-efficacy. To explain why the responses to the question "I complete the complicated tasks successfully" are an exception to the statistically significant difference, on one hand we must study the nature of the chess game, where success is almost non-existent and on the other hand, we assume that at this age the adequate metacognitive abilities that will allow us to reliably assess the fact of solving complex tasks have not yet been formed. That is, by resolving the problem, students no longer regard it as tough.

Thus, summarizing the research, we have come up with the following conclusions:

- 1. Almost half of elementary school students play chess once a week, with the majority expecting to play more frequently. Simultaneously, given the teaching methodology and conditions, it may be desirable to enable students to play once or twice a month as a summary of a certain group of themes. This result provides a foundation for proposing or lowering such frequency, as well as altering the teaching style to some extent, while taking into consideration the learners' expectations and establishing a reasonable programming sequence.
- 2. Most students solve tasks and chessproblems while learning the subject. Increasing the frequency of solving tasks in each lesson increases the knowledge and skills of chess. Therefore, it is obvious that solving tasks on the chess board should be considered a mandatory condition for the effectiveness of the lesson and an teaching strategy.

- 3. Chess students often pay close attention to the lesson explained by the teacher, which has a direct good influence on their chess knowledge, but experience with effective application of interactive teaching methods is limited. At the same time, it can be assumed that boredom and disorder during the lesson have a negative impact on the educational outcome. Considering these questions in the context of the lack of statistical indicators of impact on the interest of the chess class, it can be assumed that it is desirable to develop new strategies to stimulate students' learning interests and link them to chess knowledge.
- 4. In the structure of the educational motivation of the chess subject. the positive attitude towards the subject prevails, as well as the indicators of the students' self-determination manifestation. The latter can be considered as another indirect advantage of the chess subject, that is, making the right choice and managing one's own activities. As a result of the research, all the motivational components have provided statistical certainty in terms of the impact on chess knowledge. As a result, it should be stated that motivating factors have a major influence on chess knowledge and skills. This conclusion may be due to the fact that although the role and significance of motivational factors are obvious, the discovery of this pattern can be an indirect indicator of the reliability of the research.
- 5. Discussing the issue of chess education in the context of attributions, it was found that among students the predominant were internal attributes, and considering the subject as complex has a negative effect on the results of the chess knowledge test and the solution of complex tasks is more related to internal effort and abilities, allocating less attention to the success factor, as in the instance of a game of chess.

References

- 1. Christiaen J. Chess and Cognitive Development: doctoral dissertation. Trans.: Stanley Epstein, 1976, 245 p.
- 2. Ferguson R. Developing Critical and Creative Thinking through Chess // Report on ESEA Title IV-C project presented at the annual conference of the Pennsylvania Association for Gifted Education. Pittsburgh, Pennsylvania, April 11-12, 1986. 199 p.
- 3. Gevorgyan S., Sargsyan V., Gevorgyan L. Sociopsychological analysis of factors influencing Chess Education // Main Issues of Pedagogy and Psychology, Scientific Periodical. 2021. Vol. 20(2). P. 5—19. DOI:10.24234/miopap.v20i2.403
- 4. Khachatryan H., Khachatryan S., Movsisyan N. Elements of critical thinking in the school standards of «chess» subject // Scientia Paedagogica Experimentalis. 2021. Vol. 58(1). P. 105—118.
- 5. Mirzakhanyan R., Gevorgyan S., Sargsyan V., Daveyan H. Analysis of the Efficiency of Teaching Chess in Schools // Sociology Study. 2017. Vol. 7(1). P. 36—42. DOI:10.17265/2159-5526/2017.01.006
- 6. Mirzakhanyan R., Gevorgyan S., Karapetyan V., Dallakyan A., Berberyan A. Typical Expression of Cognitive Dissonance and Consonance in the Course of Argumentation among Primary-School Children Playing Chess // Wisdom. 2019. Vol. 2(13). P. 75—84. DOI:10.24234/wisdom.v 13i2.281
- 7. Rifner P. Playing Chess: A Study of Problem-Solving Skills in Students with Average and Above Average Intelligence, doctoral dissertation, 1992.
- 8. Sargsyan A., Khachatryan A. Critical thinking and motivation of chess teachers with the «best experience» // Revista Mundi Engenharia, Tecnologia e Gesto. Paranagu, PR. 2021. Vol. 6(1). P. 310—313. DOI:10.21575/25254782rmetg2021vol6n11483

- 9. Sargsyan A., Khachatryan A., Lputyan G. Current Level of Expression of Psychological Components of Assimilation of Chess as a School Subject and the Ways of Its Activation // Theoretical and Practical Issues of Chess Education in School, International Conference. Tsaghkadzor, Armenia, 2016. P. 117—127.
- 10. Sargsyan T.A., Gevorgyan S.R., Movsisyan N.N., Manukyan S.A., Sargsyan V.Zh., Khachatryan E.A. Socio-Psychological analysis of the influence of teacher's and parent's characteristics on chess knowledge // ASPU Scientific News. 2021. № 3(41). P. 86—97.
- 11. Sargsyan V.ZH., Manukyan S.A., Sargsyan T.A., Gevorgyan L.L. The connection of chess knowledge with the indicators of progress in mathematics and native language in primary schools // ASPU SCIENTIFIC NEWS. 2021. Vol. 3(41). P. 98—109.
- 12. Tanajyan K., Melkonyan N., Gevorgyan N. Chess as a Mechanism for Accumulating the Intellectual Capacity among Primary School Student // Theoretical and Practical Issues of Chess Education in School, International Conference. Tsaghkadzor, Armenia, 2016. P. 137—143. 13. Tanajyan K., Melkonyan N., Movsisyan S. Chess as a Social Value // Main Issues of Pedagogy and Psychology. 2021. Vol. 19(1). P. 32—37.
- Weiner B. Achievement motivation and attribution theory. Morristown, N.J.: General Learning Press, 1974.
 Weiner B. Human Motivation. NY: Holt, Rinehart & Winston, New York, 1980. 480 p.

DOI:10.24234/miopap.v19i1.390

16. Zuckerman G.A., Obukhova O.L., Shibanova N.A. Play and Learning Activity: Borderline Conflicts [Elektronnyi resurs]. Psikhologo-pedagogicheskie issledovaniya [Psychological-Educational Studies]. 2019. Vol. 11(4). P. 22—35. DOI:10.17759/psyedu.2019110402 (In Russ., abstr. in Engl.).

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Преодоление барьеров: как пандемия устранила разрыв в успеваемости в сельских и городских школах

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В статье рассматривается влияние пандемии COVID-19 на динамику успеваемости в школах Новосибирской области в период с 2017 по 2022 годы. С использованием данных индивидуальных результатов ОГЭ учащихся 9-х классов в исследовании применяется многоуровневое регрессионное моделирование для изучения дифференцированного влияния пандемии COVID-19 на городские и сельские школы. Вопреки предыдущим исследованиям, которые предсказывали, что больше всего пострадают сельские школьники, полученные результаты оказались неожиданными. При анализе академических достижений учащихся на общей выборке значимых различий между годами не обнаружено: пандемия в среднем никак не отразилась на успеваемости в регионе. Однако оценка дифференцированного эффекта в зависимости от типа населенного пункта, в котором находится школа, выявила нетипичные тенденции: в городских школах после пандемии наблюдалось небольшое снижение успеваемости, а в сельских школах, наоборот, повышение. Примечательно, что год пандемии за счет этого устранил разрыв в успеваемости между городскими и сельскими школами, сделав его статистически незначимым. Возможными объяснениями полученных результатов могут быть региональные меры, принятые для поддержки школьников, или изменение процедуры проведения экзаменов. Эти контринтуитивные результаты опровергают доминирующие исследования в области образования, посвященные COVID-19, и подчеркивают неожиданную роль пандемии в изменении траекторий академической успеваемости.

Ключевые слова: пандемия COVID-19; ОГЭ; городские школы; сельские школы; образовательное неравенство.

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Breaking Barriers: How the Pandemic Bridged the Academic Achievement Gap in Rural and Urban Schools

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The article examines the impact of the COVID-19 pandemic on the dynamics of academic achievement in schools in the Novosibirsk region over the period 2017—2022. Using data on individual BSE results of grade 9 students, the study applies multilevel regression modelling to examine the differential impact of the COVID-19 pandemic on urban and rural schools. Contrary to previous studies which predicted that rural students would be most affected, the results were unexpected. When analysing the academic performance of students in the overall sample, no significant differences were found between years: on average, the pandemic had no effect on academic performance in the region. However, assessing the differential effect according to the type of community in which the school was located revealed atypical trends: urban schools experienced a slight decrease in academic achievement after the pandemic, while rural schools experienced an increase. Notably, the year of the pandemic eliminated the achievement gap between urban and rural schools, making it statistically insignificant. Possible explanations for these results could be regional policies to support students or changes in examination procedures. These counterintuitive findings challenge the dominant educational research on COVID-19 and highlight the unexpected role of the pandemic in changing the trajectory of academic achievement.

Keywords: COVID-19 pandemic; Basic State Examination; urban schools; rural schools; educational inequality.

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Введение

Пандемия COVID-19, несомненно, оказала сильное влияние на образовательные системы во всем мире, коренным образом изменив наши представления о подходах к организации образовательного процесса. Школы и университеты большинства стран столкнулись с огромными трудностями, преодолевая не только непосредственные риски для здоровья учащихся, но и далеко идущие экономические и социальные последствия пандемии [12]. Эффекты от глобального нарушения образовательного процесса — которое длилось в среднем 10 недель [21] — широко обсуждаются как учеными, так и политиками.

На сегодняшний день, спустя три года после начала пандемии, все чаще появляются метааналитические исследования, которые систематизируют результаты эмпирических работ по оценке влияния пандемии на качество образования в разных странах. Один из первых метаанализов показал, что пандемия привела к небольшому снижению результатов учащихся, которое в среднем составило 0.10 SD [11]. В наиболее свежем метаанализе оценка потерь оказалась чуть выше и составила 0,14 SD [6]. Однако если при отборе исследований в метаанализе используются более строгие требования к качеству их методологии, то размер потерь увеличивается до 0,18 SD [15], что приближается к среднему размеру эффекта. Таким образом, на данный момент можно уверенно заключить, что в среднем пандемия COVID-19 привела к доказанному снижению уровня знаний среди школьников, эквивалентному как минимум трети учебного года [13]. Важно отметить, что снижение результатов, проявившееся во время пандемии, не исчезает со временем, несмотря на все усилия по его компенсации со стороны системы образования [6].

При этом последствия кризиса непропорционально сильно затронули наиболее уязвимые группы учащихся в системе образования, что стало проявляться еще во время пандемии. Исследования подтверждают, что с наибольшей потерей в знаниях столкнулись учащиеся младших классов [15], из семей с низким социально-экономическим статусом [6], с низкой успеваемостью [9]. Одна из причин наиболее сильного снижения достижений в этих группах — это перераспределение детьми учебного времени на занятия, не способствующие повышению успеваемости: например, просмотр телевизора или компьютерные игры [9]. Одновременно с этим низкий уровень поддержки среди родителей и школ, характерный для тех, кто находится в неблагополучных условиях [20], не позволил компенсировать снижение времени, затрачиваемого на учебу [9]. Интересно, что гораздо меньше внимания в исследованиях уделяется оценке различий в эффектах пандемии между городскими и сельскими школьниками, последние из которых относятся к одной из наиболее уязвимых категорий учащихся [23]. Тем не менее из работ, посвященных влиянию COVID-19 на разные типы школ, известно, что сельские школы имеют слабую техническую оснащенность и поэтому оказываются не готовы к дистанционному обучению [1; 22].

Несмотря на активное исследование влияния пандемии на образование во всем мире, работ, посвященных данной теме в контексте российской образовательной системы, не так много. Всего в одном российском исследовании был эмпирически оценен эффект пандемии на уровень знаний школьников с использованием объективных данных тестирования [4]. По его результатам значимые потери в академических достижениях были зафиксированы только среди учащихся 8-х классов, проходивших тестирование по естествознанию. Примечательно, что, несмотря на подтвержденный зарубежными исследованиями тренд усиления неравенства в период пандемии, на российских данных все учащиеся столкнулись с одинаковым снижением результатов независимо от социально-экономического статуса их семей. В других работах сравниваются полученные и ожидаемые баллы ЕГЭ учащихся путем применения опроса в формате самоотчета [5], изучаются особенности перехода на дистанционное обучение [3], состояние учителей [2] и другие аспекты образовательного процесса в период пандемии без попытки проведения объективной оценки потерь в этот период.

С целью компенсировать описанные пробелы в научной литературе настоящее исследование направлено на количественную оценку изменений в успеваемости учащихся городских и сельских территорий до и после пандемии с использованием данных ОГЭ по русскому языку и математике. На примере одного из российских регионов — Новосибирской области — мы постараемся ответить на два исследовательских вопроса:

- 1. Как менялись результаты ОГЭ учащихся до и после пандемии COVID-19?
- 2. Различаются ли эффекты пандемии для сельских и городских школ региона?

Контекст исследования

В Новосибирской области система образования столкнулась с новыми трудностями из-за пандемии, начавшейся весной 2020 года. Школы региона были вынуждены полностью изменить свою работу в связи с введением ограничительных мер, вызванных угрозой распространения COVID-19. В зависимости от технических условий в школе и возможностей семей обучение проводилось по одной из трех моделей, выбор которых осуществляли сами школы¹.

Первая модель использовалась школами, имеющими хорошие технические условия. Реализация образовательной программы полностью осуществлялась в дистанционном режиме с использованием региональной системы дистанционного обучения, а также цифровых образовательных платформ и ресурсов, находящихся в свободном доступе. Вторая модель была рекомендована для школ со скоростью интернета, недостаточной для работы с системами дистанционного обучения и проведения занятий в режиме реального времени. Все материалы, подго-

товленные по образовательной программе, включая домашние задания, учитель передавал учащимся через электронную почту, файлообменники, социальные сети, чаты, форумы или в очном режиме через классных руководителей (по определенному графику посещения школы, например, один-два раза в неделю). Получить задания могли как сами обучающиеся, так и их родители. Обратная связь от учителей передавалась учащимся аналогичным образом. Третья модель предполагала очные занятия учащихся в отдельных кабинетах школы и небольших группах до 12 человек. Эта модель была реализована преимущественно в сельских школах.

В целях организации работы в период пандемии в Новосибирской области, как и в других регионах России, были разработаны рекомендации для учащихся, их родителей, учителей, образовательных организаций. В их число входили: усиление санитарно-противоэпидемических мероприятий в школах; методические рекомендации по реализации образовательных программ с применением электронного обучения и дистанционных образовательных технологий; памятки для родителей и других участников образовательного процесса; локальные акты о дистанционном обучении в школе². В целях методической поддержки учителей школ были также проведены вебинары, посвященные использованию образовательных платформ для организации дистанционного обучения (таких, как Российская электронная школа (РЭШ), Skyes School, ЯКласс, Учи.ру, Мобильное Электронное Образование (МЭО), Яндекс Репетитор, Яндекс Учебник и др.) и ресурсов для обмена учебной информацией (региональная система дистанционного обучения (РСДО), ГИС «Электронная школа», Яндекс Коннект (сервис Яндекс для организации командной работы в облаке), ресурс видеоконференцсвязи (ВВВ), Вики и др.).

¹ В соответствии с письмом министра образования Новосибирской области от 27 марта 2020 года № 2952-03/25 «О работе образовательных организаций в условиях ограничительных мер».

² Все документы и методические рекомендации по вопросам дистанционного обучения были размещены на портале «Новосибирская открытая образовательная сеть» (НООС) по адресу в сети Интернет: http://edu54.ru/projects/edu54/do/.

Для координации работы по поддержке образовательного процесса в период пандемии при Министерстве образования Новосибирской области был организован штаб — Единый канал связи, объединяющий информацию всех горячих линий. Штаб работал в режиме «одного окна», предоставляя полную информацию по всем вопросам как для руководителей образовательных организаций, так и для родителей в режиме 24/7 без ограничения рабочего времени. Адресная поддержка осуществлялась также и в социальных сетях. При штабе была организована работа проекта «Педагогический волонтер»: школы по запросу получали выездную адресную поддержку, в которую входило дополнительное обучение учителей организации образовательного процесса в дистанционном формате. В период «самоизоляции» использовались также и ресурсы телевидения: например, была организована трансляция видеоуроков по разным предметам.

В рамках регионального проекта «Сетевая дистанционная школа» (реализуемого в регионе с 2011 года) в каждом муниципалитете уже был сформирован опыт по организации дистанционного обучения школьников. Тем не менее все участники образовательного процесса столкнулись с целым рядом проблем и трудностей. Основными проблемами в этот период по результатам анкетирования 518 учителей школ, проведенного в мае 2020 года, были: снижение качества обучения и качества знаний школьников (24,9%), трудности в организации образовательного процесса в дистанционном формате (23,0%), увеличение нагрузки на всех участников образовательного процесса (20,8%). Также вызывали беспокойство неопределенность ситуации, отношение к дистанционному обучению обучающихся и их родителей, работа образовательных платформ, отсутствие контроля над обучением трудных детей, объективность выставления отметок по предмету (суммарно 31,3%).

С 13 апреля 2020 года школы, находящиеся на территориях региона с численностью населения менее 23 тыс. чел., вернулись к работе в штатном режиме, подразумевающем

очное посещение занятий с соблюдением санитарно-эпидемиологических требований. При этом остальные школы региона работали в особых условиях вплоть до конца 2019—2020 учебного года. В следующем 2020—2021 учебном году эпидемиологическая ситуация также повлияла на процесс обучения в школах. Например, с 16 ноября 2020 года (после осенних каникул) к учебе в очном режиме приступили учащиеся 1—5 классов, 11 классов и малокомплектных школ. Ученики с 6-го по 10-е классы снова перешли на дистанционный формат обучения. К очному обучению все учащиеся вернулись только 11 декабря 2020 года.

Особенности проведения оценочных процедур в условиях пандемии были приняты на федеральном уровне и коснулись всех регионов нашей страны. В 2020 году государственная итоговая аттестация в 9-х классах (далее — ГИА-9) впервые прошла в форме промежуточной аттестации, результаты которой признавались результатами ГИА-9. Основанием для выдачи аттестатов об основном общем образовании стало среднее арифметическое четвертных (триместровых) отметок за 9 класс по всем предметам учебного плана.

На федеральном уровне были приняты решения о проведении осенью 2020 года дополнительного мониторинга качества образования в виде стартовых диагностических работ в 10 классе, основанных на контрольно-измерительных материалах ГИА-9. Эти работы проходили по трем учебным предметам: русскому языку и математике как обязательным, а также одному предмету в соответствии с профилем обучения и выбором обучающегося. Проверку диагностических работ осуществляли эксперты региональной предметной комиссии. Принципиальным отличием процедуры проведения диагностических работ от ГИА-9 было то, что работы проводились в школах, а не в пунктах проведения экзаменов (ППЭ), что ставит под сомнение объективность полученных результатов из-за качества наблюдения за учащимися. В 2021 году выпускники 9-х классов проходили ГИА-9 по русскому языку и математике уже в стандартной форме, а в случае с предметом по выбору — писали контрольные работы. Таким образом, для наиболее объективного сравнения академических достижений учащихся в этот период времени стоит использовать только данные обязательных предметов: русского языка и математики.

Методология исследования

В данной работе для оценки эффектов пандемии COVID-19 на академические достижения школьников использовался подход многоуровневого регрессионного моделирования [14]. Анализ проводился с использованием трехуровневой структуры данных и включал результаты экзаменов учащихся на первом уровне, год сдачи экзамена на втором уровне и образовательные организации на третьем уровне.

Выборка. Итоговая выборка анализа после подготовки данных включала в себя 512 школ Новосибирской области и в общей сложности 113962 учащихся, сдававших ГИА по русскому языку и математике в период с 2017 по 2022 годы, а также диагностические работы на основе материалов ОГЭ в 2020 году. В базе данных были представлены результаты всех учащихся образовательных организаций, участвующих в исследовании, которые сдавали экзамен в конце 9-го класса.

Используемые переменные. В базе данных были представлены переменные на уровне участников экзаменов и образовательных организаций. Для каждого участника был рассчитан процент выполнения экзамена по русскому языку и математике (0—100%) путем деления полученного сырого балла на максимально возможный балл за экзамен в текущем году. Результаты экзамена были доступны за шесть лет: для когорт учащихся, сдававших экзамен в 2017—2022 годах. Описательная статистика по средним результатам экзаменов детей в регионе представлена в Приложении 1 (табл. 1).

- В базу данных на уровне школ были включены следующие переменные, доступные в период с 2017 по 2021 годы:
- Доля обучающихся со специальными потребностями (с OB3, дети-инвалиды);

- Доля обучающихся, у которых хотя бы один из родителей является безработным:
- Доля обучающихся, у которых родители не имеют высшего образования;
 - Доля обучающихся из неполных семей;
- Доля обучающихся из многодетных семей:
- Доля обучающихся из малообеспеченных семей.

Каждая из перечисленных переменных была усреднена по образовательным организациям за указанные пять лет и использовалась в анализе в качестве показателя, характеризующего школьный контингент за весь период исследования. Описательная статистика по средним характеристикам школ региона представлена в Приложении 1 (табл. 2). Кроме того, в базе данных было зафиксировано на момент 2023 года, в какой местности находится образовательная организация — в городе (46% школ) или селе (54% школ).

Стратегия анализа данных. На этапе предварительной подготовки базы данных для всех количественных переменных применялся метод поиска статистических выбросов Тьюки [25]. Нетипично высокие или низкие для выборки показатели доли разных групп учащихся в школе, так же как и результаты экзаменов, из базы были исключены. Кроме того, из анализа были исключены образовательные организации, изменение контингента которых за период исследования попадало в интервал нетипичных для выборки значений. По оставшимся наблюдениям количественные переменные были стандартизированы перед включением в модель анализа. В случае с результатами экзаменов стандартизация проводилась в рамках каждого предмета и года.

Для оценки эффекта пандемии на академические достижения 9-классников была использована многоуровневая модель роста с фиксированным наклоном (fixed slope random intercept) [14], позволяющая проследить изменения результатов экзаменов из года в год на протяжении шести лет. В качестве референтного года был использован 2020 год, в который обучающиеся участвовали в оценочной процедуре после перерыва в очном

обучении. Для каждого предмета — математика и русский язык — строились отдельные модели, в которых результаты экзамена, соответственно, включались как зависимые переменные. Школьные характеристики и год сдачи экзаменов использовались в модели в качестве ковариат. Перед включением ковариат в модель был проведен расчет мультиколлинеарности путем оценки показателя VIF [8]. Поскольку проблем мультиколлинеарности обнаружено не было, в анализе использовался полный набор независимых переменных, перечисленных выше.

Всего в процессе анализа данных было построено по две регрессионные модели для каждой предметной области: модель для оценки общих эффектов пандемии без включения переменной взаимодействия (Модель 1), модель для оценки дифференцированных эффектов для села и города с включением в модель переменной взаимодействия между типом населенного пункта и годом сдачи экзамена (Модель 2). Для простоты интерпретации результатов на основе Модели 2 были построены графики предсказанных результатов экзаменов для каждого года отдельно для сельских и городских школ, описывающие эффект взаимодействия между переменными. Анализ проводился с использованием R Studio версии 1.1.456.

Результаты исследования

Результаты регрессионного анализа, подробнее представленные в Приложении 2, показывают, что в среднем академические достижения выпускников региона не сильно менялись в период исследования (Модель 1). По русскому языку средний процент выполнения ОГЭ в период пандемии и после (2020-2022 годы) не отличается статистически значимо от предшествующих лет. По математике отмечается статистически значимое на уровне р<0,05 снижение результатов ОГЭ после пандемии, но его размер является настолько небольшим, что это трудно интерпретировать как ухудшение ситуации. Таким образом, в среднем пандемия COVID-19 скорее не привела к изменению академических достижений учащихся Новосибирской области.

Однако при учете в модели переменной взаимодействия между годом сдачи экзамена и типом населенного пункта, в котором располагается образовательная организация, ситуация меняется коренным образом. На рис. 1, 2 представлены предсказанные баллы ОГЭ по русскому языку и математике с 2017 по 2022 годы отдельно для городских и сельских школ. Отсутствие снижения академических достижений на общей выборке скрывало за собой довольно неожиданный тренд: после начала пандемии процент выполнения экзаменов в городских школах снизился, в то время как в сельских, наоборот, вырос. Несмотря на то, что эти изменения не являются статистически значимыми по сравнению с предыдущими периодами исследования — для каждой из групп по отдельности новый процент выполнения экзаменов находится в пределах доверительного интервала с баллами прошлых лет — вероятно, они нивелировали изменение результатов в период пандемии на общей выборке региона, компенсировав друг друга. Одновременно с этим с уверенностью можно заключить, что произошедшие в год пандемии изменения привели к исчезновению разрыва в академических достижениях между городскими и сельскими образовательными организациями, который сохранялся все годы до пандемии. После пандемии городские и сельские школы демонстрируют в среднем равные результаты экзаменов при учете различий в контингенте учащихся.

Стоит также обратить внимание, что изменения результатов экзаменов после пандемии по русскому языку и математике немного отличаются. В случае с русским языком основной рост баллов сельских школ произошел в год пандемии. По сравнению с 2019 годом, в 2020-ом выпускники сельских школ улучшили свои результаты более чем на 0.1 SD. В последующие годы наблюдаются небольшие колебания процента выполнения ОГЭ, но в целом сохраняется уровень, достигнутый во время пандемии. Одновременно с этим снижение результатов в городских школах оказывается довольно значительным именно в год пандемии и не сильно меняется в дальнейшем. По мате-



Рис. 1. Предсказанный стандартизированный процент выполнения ОГЭ по русскому языку для городских и сельских школ по результатам регрессионного анализа (2017—2022 гг.)



Рис. 2. Предсказанный стандартизированный процент выполнения ОГЭ по математике для городских и сельских школ по результатам регрессионного анализа (2017—2022 гг.)

матике, с другой стороны, результаты среди сельских школьников растут довольно равномерно, начиная с года пандемии и сохраняя тенденцию к постепенному повышению. С городскими школами ситуация аналогична экзамену по русскому языку: после снижения в 2020 году средний балл сохраняется примерно на том же уровне и в другие года.

Обсуждение

Ключевые результаты:

- В среднем пандемия COVID-19 никак не сказалась на академических достижениях учащихся в регионе.
- Полученные данные выявили неожиданную закономерность: результаты экзаменов учащихся во время и после пандемии выросли в сельских школах и снизились в городских. Это привело к статистически значимому снижению неравенства между двумя группами школ, которое сохранилось и после пандемии.
- Для экзамена по русскому языку рост баллов среди сельских школ оказался более резким и не вызвал дальнейшее увеличение результатов. По математике, наоборот, выпускники сельских школ стабильно повышали результат ОГЭ на протяжении всех лет после пандемии.
- Городские школы не демонстрируют восстановления допандемийного уровня выполнения ОГЭ по обоим предметам вплоть до 2022 года, хотя снижение их результатов в целом не является статистически значимым.

Ограничения исследования

Во-первых, одним из ограничений проведенного исследования, которое стоит учитывать при интерпретации результатов, является различающаяся продолжительность нахождения городских и сельских школ в дистанционном режиме работы. Учитывая условия организации образовательного процесса в Новосибирской области, на данный момент это не позволяет достоверно объяснить различия, обнаруженные между этими типами школ. Поскольку досрочному выходу в очный режим обучения подлежали школы, расположенные в муниципальных образованиях небольшой численности, среди них

оказались 85% всех сельских школ региона. То есть фактически больше половины сельских школ находились на дистанционном обучении не больше двух недель. При этом ни одна городская школа не вышла в очный режим обучения в 2020 году до начала следующего учебного года. То есть помимо самого типа населенного пункта одним из принципиальных различий городских и сельских школ является период нахождения на дистанционном обучении, что тоже могло стать причиной обнаружения различной динамики результатов в этих группах школ. Однако эта гипотеза требует дальнейших исследований.

Во-вторых, не стоит забывать о том, что экзамены ГИА-9 в год пандемии для всех регионов России сильно отличались от стандартного формата. Отмена официальных государственных экзаменов привела к тому, что школы проводили диагностические работы на основе материалов государственных экзаменов самостоятельно, без контроля за процедурой со стороны государственной экзаменационной комиссии, которая обычно обязательно принимает участие в проведении экзаменов. Это изменение могло в особенности затронуть небольшие сельские школы, баллы в которых выросли не из-за реального улучшения подготовки обучающихся, а из-за того, что не была полностью обеспечена объективность проведения процедуры оценки. Однако проверка данной гипотезы находится за рамками текущего исследования. Кроме того, не стоит забывать и о том, что помимо процедуры проведения само содержание экзаменов могло измениться в 2020 году в связи с возникшей ситуацией. Все это накладывает ограничения на объективность сравнения экзаменов по годам.

В-третьих, среди ограничений стоит обратить внимание на тот факт, что в рамках данного исследования, к сожалению, нам были недоступны индивидуальные данные учащихся — такие как, например, пол и социально-экономический статус семей учащихся. Дополнительная информация, которая была учтена в качестве ковариат в моделях, была доступна только на уровне школ. В результате имеющиеся в исследовании модели

демонстрируют довольно небольшой процент объясненной дисперсии баллов ОГЭ на первом уровне, поскольку именно индивидуальные характеристики имеют в данном случае бо́льшее значение. Вероятно, что при наличии этих данных результаты статистического анализа могли выглядеть совершенно иначе.

В-четвертых, важно также отметить слабые стороны дизайна, использованного в работе. Применяемый для анализа данных исследования подход не является ни экспериментальным, ни квазиэкспериментальным. Несмотря на то, что в случае с пандемией мы фактически наблюдаем ситуацию натурального эксперимента с появлением внешнего фактора, обеспечивающего распределение детей на тех, кого пандемия затронула и нет, применяемый метод анализа не позволяет делать выводы о причинно-следственных связях в отношении эффекта пандемии на академические достижения учащихся в регионе. Для применения более продвинутых методик, таких как, например, разрывная регрессия, требуется более длинный период наблюдения за академическими достижениями учащихся. Возможно, что такой подход будет реализован в будущих исследованиях, когда будет возможность зафиксировать достижения учащихся в течение как минимум 5 лет после пандемии.

Обсуждение

В целом полученные в исследовании данные демонстрируют довольно неожиданные результаты в отношении оценки влияния пандемии на академические достижения учащихся. Во-первых, тот факт, что в среднем пандемия никак не отразилась на качестве результатов основного государственного экзамена, уже сам по себе является довольно редким случаем на фоне данных зарубежных исследований. Отсутствие негативных эффектов пандемии на качество образования отмечается лишь в нескольких публикациях. Например, в работе, посвященной изучению навыков в чтении и математике

среди младших школьников в Швеции, для которых образовательные организации в период пандемии оставались открытыми для очного посещения [10]. В Дании, где старшие школьники оставались без очного обучения на протяжении 22 недель, отмечаются совсем небольшие потери в результатах тестирований по чтению к 2021 году [7]. Также отсутствие снижения результатов тестирований среди учащихся после пандемии фиксировалось среди представителей основной школы в Швейцарии [24] и среди младших школьников в Австралии [19].

Во-вторых, результаты данной работы полностью противоречат предсказаниям о том, что больше всего в период пандемии пострадают учащиеся из наиболее уязвимых групп, к которым относятся в том числе и ученики сельских школ [23]. Большая часть проведенных на данный момент исследований скорее подтверждает это предсказание, демонстрируя, например, что представители семей с низким социально-экономическим статусом теряют в качестве обучения во время пандемии больше, чем остальные группы [6]. Данные о различии эффектов пандемии для городских и сельских школьников менее однозначны, поскольку очень небольшое количество исследований сравнивает академические достижения этих групп учащихся. Например, в Колумбии в 2020 году был зафиксирован рост неравенства среди городских и сельских школ. В исследовании отмечается, что разница между городскими и сельскими школами в результатах тестирований увеличилась на 372,3% в пользу первых [16]. Однако буквально через год ситуация стабилизировалась и показатели неравенства значительно снизились. Исследование McKinsey, посвященное младшим школьникам в США, наоборот, демонстрирует, что в период пандемии учащиеся городских школ потеряли в качестве обучения на один месяц больше, чем учащиеся в сельских школах³. И это единственная работа,

³ В соответствии URL: https://www.mckinsey.com/industries/education/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning. (дата обращения: 21.07.2023).

в которой была обнаружена схожая с выявленными в данном исследовании динамика успеваемости среди городских учащихся.

Примечателен и тот факт, что учащиеся сельских школ Новосибирской области не только не пострадали из-за пандемии коронавируса, но и улучшили свои результаты в ОГЭ начиная с 2020 года. Рост результатов в период пандемии в других исследованиях чаще всего наблюдался среди учащихся младших классов. В исследовании на данных школьников Дании помимо отсутствия значимых потерь для учащихся старших классов был также зафиксирован прирост баллов среди младших школьников по чтению и математике [7]. В Нидерландах активное использование компьютерных систем для обучения тоже позволило ускорить рост знаний учащихся младших классов в математике, который сохранился и после пандемии [18]. Но наиболее любопытный факт роста баллов в период пандемии описывается в образовательной системе Австралии. Там рост баллов среди младших школьников наблюдался только среди тех, кто учится в неблагополучных школах — то есть среди детей, которые по всем предсказаниям должны были пострадать от пандемии больше остальных. Учащиеся остальных типов школ при этом не продемонстрировали изменений в результатах тестирований в связи с пандемией [19].

Обсуждая причины, которые могут стоять за полученными в работе результатами, следует рассмотреть несколько факторов. Во-первых, не стоит забывать об ограничениях текущего исследования, которые могли повлиять на то, что полученные данные противоречат выводам большинства других исследований. Ранее мы упоминали, что изменение формата экзамена в 2020 году могло по нескольким причинам отразиться на баллах учащихся. Однако в таком случае ситуация должна была вернуться в привычное русло после восстановления стандартной процедуры экзамена в 2021 и 2022 годах, чего мы на данных исследования не наблюдаем. Во-вторых, очевидно, что как альтернативное объяснение свою роль могла сыграть различная продолжительность дистанционного обучения среди городских и сельских школ. Более продолжительное нахождение на дистанционном обучении для учащихся городских школ могло стать причиной незначимого снижения их результатов в абсолютных значениях процента выполнения ОГЭ. Причем, как отмечалось ранее, средний балл сдачи экзамена среди городских школ сохранился и после пандемии, не проявляя признаков роста в последующие годы.

Тем не менее очень маловероятно, что факт непродолжительного нахождения в дистанционном режиме работы среди учащихся сельских школ полностью объясняет сокращение неравенства между городскими и сельскими школьниками. По данным исследования, мы наблюдаем не просто отсутствие снижения результатов в этой группе детей, но даже небольшой прирост баллов (0,1 SD), хотя статистически он является незначимым по сравнению с предыдущими периодами. Это вряд ли является следствием только отсутствия режима обучения в этой группе учащихся, негативно сказавшегося на результатах остальных детей. Одним из вероятных механизмов роста достижений детей сельских школ могла стать адресная поддержка школ и учащихся в период пандемии. Аналогичная гипотеза в исследовании, продемонстрировавшем рост баллов в период пандемии в неблагополучных школах [19], основывается на предположении, что опасения из-за потенциальных негативных эффектов пандемии привели к небывалому вниманию к группе наиболее уязвимых учащихся со стороны государства. Вероятно, что как минимум часть инициатив, внедренных в Новосибирской области в период пандемии и сохранившихся после ее завершения, способствовала улучшению ситуации с качеством образования в сельских школах. Однако этот вывод представляется в данной работе лишь как гипотеза, которая требует дальнейшего более пристального изучения практик, использованных в регионе в период пандемии и после, а также их взаимосвязей с качеством обучения учащихся.

В заключение следует отметить, что результаты данного исследования ставят под сомнение предположения, полученные в ходе международных исследований, относительно влияния пандемии на усиление образовательного неравенства. Неожиданное сокращение разрыва в успеваемости между городскими и сельскими школьниками, которое было обнаружено в исследовании, может объясняться ограничениями исследования, разной продолжительностью

дистанционного обучения, успешно проведенной поддержкой сельских школ в регионе. Все эти факторы еще раз подчеркивают сложность образовательного ландшафта во время пандемии и важность учета местных условий и конкретных мер образовательной политики при оценке влияния кризисов на успеваемость учащихся.

Приложение 1

Описательная статистика по используемым в анализе переменным после предварительной обработки базы данных

Таблица 1 Описательная статистика результатов ОГЭ по математике и русскому языку с 2017 по 2022 годы

Год	N	Среднее	Станд. откл.	Мин.	Макс.
		Русски	ій язык		
2017	18029	80	14	38	100
2018	19759	78	15	33	100
2019	20868	82	13	44	100
2020	11023	73	14	30	100
2021	21317	76	13	39	100
2022	21094	77	12	39	100
		Матем	иатика		
2017	17656	54	14	16	91
2018	19537	54	17	9	94
2019	20892	55	17	9	94
2020	10896	44	19	0	97
2021	20744	46	13	10	81
2022	21461	44	16	0	87

Таблица 2 Описательная статистика по переменным контингента школ, усредненным за 2017—2021 годы

Показатель	Среднее	Станд. откл.	Мин.	Макс.
Доля обучающихся со специальными потребностями (с OB3, дети-инвалиды)	5.2%	4.2%	0%	21%
Доля обучающихся, у которых хотя бы один из родителей является безработным	12%	13%	0%	58%
Доля обучающихся, у которых оба родителя не имеют высшего образования	54%	31%	0%	99%
Доля обучающихся из неполных семей	21%	7.3%	0%	44%
Доля обучающихся из многодетных семей	23%	12%	2.6%	62%
Доля обучающихся из малообеспеченных семей	16%	17%	0%	88%

Приложение 2

Результаты применения многоуровневой регрессионной модели роста для оценки изменения академических достижений учащихся до и после пандемии

Таблица 1

Русский язык

	Модель 1			Модель 2			
Predictors	Estimates	CI	р	Estimates	CI	р	
(Intercept)	-0.17	-0.240.11	<0.001	-0.20	-0.270.14	<0.001	
year [2017]	0.00	-0.03 — 0.03	0.959	0.06	0.02 — 0.10	0.003	
year [2018]	0.01	-0.02 — 0.04	0.518	0.05	0.02 — 0.09	0.006	
year [2019]	0.01	-0.02 — 0.05	0.426	0.08	0.04 — 0.12	<0.001	
year [2021]	0.01	-0.03 0.04	0.668	0.02	-0.01 0.06	0.231	
year [2022]	0.01	-0.02 — 0.05	0.415	0.02	-0.02 0.05	0.435	
ses4 std	-0.03	-0.07 — 0.00	0.076	-0.03	-0.07 0.00	0.074	
ses7 std	0.02	-0.02 0.06	0.357	0.02	-0.02 0.06	0.357	
ses8 std	-0.19	-0.240.15	<0.001	-0.19	-0.240.14	<0.001	
ses10 std	-0.01	-0.04 0.02	0.590	-0.01	-0.04 0.02	0.559	
ses11 std	-0.02	-0.07 0.02	0.357	-0.02	-0.07 0.03	0.382	
ses13 std	0.01	-0.04 — 0.05	0.804	0.01	-0.04 — 0.05	0.817	
location [село]	-0.09	-0.170.01	0.028	0.02	-0.08 — 0.12	0.668	
year [2017] × location [село]				-0.19	-0.26 — -0.12	<0.001	
year [2018] × location [село]				-0.15	-0.22 — -0.08	<0.001	
year [2019] × location [село]				-0.21	-0.28 — -0.14	<0.001	
year [2021] × location [село]				-0.07	-0.14 0.00	0.061	
year [2022] × location [село]				-0.02	-0.09 — 0.05	0.500	
		Random E	ffects				
σ^2		0.81			0.81		
τ ₀₀		0.03 year:schl id			0.02 year:schl id		
	0.08 _{schl id}				0.08 _{schl id}		
ICC	0.027 (year:schl_id)			0	.026 (year:schl_id)	
	0.088 (schl_id)				0.089 (schl_id)		
N	6 _{year}			6 _{year}			
	512 schl id			512 _{schl id}			
Observations	112090 112090						
Marginal R ² / Conditional R ²		0.042 / 0.152		0.043 / 0.153			
AIC		297727.073		297694.057			
AICc		297727.078		297694.065			
log-Likelihood		-148847.537		-148826.029			

Таблица 2

Математика

		Модель 1		Модель 2			
Predictors	Estimates	CI	р	Estimates	CI	р	
(Intercept)	-0.14	-0.21 — -0.07	<0.001	-0.15	-0.220.08	<0.001	
year [2017]	0.01	-0.03 0.05	0.676	0.06	0.02 — 0.11	0.008	
year [2018]	0.03	-0.01 0.07	0.095	0.05	0.01 — 0.10	0.023	
year [2019]	0.02	-0.01 0.06	0.204	0.07	0.02 — 0.12	0.003	
year [2021]	0.05	0.01 — 0.08	0.022	0.04	-0.01 0.08	0.139	
year [2022]	0.04	0.01 — 0.08	0.022	0.01	-0.04 — 0.05	0.829	
ses4 std	-0.04	-0.08 — -0.01	0.020	-0.04	-0.080.01	0.020	
ses7 std	0.01	-0.04 0.05	0.758	0.01	-0.04 0.05	0.764	
ses8 std	-0.20	-0.25 — -0.15	<0.001	-0.20	-0.25 — -0.15	<0.001	
ses10 std	-0.04	-0.07 — -0.00	0.033	-0.04	-0.08 — -0.00	0.030	
ses11 std	0.01	-0.04 0.06	0.700	0.01	-0.04 — 0.06	0.678	
ses13 std	0.04	-0.00 0.09	0.081	0.04	-0.01 — 0.09	0.082	
location [село]	-0.16	-0.25 — -0.07	<0.001	-0.12	-0.23 — -0.02	0.021	
year [2017] × location [село]				-0.15	<0.001		
year [2018] × location [село]				-0.06 -0.14 0.02		0.129	
year [2019] × location [село]				-0.13 -0.210.05 0.0 0			
year [2021] × location [село]				0.02	-0.06 — 0.10	0.620	
year [2022] × location [село]				0.10	0.02 — 0.18	0.016	
		Random Ef	fects				
σ^2		0.78			0.78		
τ ₀₀		0.05 year:schl id			0.05 year:schl id		
	0.09 _{schl id}				0.09 schl id		
ICC	0.051 (year:schl_id)			0.0	049 (year:schl_id)		
		0.095 (schl_id)		0.096 (schl_id)			
N		6 _{year}		6 _{year}			
		512 schl_id		512 _{schl.id}			
Observations	111186 111186						
Marginal R ² / Conditional R ²		0.052 / 0.191		0.054 / 0.191			
AIC		292273.937		292244.322			
AICc		292273.942		292244.330			
log-Likelihood		-146120.969			-146101.161		

Литература

1. *Звягинцев Р.С., Керша Ю.Д., Пинская М.А.* Современная аналитика образования / Под общ. ред.: Я.И. Кузьминов. Вып. 5: CAO-express 5.

Переход на дистанционное образование: Детальный разбор муниципального кейса. М.: НИУ ВШЭ, 2020. 2. *Петракова А.В., Канонир Т.Н., Куликова А.А.* Особенности психологического стресса у учителей

- в условиях дистанционного преподавания во время пандемии COVID-19 // Вопросы образования. 2021. № 1. С. 93—114.
- 3. Сапрыкина Д.И., Волохович А.А. Проблемы перехода на дистанционное обучение в Российской Федерации глазами учителей [Электронный ресурс]. 2020. URL: https://ioe.hse.ru/mirror/pubs/share/365791549.pdf (дата обращения: 01.09.2023). 4. Чабан Т.Ю., Рамеева Р.С., Денисов И.С., Керша Ю.Д., Звягинцев Р.С. Российская школа в период пандемии COVID-19: эффекты первых двух волн и качество образования // Вопросы образования. 2022. № 1. С. 160—188.
- 5. *Якобюк Л.И.* Изучение влияния дистанционной формы обучения во время пандемии на результаты обучения // Мир науки, культуры, образования. 2020. № 5. Т. 84. С. 179—181.
- 6. Betthäuser B.A., Bach-Mortensen A.M., Engzell P. A systematic review and meta-analysis of the evidence on learning during the COVID-19 pandemic // Nature Human Behaviour. 2023. Vol. 7. № 3. P. 375—385.
- 7. Birkelund J.F., Karlson K.B. No evidence of a major learning slide 14 months into the COVID-19 pandemic in Denmark // European Societies. 2023. Vol. 25. № 3. P. 468—488.
- 8. Fox J. Applied Regression Analysis and Generalized Linear Models. 3rd ed. Los Angeles: SagePublications, 2016.
- 9. Grewenig E., Lergetporer P., Werner K., Woessmann L., Zierow L. COVID-19 and educational inequality: How school closures affect low-and high-achieving students // European economic review. 2021. Vol. 140. P. 103920.
- 10. Hallin A.E., Danielsson H., Nordström T., Fälth L. No learning loss in Sweden during the pandemic: Evidence from primary school reading assessments // International Journal of Educational Research. 2022. Vol. 114. P. 102011.
- 11. Hammerstein S., König C., Dreisörner T., Frey A. Effects of COVID-19-related school closures on student achievement-a systematic review // Frontiers in psychology. 2021. Vol. 12. P. 746289.
- 12. Hanushek E., Woessmann L. "The economic impacts of learning losses", OECD Education Working Papers, No. 225. OECD Publishing, Paris, 2021. DOI:10.1787/21908d74-en
- 13. *Hattie J.* What doesn't work in education: The politics of distraction. Pearson, 2015.

References

1. Zvyagintsev R.S., Kersha Yu.D., Pinskaya M.A. Sovremennaya analitika obrazovaniya / Pod obshch. red.: Ya.I. Kuz'minov. Vyp. 5: SAO-express 5. Perekhod na distantsionnoe obrazovanie: Detal'nyi razbor munitsipal'nogo keisa [Modern analytics of education / Edited by Y.I. Kuzminov. Vyp. 5: SAO-express 5. Transition to Distance Education:

- 14. Hox J.J., Moerbeek M., Van de Schoot R. Multilevel analysis: Techniques and applications. Routledge, 2017
- 15. König C., Frey A. The impact of COVID-19-related school closures on student achievement A meta-analysis // Educational Measurement: Issues and Practice. 2022. Vol. 41. № 1. P. 16—22.
- 16. Llanes L.M., Pico M.R., Maldonado D., García S. Learning inequality during Covid-19: Evidence from secondary schools in Colombia // International Journal of Educational Development. 2023. Vol. 100. P. 102788.
- 17. MaagMerki K., Buehlmann F., Kamm C., Truniger A., Emmerich M. Support of students in primary schools: A comparative case study in a selective education system // Journal of Curriculum Studies. 2021. Vol. 53. № 3. P. 279—297.
- 18. Meeter M. Primary school mathematics during Covid-19: No evidence of learning gaps in adaptive practicing results // Trends in Neuroscience and Education. 2021. Vol. 25. № 7820. P. 100163.
- 19. Miller A., Fray L., Gore J. Was COVID-19 an unexpected catalyst for more equitable learning outcomes? A comparative analysis after two years of disrupted schooling in Australian primary schools // Australian Educational Researcher. 2023. P. 1—22.
- 20. Prakhov I., Kotomina O., Sazhina A. Parental involvement and the educational trajectories of youth in Russia // International Journal of Educational Development. 2020. Vol. 78. P. 102252.
- 21. Schleicher A. The Impact of COVID-19 on Education: Insights from" Education at a Glance 2020". OECD Publishing, 2020.
- 22. *Tadesse S., Muluye W.* The impact of COVID-19 pandemic on education system in developing countries: a review // Open Journal of Social Sciences. 2020. Vol. 8. № 10. P. 159—170.
- 23. The United Nations. Education during COVID-19 and beyond. Policy Brief, 2020.
- 24. *Tomasik M.J., Helbling L.A., Moser U.* Educational gains of in-person vs. distance learning in primary and secondary schools: A natural experiment during the COVID-19 pandemic school closures in Switzerland // International Journal of psychology. 2021. Vol. 56. № 4. P. 566—576.
- 25. *Tukey J.W.* Exploratory Data Analysis. Addison-Wesley, Reading, MA, 1977.
- A Detailed Analysis of a Municipal Case Study]. Moscow: NIU VShE, 2020.
- 2. Petrakova A.V., Kanonir T.N., Kulikova A.A. Osobennosti psikhologicheskogo stressa u uchitelei v usloviyakh distantsionnogo prepodavaniya vo vremya pandemii COVID-19 [Peculiarities of psychological stress in teachers under conditions of distance teaching during the COVID-19 pandemic]. Voprosy

- obrazovaniya = Educational studies, 2021, no. 1, pp. 93—114. (In Russ.).
- 3. Saprykina D.I., Volokhovich A.A. Problemy perekhoda na distantsionnoe obuchenie v Rossiiskoi Federatsii glazami uchitelei [Problems of transition to distance learning in the Russian Federation as seen by teachers]. 2020. Available at: https://ioe.hse.ru/mirror/pubs/share/365791549.pdf (Accessed 01.09.2023). (In Russ.).
- 4. Chaban T.Yu., Rameeva R.S., Denisov I.S., Kersha Yu.D., Zvyagintsev R.S. Rossiiskaya shkola v period pandemii COVID-19: effekty pervykh dvukh voln i kachestvo obrazovaniya [Russian schools during the COVID-19 pandemic: effects of the first two waves and quality of education]. Voprosy obrazovaniya = Educational studies, 2022, no. 1, pp. 160—188. (In Russ.).
- 5. Yakobyuk L.I. Izuchenie vliyaniya distantsionnoi formy obucheniya vo vremya pandemii na rezul'taty obucheniya [Investigating the impact of distance learning during the pandemic on learning outcomes]. Mir nauki, kul'tury, obrazovaniya = The world of science, culture, education, 2020. Vol. 84, no. 5, pp. 179—181. (In Russ.).
- 6. Betthäuser B.A., Bach-Mortensen A.M., Engzell P. A systematic review and meta-analysis of the evidence on learning during the COVID-19 pandemic. *Nature Human Behaviour*, 2023. Vol. 7, no. 3, pp. 375—385.
- 7. *Birkelund J.F.*, *Karlson K.B.* No evidence of a major learning slide 14 months into the COVID-19 pandemic in Denmark. *European Societies*, 2023. Vol. 25, no. 3, pp. 468—488.
- 8. Fox J. Applied Regression Analysis and Generalized Linear Models. 3rd ed. Los Angeles: SagePublications, 2016.
- 9. Grewenig E., Lergetporer P., Werner K., Woessmann L., Zierow L. COVID-19 and educational inequality: How school closures affect low-and high-achieving students. European economic review, 2021. Vol. 140. P. 103920.
- 10. Hallin A.E., Danielsson H., Nordström T., Fälth L. No learning loss in Sweden during the pandemic: Evidence from primary school reading assessments. International Journal of Educational Research, 2022. Vol. 114. P. 102011.
- 11. Hammerstein S., König C., Dreisörner T., Frey A. Effects of COVID-19-related school closures on student achievement-a systematic review. Frontiers in psychology, 2021. Vol. 12. P. 746289.
- 12. Hanushek E., Woessmann L. "The economic impacts of learning losses", OECD Education Working Papers, No. 225. OECD Publishing, Paris, 2021.

- DOI:10.1787/21908d74-en
- 13. *Hattie J.* What doesn't work in education: The politics of distraction. Pearson, 2015.
- 14. Hox J.J., Moerbeek M., Van de Schoot R. Multilevel analysis: Techniques and applications. Routledge, 2017.
- 15. König C., Frey A. The impact of COVID-19-related school closures on student achievement A meta-analysis. Educational Measurement: Issues and Practice, 2022. Vol. 41, no. 1, pp. 16—22.
- 16. Llanes L.M., Pico M.R., Maldonado D., García S. Learning inequality during Covid-19: Evidence from secondary schools in Colombia. International Journal of Educational Development, 2023. Vol. 100. P. 102788.
- 17. MaagMerki K., Buehlmann F., Kamm C., Truniger A., Emmerich M. Support of students in primary schools: A comparative case study in a selective education system. Journal of Curriculum Studies, 2021. Vol. 53, no. 3, pp. 279—297.
- 18. *Meeter M.* Primary school mathematics during Covid-19: No evidence of learning gaps in adaptive practicing results. *Trends in Neuroscience and Education*, 2021. Vol. 25, no. 7820. P. 100163.
- 19. Miller A., Fray L., Gore J. Was COVID-19 an unexpected catalyst for more equitable learning outcomes? A comparative analysis after two years of disrupted schooling in Australian primary schools. Australian Educational Researcher, 2023, pp. 1—22.
- 20. Prakhov I., Kotomina O., Sazhina A. Parental involvement and the educational trajectories of youth in Russia. International Journal of Educational Development, 2020. Vol. 78. P. 102252.
- 21. Schleicher A. The Impact of COVID-19 on Education: Insights from" Education at a Glance 2020". OECD Publishing, 2020.
- 22. *Tadesse S., Muluye W.* The impact of COVID-19 pandemic on education system in developing countries: a review. *Open Journal of Social Sciences*, 2020. Vol. 8, no. 10, pp. 159—170.
- 23. The United Nations. Education during COVID-19 and beyond. Policy Brief, 2020.
- 24. Tomasik M.J., Helbling L.A., Moser U. Educational gains of in-person vs. distance learning in primary and secondary schools: A natural experiment during the COVID-19 pandemic school closures in Switzerland. *International Journal of psychology*, 2021. Vol. 56, no. 4, pp. 566—576.
- 25. *Tukey J.W.* Exploratory Data Analysis. Addison-Wesley, Reading, MA, 1977.

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Improving the Effectiveness of Educational Quality Management Mechanisms as the Main Condition for Improving School Educational Outcomes

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The paper is devoted to improving the results of a general school by introducing changes to the established practices of decision-making and setting development goals that have settled in school management practices. The paper is based on materials of a project of targeted methodological assistance to schools with low educational outcomes, that was implemented from 2020 to 2022 in the Russian Federation. The authors set a goal to identify the existence of a correlation between a number of parameters characterising an educational organisation (the proportion of underachieving students), its management style (the director's attitudes, the dynamics of changes in management and pedagogical practices) and the likelihood of effective implementation of the development program, observed through increasing students' outcomes. The results show a straight correlation between the principal's attitudes and the results, a straight connection with different weights of different practices from the study set, and no correlation for the proportion of underachieving students. The conclusion is drawn about the influence of a low level of manager competencies on the director's attitudes, the feasibility of helping schools in identifying and preventing risk factors, the universality of benefits from the introduction of datadriven management mechanisms data in any school, regardless of the depth of underachievement.

Keywords: low educational outcomes; a project of targeted methodological assistance to schools with low educational outcomes; educational quality management mechanisms; school failure; conditions of prevention of low educational outcomes.

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Повышение эффективности механизмов управления качеством образования как основное условие повышения результатов образовательной организации

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Представленная в статье тема посвящена проблеме повышения результатов образовательной организации в системе общего образования за счет внедрения изменений в устоявшиеся практики принятия решений и постановки задач развития, сложившиеся в школе. Статья опирается на материалы проекта «Адресная методическая помощь школам с низкими образовательными результатами», который реализовывался с 2020 по 2022 годы в Российской Федерации. Авторы поставили целью выявить наличие связи между рядом параметров, характеризующих образовательную организацию (доля неуспевающих обучающихся), стилем управления ею (установки директора, динамика изменений управленческих и педагогических практик) и вероятностью результативной реализации программы развития, выражающейся в повышении результатов обучающихся. Результаты показали прямую связь установок директора с результатами обучающихся, прямую связь разной степени, характерную для той или иной практики из исследуемого набора, и отсутствие связи для доли неуспевающих обучающихся. Делается вывод о влиянии низкого уровня управленческих компетенций директора на его установки, целесообразности помощи образовательным организациям в вопросах выявления и профилактики факторов риска, универсальности пользы от внедрения управленческих механизмов: выявления задач развития на основе данных в любой школе независимо от глубины неуспешности школьного контингента обучающихся.

Ключевые слова: низкие образовательные результаты; проект адресной методической помощи; механизмы управления качеством образования; школьная неуспешность; условия преодоления факторов риска низких результатов.

Финансирование. Исследование выполнено с применением данных, полученных в процессе выполнения государственного задания ФГБУ ФИОКО в 2020—2022 гг.

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Introduction

The purpose of the concept of "the best school is the one next door" relates to many educational systems of the world. However, in practice, the educational results of schools may significantly differ. In the Russian Federation, according to assessment and evaluation procedures in 2019, more than 9 thousand schools were classified as "schools with low educational results". Classification took place according to the methodology and criteria [1].

Researchers associate the quality gap in schools' results with various internal and external factors [2]. Positive factors are associated with high outcomes, risk factors, the contrary — with underperformance and underachievement.

The purpose of the Russian "Targeted Methodological Assistance to Schools with Low Educational Results" project (hereinafter referred to as the Project) is to improve the results of schools with poor student performance by identifying the risk factors for reducing the results characteristic of each individual school participating in the project, by developing and implementing measures (development programs) to overcome the negative impact of such factors.

As risk factors, the Project considers risk factors recognized by the scientific community for reducing educational outcomes: contextual constraints, resource shortage and competence deficits, as well as the features of the school educational environment.

Contextual risks are understood as complex factors that the school cannot change itself (for example, the location, social-economic and cultural characteristics of the school's territory and students background). Contextual risks may also include the characteristics of school students (high socio-cultural diversity, am increased proportion of students with disabilities, etc.). In any education system, such complex

factors have a high correlation with lower student outcomes, and students with low socio-economic and cultural status are at risk of low educational outcomes [3].

The other, non-contextual risk factors may be directly affected. For example: the resource shortage (staff, teaching materials and equipment), the quality of the physical environment of the school; the risks of a low-quality school social environment (negative school climate), that affects the quality of social and professional relations at school [4]; low professional competencies of teachers. Researchers often attribute this last category of risk factors to be the most significant [5].

The studies that formed the methodological basis of the Project indicate that contextual risk factors can be mitigated, while the impact of non-contextual factors is significantly reduced or eliminated at all [5, 6, 7].

We will highlight a group of risks associated with school management. The school principal is a key figure in the success of measures to counteract risk factors, planning and implementation is impossible without the direct meaningful participation of the school principal in it. Effective school management today requires the diverse competencies of a school manager: a) assessing deficits and supporting the development of the professional competencies of teachers; b) goal setting, the analysis of the effectiveness of achieving goals, compliance with higher management levels; c) financial and human resources management; d) interaction with the external environment of the school [8].

There at are at least two possible scenarios when the principal and the managerial team do not implement the management function to improve the quality of the results, threating its development: the principal is inactive regarding the identification of risk factors specific to the school, or the principal takes measures which do not lead to the desired results. Inaction can also be the result of little knowledge on how to solve a noticed problem, or a lack of knowledge of the problem, that leads to the inability to make decisions. The situation of taking ineffective measures can also be assumed as a situation of knowledge about the problem, but a lack of skills to solve it.

As a result, the school remains equal to its own basic potential, when the risk factors that threaten its development are contrasted with the professional abilities of the members of the teaching staff, the set of technologies, techniques and practices that have actually developed after receiving pedagogical education and subsequent professional experience, individually implemented by teachers at school. If the skills of the school staff are not enough to mitigate the risk factors, it will demonstrate lower results than if there was an adequate identification, prevention of deficiencies and adaptation of the technologies used to the needs of the school.

The situation of the principal's inaction regarding the quality of education is quite common in Russian schools. According to the TALIS-2018 study, Russian principals are less involved in issues directly related to improving the quality of education, compared with principals from countries leading in the quality of general education. In a Russian school, the principal pays less attention to identifying teacher deficiencies and adapting the school curriculum (as well as identifying the need for its adaptation) [9].

Not only the lack of necessary competencies, but also the principal's attitude can interrupt the identification, recognition and elimination of the problems that hinder the development of a school. The lack of successful experience in countering risk factors can support a fixed mindset [10]. The necessity to make steps to change existing practices may be perceived by the principals as an admission of their own failure, which can foster inaction.

Due to the need to change the common inaction of the principal, the main part of the Project involved the creation of the conditions for launching a decision-making process aimed at the school development.

The Project was intended to provide the schools with low education outcomes the following: 1) the information about educational outcomes and the risk factors, and an individual risk profile for a school; 2) a set of selected and approved technologies for developing the practical measures to mitigate the risk factors; 3) methodological advisory support on the development and implementation of measures to mitigate risk factors. Thus, schools received the instruments and instructions for restarting their quality management.

The article discusses the following hypotheses:

- the effectiveness of participation in the Project of Targeted Methodological Assistance to Schools with Low Educational Results correlates with the attitudes of the administrative staff;
- the prevention of low educational outcomes is associated with changes in pedagogical and classroom practices, professional interaction and managerial practices in school;
- the effectiveness of the preventive measures is associated with the starting position of a school receiving assistance (the greater numbers of underperforming students in schools associate with the little efficiency of the assistance).

Method

Comparison of the Results of Subgroups of Schools

The main way to test the hypotheses was to compare the results of different subgroups of schools, identified in the survey results. For this, the following data is used:

1) the lists of schools with low results from different years, the 2019 list is taken as the base, the 2022 list as the control list; 2) the

dynamics of the low performance index. The analysis of the dynamics of the index makes it possible to identify differences between effective prevention factors and observe trends in school results even if the school has not left the list of low performers.

The index of low results is calculated for each test of the All-Russian National Tests. separately for grades 4, 5 and 6 in Russian and Math. The index is calculated as the share of the participants in a procedure in a given subject in a given grade, whose results are below the established minimum score value for this grade-subject. The index reflects the proportion of students receiving unsatisfactory grades in the subject. The index takes values from 0—1, where 1 stands for low results. 100% of students in the target grade received "Unsatisfactory" in the subject, 0 means the absence of low results. Since the index characterizes low educational results, its decrease is associated with a decrease in the share of unsuccessful students and an increase of the results. To assess the dynamics, the value of the generalized index of low results is used, equal to the average of all indices of low results according to the specified assessment procedures, including selected grade-subjects results. The base index score is calculated on the results of 2019. the control index is calculated using the same procedure results from 2022.

To analyze the administration's attitudes an index was developed that characterizes *school involvement* in the Project. It presumes the principal's view and those school employees that have the greatest influence on his opinion. It includes: the principal's attitude towards the Project, the feedback of the curator (an appointed external practitioner, who is a skilled school manager themselves) collected throughout the Project. The objectives of the survey were the principal's readiness for professional development, their openness to the external environment, their willingness to change the status quo.

The index is calculated using the responses of principals and curators who answered all of the necessary questions during a series of questionnaires (at the beginning, middle, and end of the year of participation in the Project). The number of pairs of a principal and a curator representing one school was 1,590 out of 3,000 pairs who participated in the Project in 2021.

The questionnaires consisted of questions with scoring options (from 1 to 5) and questions with a choice of options. Answers with values 1—3 correspond to a low index value, answers with 4—5 correspond to a high value; all choice options questions used for the index were associated with a decrease in the index (Table 3).

45% of schools showed a high engagement index, 11% showed a low one.

The study of the influence of the change in school practices is made on a sample of underachieving students, the survey of the principals who participated in the Project in 2021 was conducted in 2022. More than 2836 (95%) principals took part in the survey. Survey participants were asked to evaluate how much a particular technology or practice had changed, indicating that it had not changed at all (1 point) or, on the contrary, that it had become developed enough that the school could present its own experience in that area (5 points). The results of the survey were compared for schools that remain in the list of schools with low results since 2019 or had left it in 2022.

To analyze the connection between the initial level of underperformance in school and the results of participation in the Project, the dynamics of the results of the index of low results in the subgroups of schools is analyzed. The following groups are distinguished: basic underachievers (<= .32); average underachievers (.33—.47; .48—.60); severe underachievers (>= .61). The share in the brackets is the low performing

students according to All-Russian National Tests. Among the Project participants, the shares of schools with different levels of failure and contextual risks are distributed in equal proportions to the actual state at the beginning of the Project, this was one

of the specific conditions for selecting participating schools [11].

The value of the index of low results, the share of public organizations that were on the list with low results and left it are presented in Table 2.

Table 1

Questions Used for the Index of School Involvement in the Implementation
of the Targeted Methodological Assistance Project in 2021

Role of participant	Time of completing questionnaire	Question
Principal	end	How do you assess the current involvement of your school in the Project?
Curator	middle	How can you characterize the openness of the school for the changes that need to be implemented within the Project?
Curator	middle	In your opinion, does the administration of the school you are supervising strive to improve the internal evaluation system (IES) to obtain more optimal and accurate information? (The answer "The Administration does not see the need for changes in the IES" gives an index decrease.)
Curator	end	How would you describe the involvement of the supervised school in the Project?
Curator	end	What is the frequency of communication with the school you are supervising? (The answer "Less than 1 time per month" gives a decrease in the index.)
Curator	end	How can you characterize the interaction between you (as a curator) and the supervised school during collaboration within the Project? (The answers "The supervised school contacted me (as a curator) only for formal approvals needed for the Project " and "I (as a curator) often had to remind the school of the importance of participating actively in the Project, of deadlines for completing assignments and initiating discussions of problematic issues" give a decrease in the index.)

Table 2

The Relationship Between the Factors of the Prevention of Low Results, the Fact that a School is Included in the List of Low Performers and the Dynamics of the Low Results Index

Factor Under Study	Value of the Factor		ormers List 122	Low Results Index Dynamics	
-		Left the list	Remain in the list	Mean (remain — left)	
	Management Att	itudes			
School involvement	low	51%	49%	-,07	
	medium	61%	39%	-,09	
	high	72%	28%	-,12	

Factor Under Study	Value of the Factor		ormers List 022	Low Results Index Dynamics	
,		Left the	Remain in the list	Mean (remain — left)	
	School Pra	ctices			
Communication quality between management	No changes observed	50%	50%	-,03	
and teachers	2	55%	45%	-,10	
	3	57%	43%	-,08	
	4	65%	35%	-,10	
	Severe, noticeable changes	72%	28%	-,11	
Teacher practices and	No changes observed	0%	100%	,04	
classroom technologies	2	41%	59%	-,04	
	3	57%	43%	-,08	
	4	66%	34%	-,10	
	Severe, noticeable changes	72%	28%	-,12	
Teacher per lessons	No changes observed	47%	53%	-,01	
observation	2	48%	52%	-,04	
	3	59%	41%	-,09	
	4	65%	35%	-,11	
	Severe, noticeable changes	72%	28%	-,11	
Feedback to the col-	No changes observed	29%	71%	-,02	
leagues	2	47%	53%	-,05	
	3	59%	41%	-,09	
	4	63%	37%	-,10	
	Severe, noticeable changes	73%	27%	-,11	
Communication quality	No changes observed	38%	63%	-,07	
between teachers and	2	56%	44%	-,08	
students	3	58%	42%	-,09	
	4	64%	36%	-,10	
	Severe, noticeable changes	72%	28%	-,11	
School climate	No changes observed	45%	55%	-,08	
	2	51%	49%	-,08	
	3	58%	42%	-,09	
	4	65%	35%	-,10	
	Severe, noticeable changes	71%	29%	-,12	
Upbringing technologies	No changes observed	27%	73%	,00	
. 5 5	2	50%	50%	-,04	
	3	57%	43%	-,09	
	4	65%	35%	-,10	
	Severe, noticeable changes	72%	28%	-,12	
Parents involvement in	No changes observed	47%	53%	-,09	
the school life	2	47%	53%	-,06	
	3	61%	39%	09	

Factor Under Study	Value of the Factor		ormers List 022	Low Results Index Dynamics	
		Left the	Remain in the list	Mean (remain — left)	
	4	67%	33%	-,10	
	Severe, noticeable changes	70%	30%	-,11	
Communication to the	No changes observed	59%	41%	-,06	
ounder	2	62%	38%	-,10	
	3	61%	39%	-,09	
	4	64%	36%	-,10	
	Severe, noticeable changes	69%	31%	-,11	
Unbiased internal	No changes observed	14%	86%	-,04	
evaluation	2	35%	65%	-,06	
	3	57%	43%	-,08	
	4	66%	34%	-,10	
	Severe, noticeable changes	71%	29%	-,12	
School self-assessment	No changes observed	50%	50%	-,04	
	2	56%	44%	-,08	
	3	56%	44%	-,08	
	4	64%	36%	-,10	
	Severe, noticeable changes	71%	29%	-,11	
Managing of the internal	No changes observed	31%	69%	,04	
evaluation system	2	45%	55%	-,08	
	3	57%	43%	-,08	
	4	66%	34%	-,10	
	Severe, noticeable changes	73%	27%	-,12	
Defining problems and	No changes observed	62%	38%	-,05	
risks	2	56%	44%	-,09	
	3	57%	43%	-,09	
	4	65%	35%	-,10	
	Severe, noticeable changes	71%	29%	-,11	
	Starting Level of Un	nderachieving	•		
Low results index	<= ,32	71%	29%	-,04	
(Grade 5)	,33—,47	69%	31%	-,08	
	,48—,60	62%	38%	-,11	
	,61+	56%	44%	-,18	
Low results index	<= ,50	73%	27%	-,05	
(Grade 6)	,51 — ,61	69%	31%	-,07	
	,62 — ,75	62%	38%	-,11	
	,76+	53%	47%	-,18	

Results

As a result of hypothesis testing, it was revealed that the attitudes of the principal

are associated with the successful implementation of the Project. Schools whose principals demonstrated high involvement in

the implementation of the Project were on average 1.7 times more effective than principals who did not show such involvement.

Increased confidence in the use of classroom technologies and managerial practices that were mentioned in the questionnaire is associated with a reduction in the proportion of low educational results. For example, the most noticeable changes for the principal in the pedagogical technologies used by teachers and the organization of the school system for assessing the quality of education resulted in the most noticeable decline in the index of low results (-,16), as well as the use of educational practices by teachers (-,12); the visiting of each other's lessons by colleagues (-,10); providing feedback to colleagues (-,09).

The hypothesis of a higher difficulty of preventing low results in schools with a higher proportion of underachieving students is not confirmed. On the contrary even, the schools with the largest proportion of students with low results have achieved the most noticeable dynamics of reducing the number of underachieving students. Note, however, that a more favorable starting position turned out to be associated with a more successful exit from the list of low performing schools, probably due to the fact that the results are closer to the boundary of the criteria chosen to determine the list, and. consequently, even a small improvement takes the school out of the focus zone.

As part of the discussion, it should be noted that, as a result of the differences in the evaluation scales of the studied groups of prevention factors (attitudes, practices, initial position), one should interpret with caution the comparison of the strength of the factors described by the change in the index of low results. So, for example, the active position of the principal can become a determining factor for the school to improve results, while the fixed mindset of the impossibility of improving results can completely block the development of a school.

At the same time, it seems that, in general, both the trend and the magnitude of the listed factors reflect reality.

The lack of standards and generally accepted criteria for the qualitative implementation of the listed communication and managerial practices significantly complicate the assessment of the effectiveness of their implementation in schools. The more unambiguously interpreted aspects, which were covered within the Project's methodological framework, such as "pedagogical technologies", "organization of IES", "observation of colleagues' lessons", turned out to be associated with more noticeable positive dynamics than more abstract categories such as "quality of communication between teachers and students", "school climate". At the same time, there is good reason to believe that the potential for the development of these aspects of the school's activities is more than significant.

An important factor that can be considered in relation to the activity of a school, but that is not sufficiently covered by the analysis is the external environment — the administrative structure in the school's founder and the region where school is located. Schools facing inefficient management and schools receiving the necessary assistance obviously work in different conditions. In this regard, the attitude and criteria that municipal and regional managers use for determining schools with low outcomes are very important. For example, an educational organization with high contextual risks and a significant proportion of underachievers may not be considered by the municipality and the regional executive authority as a school in need of support until it gets into the federal list of public organizations with low results. It seems risky for achieving the national goal of improving the quality of education.

Conclusion

To summarize, let us record a number of conclusions.

- Low school results are a consequence of the conjunction of a number of circumstances: an increased concentration of risk factors, insufficient counteraction or the inaction of the school administration.
- The inaction of the school is associated with the low competence of the administration in identifying and counteracting the risk factors. Inaction could be provoked by the absence of mechanisms for managing the quality of education: schools don't have enough technologies to identify problems and introduce the ap-

propriate measures to mitigate negative impact.

- The administration's attitudes may influence the implementation of quality management mechanisms for education at school.
- A school regardless of the starting point and the share of underachieving students can improve its results if it begins to implement mechanisms for managing the quality of education. Approaches to managing the quality of educational outcomes at school are universal.

References

- 1. Dweck C. Gibkoe soznanie: novyj vzglyad na psihologiyu razvitiya vzroslyh i detej [Flexible consciousness: a new look at the psychology of adult and child development]. Russian language, 7th release. 2021.
- 2. Metodika vyyavleniya obshcheobrazovatel'nyh organizacij, imeyushchih nizkie obrazovateľnye rezul'tatv obuchayushchihsya, na osnove kompleksnogo analiza dannyh ob obrazovateľnyh organizaciyah, v tom chisle dannyh o kachestve obrazovaniya [Methodology for identifying general education schools with low educational results of students based on a comprehensive analysis of data on educational organizations, including data on the quality of education]. 2020. Available at: https://fioco. ru/antirisk (Accessed 18.06.2023).
- 3. Report of the TALIS-2018 national study coordinator. 2018. Vol 1. Available at: https://fioco.ru/Talis-18-results (Accessed 28.07.2023).
- 4. Pinskaya M.A. et al. Poverh bar'erov: istorii shkol, rabotayushchih v slozhnyh social'nyh usloviyah. Kniga dlya shkol'nyh administratorov i dlya tekh, kto upravlyaet shkolami na municipal'nom i regional'nom urovnyah [Over the barriers: stories of schools operating in difficult social conditions. A book for school administrators and for those who manage schools at the municipal and regional levels]. Higher School of Economics, 2019. Available at: http://publications.hse.ru/mirror/pubs/share/direct/339289224 (Accessed 28.07.2023). (In Russ.).
- 5. Order Federal Service of Supervision in Sphere of Education and Science from 19.08.2020 No 847.

Available at: https://fioco.ru/научно-методическиематериалы (Accessed 18.06.2023). (In Russ.).

- Order Federal Service of Supervision in Sphere of Education and Science from 30.08.2020 No. 871. Metodika okazaniva adresnoi metodicheskoi pomoshchi obshcheobrazovatel'nym organizaciyam, imevushchim nizkie obrazovateľnye rezul'tatv obuchayushchihsya [Methods of providing targeted methodological assistance to general education schools with low educational results of students]. Available https://fioco.ru/antirisk (Accessed at: 18.06.2023). (In Russ.).
- Agasisti T. et al. Academic resilience: What schools and countries do to help disadvantaged students succeed in PISA. OECD Education Working Papers, 2018, no. 167. DOI:10.1787/e22490ac-en
- 8. Echazarra A., Radinger T. Learning in rural schools: Insights from PISA, TALIS and the literature. *OECD Education Working Paper*, 2019, no. 196. URL: https://one.oecd.org/document/EDU/WKP(2019)4/En/pdf (Accessed 28.07.2023).
- 9. Gase L. et al. Relationships among student, staff, and administrative measures of school climate and student health and academic outcomes. *Journal of School Health*, 2017. Vol. 87/5. DOI:10.1111/josh.12501 10. Pont B. et al. Improving School Leadership. OECD Policy and Practice. 2008. Available at: https://www.oecd.org/education/school/Improving-school-leadership.pdf (Accessed 18.06.2023).
- 11. Schleicher A. World Class: How to Build a 21st-Century School System. Strong Performers and Successful Reformers in Education. OECD Publishing, Paris, 2018. DOI:10.1787/9789264300002-en

Литература

1. Дуэк К. Гибкое сознание: новый взгляд на психологию развития взрослых и детей // 7-е издание, пер. с английского. МИФ, 2021.

2. Методика выявления общеобразовательных организаций, имеющих низкие образовательные результаты обучающихся, на основе комплексного анализа данных об образовательных организациях,

- в том числе данных о качестве образования [Электронный ресурс] // Сайт ФГБУ ФИОКО. 2020. URL: https://fioco.ru/antirisk (дата обращения: 18.06.2023).
- 3. Отчет национального центра исследования TALIS по результатам исследования TALIS-2018. Часть 1. 2018 [Электронный ресурс] // Сайт ФГБУ ФИОКО. 2018. URL: https://fioco.ru/Talis-18-results (дата обращения: 28.07.2023).
- 4. Пинская М.А. и др. Поверх барьеров: истории школ, работающих в сложных социальных условиях. Книга для школьных администраторов и для тех, кто управляет школами на муниципальном и региональном уровнях [Электронный ресурс] // ВШЭ. 2019. URL: http://publications.hse.ru/mirror/pubs/share/direct/339289224 (дата обращения: 28.07.2023).
- 5. Приказ Федеральной службы по надзору в сфере образования и науки от 19.08.2020 № 847 [Электронный ресурс] // Сайт ФГБУ ФИОКО. 2020. URL: https://fioco.ru/научно-методическиематериалы (дата обращения: 18.06.2023).
- 6. Приказ Федеральной службы по надзору в сфере образования и науки от 30.08.2020 № 871. Методика оказания адресной методической помощи общеобразовательным организациям,

- имеющим низкие образовательные результаты обучающихся [Электронный ресурс] // Сайт ФГБУ ФИОКО. 2020. URL: https://fioco.ru/antirisk (дата обращения: 18.06.2023).
- 7. Agasisti T. et al. Academic resilience: What schools and countries do to help disadvantaged students succeed in PISA // OECD Education Working Papers. 2018. No. 167. DOI:10.1787/e22490ac-en
- 8. Echazarra A., Radinger T. Learning in rural schools: Insights from PISA, TALIS and the literature // OECD Education Working Paper. 2019. No. 196. URL: https://one.oecd.org/document/EDU/WKP(2019)4/En/pdf (дата обращения: 28.07.2023).
- 9. Gase L. et al. Relationships among student, staff, and administrative measures of school climate and student health and academic outcomes // Journal of School Health. 2017. Vol. 87/5. DOI:10.1111/josh.12501 10. Pont B. et al. Improving School Leadership // OECD Policy and Practice. 2008 [Электронный ресурс]. URL: https://www.oecd.org/education/school/Improving-school-leadership.pdf (дата обращения: 18.06.2023).
- 11. Schleicher A. World Class: How to Build a 21st-Century School System. Strong Performers and Successful Reformers in Education. OECD Publishing, Paris, 2018. DOI:10.1787/9789264300002-en

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DEVELOPMENTAL PSYCHOLOGY | ПСИХОЛОГИЯ РАЗВИТИЯ

Communicative Learning Difficulties of Primary School Students

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The article describes the main learning difficulties primary school students face in communication. To identify these difficulties we used a digital adaptation of the School Anxiety Test (Phillips Test). Primary school students from 5 subjects of the Russian Federation were recruited for this study (The Republic of Tatarstan, Lipetsk Region, Volgograd Region, Chuvash Republic, Samara Region). 2031 4th grade students aged 9—11 years participated in the research. The data obtained revealed a significant percentage of primary school students with increased and high levels of anxiety and fears associated with school, which can be predictors of educational difficulties and school failure. Experimental testing of the developed diagnostic program proved that: 1) our initial theoretical assumptions about the forms of manifestations of learning difficulties of primary school students in the communicative area were reasonable; 2) the diagnostic method of some specific manifestations of learning difficulties is valid.

Keywords: learning difficulties; communicative difficulties; primary school students; a program for diagnosis of learning difficulties.

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Коммуникативные трудности в обучении младших школьников

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В статье описаны основные трудности у младших школьников в обучении, которые проявляются в коммуникативной сфере. Для выявления рассматриваемых трудностей использована цифровая адаптация методики «Тест школьной тревожности Филлипса». В исследовании приняли участие младшие школьники из 5 субъектов Российской Федерации: Республика Татарстан, Липецкая область, Волгоградская область, Чувашская республика, Самарская область. Выборку составил 2031 обучающийся 4 класса в возрасте 9—11 лет. Полученные данные выявили значительный процент школьников с повышенным и высоким уровнями тревожности и страхов, связанных со школой, что может являться предикторами появления учебных трудностей и школьной неуспешности. Экспериментальная апробация разработанной программы диагностики доказала: 1) обоснованность исходных теоретических предположений о формах проявлений трудностей в обучении у младших школьников в коммуникативной сфере, 2) валидность методики диагностики конкретных проявлений трудностей.

Ключевые слова: трудности в обучении; коммуникативные трудности; младшие школьники; программа диагностики трудностей в обучении.

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Introduction

The phenomenon of learning difficulties belongs to the category of educational phenomena that is a major focus of interest of specialists dealing with this sphere. Original psychological and pedagogical research studies dedicated to the problems of school-children's learning difficulties state that 15 to 40% of students somehow experience diffi-

culties in learning [1, 5]. One of the reasons for these difficulties might be in the deviation from the normal course of communicative activities employed in the educational process. As a rule, these said deviations lead to adverse implications of a socio-psychological and personal nature. The students may reveal difficulties in the communicative sphere in their interaction with peers as well as with

teachers and parents. A contributor to the decline in the motivation for learning and demonstrating academic progress is that parents or teachers might be reluctant to recognize the student's right to express his own opinion and prove his point of view. There is a wealth of examples for when parents or teachers at a based on their life experience and knowledge, conclude that they are to know, and their child or student is to simply listen and follow directions without objection. However, this constitutes the restriction of the independence of thought. It is important to realize that the educational process is an interaction in which students have the opportunity to ask guestions, express their assumptions, and reason for their views [13, 14].

The research conducted proves that a significant percentage of primary school teachers experience trouble with identifying and understanding the causes of students' difficulties, including those of the communicative sphere [3, 7, 16]. Such an insufficient level of troubleshooting awareness of teachers is due to the fact that theoretically grounded methods for identifying the causes of educational difficulties based on psychological and pedagogical diagnostic data is not available in the practice of organizing the educational process in primary general education.

The purpose of the study is to identify, document and analyze the main difficulties in the communicative sphere among primary school students and to justify the choice of diagnostic method.

The stated purpose required the delineation of the main difficulties of primary school children revealed in the communicative sphere. Diagnostic procedures were analyzed and selected to identify the main communicative difficulties in primary school students. The diagnostic program regarding communicative difficulties in primary school children obtained an experimental validation.

Methods

Sample description.

2031 4th grade students took part in an experimental validation of the diagnostic program regarding communication difficulties in younger schoolchildren. The study involved primary school children from 5 constituent entities of the Russian Federation, namely, from the Republic of Tatarstan, Lipetsk region, Volgograd region, the Chuvash Republic, and Samara region. The sample consisted of primary school students aged 9—10 years, of which boys comprised 51.0% (1036), and girls composed 49.0% (995). The distribution of study participants by the constituents of the Russian Federation is presented in Table 1.

Methods and procedures.

The accomplishment of the stated study purpose involved methods like the analysis of domestic and foreign scientific literature on the problem of communicative learning difficulties in primary school children, the analysis of existing psychodiagnostic tools, a psychological and pedagogical diagnosis of difficul-

Table 1

Distribution of Study Participants by Constituents of the Russian Federation

Constituent of the Russian Federation	Frequency	Percentage	Valid percentage	Accumulated percentage
Republic of Tatarstan	417	20,5	20,5	20,5
Lipetsk region	335	16,5	16,5	37,0
Volgograd region	406	20,0	20,0	57,0
Chuvash Republic	455	22,4	22,4	79,4
Samara region	418	20,6	20,6	100,0
Total	2031	100,0	100,0	

ties in primary school children that manifest themselves in the communicative sphere.

Based on the analysis of existing psychodiagnostic tools [10, 12], the "School Anxiety Test (Phillips test)" was selected to be included into the diagnostic portfolio to identify the main learning difficulties in primary school students in the communicative sphere. Pursuant to the study, the selected method was exposed to a digital adaptation. Study participants were offered consistent survey questions in an electronic format with 15 minutes, which were distributed by the 8 factors of school anxiety according to Phillips [12].

The analysis of the results of the Phillips School Anxiety Test allowed for the identification of the reasons for the student-adult and student-peer communication impairment with a substantial description of those reasons.

Description of Communicative Difficulties in Teaching Primary Schoolchildren

In an attempt to figure out the difficulties in teaching primary school children, the authors took "cultural development" as the fundamental concept of learning [2]. This concept presumes that active cultural capability (skill, competence) is only possible when the student assimilates the sign structures that are the ultimate expression (landmarks) of the cultural way to behave. The cultural method is mastered through participatory action. Communication with adults or peers constitutes the ontological basis of a child's development. In this case, evolving educational practice takes the form of the integrity and interconnection of activity, cognitive, communicative and interactive processes [4, 8]. This view of the educational process envisages the learning difficulties to be manifested in communicative, general educational and universal activities, or socially adaptive areas of the students' life. The basic communicative difficulties in teaching primary schoolchildren are depicted below.

Typical learning difficulties in the communicative sphere might reflect the result of the student's impaired communication 1) with teachers, 2) with peers, 3) with parents. Deficiency in the development of means of speech and means of information and communication technologies leads to difficulties in solving not only communicative, but also cognitive tasks [2].

The relationship with teachers identifies the following main communication difficulties.

- 1. The inability to follow the code of behavior in lessons and during breaks. Students failure to follow the rules of conduct or so-called disciplinary violations put the teacher under the necessity of disciplinary measures. Such disciplinary actions by the teacher, firstly, distract other students from completing educational tasks, and prevent the establishment of cooperation between the teacher and the student. Difficulties in learning can manifest themselves in the disruption of the teacher's contacts in educational activities.
- 2. The student fears negative assessment from the teacher and feels helpless. A younger schoolchild, especially at the initial stages of his school life, strives for a positive assessment of his educational results, expressed in high, typically excellent grades. This tendency may not be overcome by the practice of abolishing grades in the first grade of primary school. Expressing the fear of getting a low grade leads to helplessness when completing a new academic topic, concerns of being unable to cope with the educational task and, as a result, being exposed to difficulties in mastering the educational material.
- 3. The inability to properly communicate with the teacher in educational activities. The inability to build a communication procedure during the course of the learning process can be caused by the student's underdeveloped speech skills. The student's poor command of the language of instruction impedes him from addressing the teacher. This includes a misunderstanding of the essence of a learning task as well. The student is unable to recognize the causes of learning problems and ask for help. In this regard, the younger student

is unable to involve the teacher in cooperation in finding ways to be active in learning, or make a specific request for missing information. The student's inability to be reflective in assessing a learning problem or constructing an at of speech in accordance with the task at hand precludes the student from verbally addressing the teacher.

- 4. The difficulties of inclusion into shared (frontal and group) educational activities organized by the teacher. Difficulties of inclusion in shared activities are manifested in the lack of initiative in establishing and maintaining good cooperation based on educational interests, and in accepting educational cooperation. The inability to consider any other standpoint, to agree on points of view, to show respect for the interlocutor, to follow the rules of dialogue and discussion lead to difficulties in learning.
- 5. The individual psychological characteristics of the student. Difficulties in communication with the teacher are also vested in the individual characteristics of the student: timidity, shyness, speech defects (for instance, stuttering) and others.

In relationships with peers, the following main communication difficulties may be detected.

- 1. The inability to argue with one's point of view, or to defend one's position. Peer-to-peer communication suggests the presence of a partnership and equality of positions. Peers tend to preserve these conditions. Attempts to impose one's point of view, one's opinion in communication and interaction with peers destroys educational cooperation and leads to difficulties in mastering educational material.
- 2. The communication difficulties associated with the specific cultural norms and rules in the family where the child lives. Complicated communication with peers, which causes learning difficulties, may be associated with the student's foreign culture. The difference in cultures is clearly manifested in verbal communication, in its lexical content and social pragmatics of speech. The inability to perceive

and formulate judgments and express emotions in accordance with the goals and conditions of communication adopted in another culture leads to mutual misunderstanding and learning difficulties.

- 3. The failure to maintain a productive dialogue, of getting on the same page and to successfully interact with peers. Students-peers recognize each other as partners in educational activities and leisure forms of activity. The ability to conduct a productive dialogue and express one's attitude towards a presented point of view are integral attributes of the educational activities of primary school children. Immature communication skills lead to difficulties when accepting or setting an educational task, or with planning ways to solve it.
- 4. The lack of skills to collaborate with peers in educational, research, project and other types of activities. Communication skills are of particular importance when carrying out educational, research and project activities. These types of educational activities are usually employed in group work. A lack of communication and interaction skills in these types of activities hampers an effective completion of the research tasks and project assignments.
- 5. The difficulties in building communications with peers in educational and extracurricular activities, determined by individual psychological characteristics. Difficulties in communication with peers, leading to learning difficulties, lie in the individual psychological characteristics of the student. Peers avoid communication and educational cooperation with classmates that are distinct in character traits and manifest themselves as arrogant, boastful, aggressive, unassertive, etc.

In relationships with parents, the following main communication difficulties are identified.

1. The child's puerility in relations with parents. The student's parents participate as much as possible in his studies and life, by helping out with homework, explaining something, searching for material,

organizing events at school and monitoring classroom life on a day-to-day basis. Such parent attitude slows down the development of independent educational goal setting and responsibility for its results.

2. Loose contact with parents, a fear of negative assesment or punishment for bad grades. Parents express a formal attitude towards how their child does at school. The main attention is paid to the grades that the child receives, and while positive grades are rewarded, bad grades are frowned upon and punished. A shortage of parental support in the form of gentle encouragement and participation in the child's school life reduces the internal motivation of learning and deprives educational activities of personal meaning.

All of these difficulties manifest themselves in the communicative sphere and, most often, they are paid attention to by teachers or concerned parents. A psychologist builds up interaction with the child and his family during the course of discussing problematic situations. However, most often described symptoms reflect a poor organization of the educational process and a lack of productive communication between all of its participants. It has been established that the context for the development of proactive behavior in the cognitive sphere is a group of equals or peers, jointly solving a problem [9]. Therefore, when organizing the educational process based on the principles of developmental education, the main task of the teacher is to organize the class in a form of learning community that capable of cooperation in carrying out the tasks that are beyond the capabilities of each individual participant in the common work. In the context of educational cooperation, emotional support is provided for the student who expresses his thoughts about something unknown. The social and functional connections and relationships of all participants in educational work are supposed to share the motivation to get involved in the educational process instead of dropping out of it [6, 9]. The cooperation with adults and peers is a

proven area of activity where cultural ways of acting are mastered with the most success [11, 15]. Collaboration in a group of equals is a source of development of a reflective and decentering way both in the intellectual, emotional and personal spheres [9].

Developmental education can also be considered as the diagnosis object, while the subject of diagnosis of individual development in education is the educational process as the unity and integrity of the processes of communication, cognition, and interaction in joint educational activities. The unit of diagnostics of development is the child-adult alliance in the educational context.

In this regard, the basic tool for overcoming the onset of communicative difficulties in learning among younger schoolchildren is the improvement of the didactic and methodological competence of the teacher.

Results

Descriptive statistics. The evaluation of the sample comprising 2031 students of 4th grade, demonstrates that the majority of children experience not only general school anxiety, but also specific anxiety symptoms that indicate certain problems. Additional data presented in Table 2 detail the results for all scales.

As shown in Table 2, distributions on the scales 1. General anxiety at school, 2. Experience of social stress, 3. Frustration of the need to achieve success, 6. Fear of not meeting the expectations of others and, in particular, 7. Low physiological resistance to stress of the School Test Phillips' anxiety scores have a pronounced rightsided asymmetry (the sign of A is negative, the module A is a multiple of the standard error of the asymmetry), which means that higher indicators are predominant in the sample. All distributions differ from normal (Kolmogorov-Smirnov test, p = 0.000, p < 0.001). The distribution of respondents according to the levels of severity of these indicators of school-related anxiety in children of primary school age makes one think (see tables below).

Table 2

Descriptive statistics for the Phillips School Anxiety Test (N = 2031)

						Asymn	netry (A)	Exces	s (E)
	N	Min.	Max.	Average (N	Standard deviation (SD)	A	Standard Error	E	Standard Error
Overall anxiety at school (point)	2031	0,00	22,00	13,14	5,70	-,269	,054	-,810	,109
Experience of social stress (point)	2031	0,00	11,00	7,10	2,26	-,329	,054	-,503	,109
Frustration of the need to achieve success (point)	2031	2,00	13,00	8,38	2,02	-,336	,054	-,285	,109
Fear of self-expression (point)	2031	0,00	6,00	3,22	1,77	-,024	,054	-1,009	,109
Fear of knowledge testing situation (point)	2031	0,00	6,00	2,94	1,81	,039	,054	-1,021	,109
Fear of failure to meet the expectations of others (point)	2031	0,00	5,00	2,80	1,41	-,219	,054	-,869	,109
Low physiological resistance to stress (point)	2031	0,00	5,00	3,47	1,48	-,719	,054	-,494	,109
Problems and fears in relationships with teachers (point)	2031	0,00	8,00	4,40	1,40	-,026	,054	-,292	,109

Tables 3—10 present the distributions of indicators by severity levels for all 8 subscales of the Phillips test.

Data analysis presented in Tables 3 through 10, allows for several observations. Firstly, it turned out that 18.2% of primary school children experience a high or increased level of frustration when it comes to achieving success. This means that these children almost constantly express frustration or dissatisfaction with their academic performance. Moreover, 23.6% of children are exposed to social stress. This may be due to difficulties in

communication with peers or situations where the child feels insecure. It was also found that 24.7% of children have a low physiological resistance to stress. 38.6% of children face overall school anxiety. This may be due to the feeling of constant tension or anxiety that they experience staying at school.

More than 40% of children (41.1%) experience fear of failure to meet the expectations of others. This concern might be related to not living up to the high expectations of their parents or teachers. More than half of the students (52.1%) experience problems and

Table 3

Distribution of Primary School Children by Levels of General Anxiety
at School According to the Phillips test (N = 2031)

General anxiety at school: level of anxiety								
		Frequency	Percentage	Valid percentage	Accumulated percentage			
Valid	1. High level of anxiety	227	11,2	11,2	11,2			
	2. Increased level of anxiety	557	27,4	27,4	38,6			
	3. Normative level of anxiety	587	28,9	28,9	67,5			
	4. Absence or low degree of anxiety	660	32,5	32,5	100,0			
	Total	2031	100,0	100,0				

Table 4
Distribution of Primary School Children by Levels of Severity
of Experiencing Social Stress According to the Phillips test (N = 2031)

	2. Experiencing social stress: level of anxiety								
		Frequency	Percentage	Valid percentage	Accumulated percentage				
Valid	1. High level of anxiety	52	2,6	2,6	2,6				
	2. Increased level of anxiety	427	21,0	21,0	23,6				
	3. Normative level of anxiety	926	45,6	45,6	69,2				
	4. Absence or low degree of anxiety	626	30,8	30,8	100,0				
	Total	2031	100,0	100,0					

Table 5

Distribution of Primary School children by Levels of Frustration of the Need to Achieve Success According to the Phillips test (N = 2031)

3. Frustration of the need to achieve success: level of anxiety								
		Frequency	Percentage	Valid percentage	Accumulated percentage			
Valid	1. High level of anxiety	24	1,2	1,2	1,2			
	2. Increased level of anxiety	346	17,0	17,0	18,2			
	3. Normative level of anxiety	1018	50,1	50,1	68,3			
	4. Absence or low degree of anxiety	643	31,7	31,7	100,0			
	Total	2031	100,0	100,0				

Table 6

Distribution of Primary School Children by the Degree of Fear of Self-Expression According to the Phillips test (N = 2031)

	4. Fear of self-expression: level of anxiety									
		Frequency	Percentage	Valid percentage	Accumulated percentage					
Valid	1. High level of anxiety	394	19,4	19,4	19,4					
	2. Increased level of anxiety	723	35,6	35,6	55,0					
	3. Normative level of anxiety	367	18,1	18,1	73,1					
	4. Absence or low degree of anxiety	547	26,9	26,9	100,0					
	Total	2031	100,0	100,0						

fears in relationships with teachers. This may be due to insufficient support from teachers, conflicts or misunderstandings, which can negatively affect the learning process. In addition, 55.0% of children experience a fear of self-expression. This may be associated with a lack of confidence in their abilities or a fear of being judged or rejected by others if they express their opinions or disclose

their individuality. And finally, almost 60% of children (59.9%) experience a fear of getting their knowledge tested. A possible reason for that is a fear to fail or to receive a low grade, which can create additional pressure and anxiety during the learning process.

The findings above suggest that many younger students experience various types of stress and anxiety in the school environment.

Table 7

Distribution of Primary School Children by Levels of Fear of Knowledge

Testing Situations According to the Phillips test (N = 2031)

	5. Fear of knowledge testing situations: level of anxiety								
		Frequency	Percentage	Valid percentage	Accumulated percentage				
Valid	1. High level of anxiety	518	25,5	25,5	25,5				
	2. Increased level of anxiety	698	34,4	34,4	59,9				
	3. Normative level of anxiety	359	17,7	17,7	77,5				
	4. Absence or low degree of anxiety	456	22,5	22,5	100,0				
	Total	2031	100,0	100,0					

Table 8

Distribution of Primary School Children by Levels of Fear of Not Meeting
the Expectations of Others According to the Phillips test (N = 2031)

6. Fear of not meeting the expectations of others: level of anxiety								
		Frequency	Percentage	Valid percentage	Accumulated percentage			
Valid	1. High level of anxiety	421	20,7	20,7	20,7			
	2. Increased level of anxiety	413	20,3	20,3	41,1			
	3. Normative level of anxiety	461	22,7	22,7	63,8			
	4. Absence or low degree of anxiety	736	36,2	36,2	100,0			
	Total	2031	100,0	100,0				

Table 9

Distribution of Primary School Children by Levels of Low Physiological
Resistance to Stress According to the Phillips test (N = 2031)

	7. Low physiological resistance to stress: anxiety level								
		Frequency	Percentage	Valid percentage	Accumulated percentage				
Valid	High level of anxiety	259	12,8	12,8	12,8				
	2. Increased level of anxiety	243	12,0	12,0	24,7				
	3. Normative level of anxiety	393	19,4	19,4	44,1				
	4. Absence or low degree of anxiety	1136	55,9	55,9	100,0				
	Total	2031	100,0	100,0					

The research conducted, aimed at diagnosing communicative learning difficulties in 4th grade primary school students, allows for a conclusion on the feasibility of the assumptions regarding the forms of manifestation of learning difficulties in the communicative sphere of primary school students. The method for diagnosing the specific manifestations of difficulties in the communicative sphere is valid. The

study revealed five action levels of primary school children in an experimental situation, including a high level corresponding to the age reference, slightly below the norm, a low level and a very low level of communicative development. Henceforth, the diagnostic results facilitate the classification of students to a certain level of communicative development based on completed tasks. The students with below-norm lev-

Table 10

Distribution of Primary School Children by Levels of Severity of Problems and Fears in Relationships with Teachers According to the Phillips test (N = 2031)

	8. Problems and fears in relationships with teachers: level of anxiety								
		Frequency	Percentage	Valid percentage	Accumulated percentage				
Valid	1. High level of anxiety	187	9,2	9,2	9,2				
	2. Increased level of anxiety	871	42,9	42,9	52,1				
	3. Normative level of anxiety	848	41,8	41,8	93,8				
	4. Absence or low degree of anxiety	125	6,2	6,2	100,0				
	Total	2031	100,0	100,0					

els of communicative development, or a low level and very low level of it, should be placed into a special focus. These results indicate the presence of difficulties in the communicative sphere which require differentiated psychological assistance and individual pedagogical work.

It's also worth noting that a large percentage of schoolchildren from this sample possess increased or high levels of anxiety and fears associated with school, a fact that can't help but raise certain concerns. This is precisely the area of school life which often is out of the teacher's attention, but which is of a significant importance, acting as factor and predictor of the emergence of educational difficulties and performance failure.

The description of students' difficulties, which manifest themselves in the communicative sphere united with the diagnostic method, enables the identification of existing developmental deficits in students' communicative competencies, as well as the development of a program for the formation of metadisciplinary educational results (in terms of the formation of communicative competencies) and improvement of the educational process.

Conclusion

Difficulties in the communication sphere may occur at the very initial stage of schooling. Advanced communication between students, teachers and peers significantly conditions personal development, cognitive activity and educational output.

Difficulties in the communicative sphere in communicating with peers can manifest themselves in the inability to argue their point of view, achieve mutual understanding and successfully interact with peers; to build a productive interaction when carrying out educational, research and project activities; to be on the same wavelength with peers in educational and extracurricular activities. All possible impediments in this case are determined by individual psychological characteristics, as well as generally by the inability to defend one's position and conduct a constructive dialogue.

Difficulties in communication with teachers often take the form of the inability to follow the rules of conduct in class and during breaks, a failure to build communications with the teacher in educational activities, to participate in joint (frontal and group) educational activities organized by the teacher, or in the student's fear of a negative assessment by the teacher, in a feeling of helplessness.

In relations with parents, the following main communication difficulties are interrelated with the child's immaturity in relations with parents and a lack of good interaction with parents, as well as a fear of negative assessment and punishment for bad grades.

Difficulties in learning are attributed, first of all, to the learning process itself. Developmental education is built on the basis of a productive student-teacher communication as well as student-student interaction in joint educational activities. This way, everything that happens in the learning process is the product of joint actions. Once the teacher timely identifies the emerging

problems in the communicative sphere among students, the overall pedagogical interaction might be organized in an effective way.

References

- 1. Anufriev A.F., Kostromina S.N. Kak preodolet' trudnosti v obuchenii detei. Psikhodiagnosticheskie tablitsy. Psikhodiagnosticheskie metodiki. Korrektsionnye uprazhneniya [How to overcome difficulties in teaching children. Psychodiagnostic tables. Psychodiagnostic techniques. Corrective exercises]. Moscow: Axis-89, 1997. 224 p.
- 2. Vygotskii L.S. Pedologiya podrostka. Sobranie sochinenii v 6 tomakh. Tom 4 [Pedology of a Teenager: Collected Works in 6 vol. Vol. 4]. Moscow: Pedagogika, 1984. 432 p.
- 3. Guruzhapov V.A., Sanina S.P., Voronkova I.V., Shilenkova L.N. Diagnosticheskaya kompetentnosť uchitelya kak uslovie preodoleniya uchebnoi neuspeshnosti obuchayushchikhsya [Diagnostic competence of a teacher as a condition for overcoming the educational failure of students]. Sovremennaya zarubezhnaya psikhologiya = Modern foreign psychology, 2019. Vol. 8, no. 1, pp. 43—55. DOI:10.17759/jmfp.2019080105
- 4. Isaev E.I. Deyatel'nostnyj podhod pedagogicheskom obrazovanii: stanovlenie realizaciya [Activity approach in pedagogical education: formation and implementation]. Psikhologicheskaya nauka i obrazovanie Psychological Science and Education, 2020. Vol. 25, no. 5. pp. 109—119. (In Russ.), DOI:10.17759/ pse.2020250509
- 5. Kak proektirovat' universal'nye uchebnye deistviya v nachal'noi shkole. Ot deistviya k mysli: standarty vtorogo pokoleniya: posobie dlya uchitelya [How to design universal learning activities in elementary school. From action to thought: standards of the second generation: a manual for teachers]. A.G. Asmolov et al. Moscow: Enlightenment, 2011. 152 p.
- 6. Lokalova N.P. Shkol'naya neuspevaemost': prichiny, psikhokorrektsiya, psikhoprofilaktika [School failure: causes, psychocorrection, psychoprophylaxis]. Saint Petersburg: Piter, 2009. 368 p.
- 7. Margolis A.A. Deyatel'nostnyi podkhod v pedagogicheskom obrazovanii [Activity approach in pedagogical education]. *Psikhologicheskaya nauka i obrazovanie = Psychological science and education*, 2021. Vol. 26, no. 3, pp. 5—39. DOI:10.17759/pse.2021260301
- 8. Obuchenie uchebnomu sotrudnichestvu [Teaching educational cooperation]. G.A. Cukerman, N.V. Elizarova, M.I. Frumina, E.V. CHudinova. *Voprosy psihologii = Questions of Psychology*, 1993, no. 2, pp. 35—43.
- 9. Polivanova N.I., Rivina I.V., Ulanovskaya I.M. Vyyavlenie umeniya uchashchikhsya nachal'noi shkoly deistvovat' sovmestno v usloviyakh sotsio-

kognitivnogo konflikta [Revealing the ability of primary school students to act together in conditions of socio-cognitive conflict]. *Psikhologicheskaya nauka i obrazovanie = Psychological science and education*, 2013. Vol. 5, no. 4, pp. 312—322.

- 10. Razvitie kommunikativno-refleksivnykh sposobnostei u detei 6—10 let v zavisimosti ot sposobov organizatsii uchebnykh vzaimodeistvii: Kollektivnaya monografiya [Development of communicative and reflexive abilities in children aged 6—10 years, depending on the ways of organizing educational interactions: A Collective monograph]. V.V. Rubtsov. Moscow: MSUPE, 2023. 203 p.
- 11. Raygorodsky D.Ya. Prakticheskaya psikhodiagnostika. Metodiki i testy. Uchebnoe posobie [Practical psychodiagnostics. Methods and tests. Study guide]. Samara: Publishing House House "BAHRAKH-M", 2001. 672 p.
- 12. Sanina S.P., Rastorgueva M.D. Psikhologopedagogicheskie osnovy podgotovki pedagogov razvitiyu iskhodnykh predstavlenii mladshikh shkol'nikov (na materiale kursa «Okruzhayushchii mir») [Psychological and Pedagogical Foundations of Teacher Training for Development of Primary School Student's Initial Representations (Based on The Course Material Natural Science)]. Psikhologopedagogicheskie issledovaniya = Psychological-Educational Studies, 2022, Vol. 14, no. 4, pp. 82—98. 13. Sanina S.P., Tyukhtina M.D. Razvitie kommunikativnykh kompetentsiva obuchayushchikhsya 4-kh klassov pri reshenii zadach gruppovoi raboty [The development of communicative competencies among students of the 4th grades when solving group work tasks]. Vserossiiskaya nauchno-prakticheskaya konferentsiya molodykh issledovatelei obrazovaniya: Tezisy konferentsii, Moskva, 01-30 maya, 2019 = XVIII All-Russian Scientific and Practical Conference of Young researchers of education: Conference abstracts, Moscow, May 01-30, 2019, Moscow; Moscow State Psychological and Pedagogical University, 2019, pp. 324-325.
- 14. Sovmestnaya uchebnaya deyatel'nost' i razvitie detej: Kollektivnaya monografiya [Joint educational activity and development of children: A Collective monograph]. V.V. Rubtsov. I.M. Ulanovskaya. Moscow: MSUPE, 2021. P. 352.
- 15. Ulyashev K.D. Professional'nye zatrudneniya pedagogov pri realizatsii FGOS [Professional difficulties of teachers in the implementation of FGOS]. *Vestnik obrazovaniya = Bulletin of Education*, 2014, no. 14, pp. 29—41.

Литература

- 1. Ануфриев А.Ф., Костромина С.Н. Как преодолеть трудности в обучении детей. Психодиагностические таблицы. Психодиагностические методики. Коррекционные упражнения. М.: Ось-89, 1997. 224 с.
- 2. *Выготский Л.С.* Собрание сочинений: в 6 т. Т. 4. М.: Педагогика, 1984. 432 с.
- 3. Гуружапов В.А., Санина С.П., Воронкова И.В., Шиленкова Л.Н. Диагностическая компетентность учителя как условие преодоления учебной неуспешности обучающихся [Электронный ресурс] // Современная зарубежная психология. 2019. Том 8. № 1. С. 43—55. DOI:10.17759/jmfp.2019080105
- 4. *Исаев Е.И*. Деятельностный подход в педагогическом образовании: становление и реализация // Психологическая наука и образование. 2020. Том 25. № 5. С. 109—119. DOI: 10.17759/pse.2020250509
- 5. Как проектировать универсальные учебные действия в начальной школе. От действия к мысли: стандарты второго поколения: пособие для учителя / А.Г. Асмолов [и др.] / ред. А.Г. Асмолова. М.: Просвещение, 2011. 152 с.
- 6. Локалова Н.П. Школьная неуспеваемость: причины, психокоррекция, психопрофилактика. СП6: Питер, 2009. 368 с.
- 7. *Марголис А.А.* Деятельностный подход в педагогическом образовании // Психологическая наука и образование. 2021. Том 26. № 3. С. 5—39. DOI:10.17759/pse.2021260301
- 8. Обучение учебному сотрудничеству / Г.А. Цукерман, Н.В. Елизарова, М.И. Фрумина, Е.В. Чудинова // Вопросы психологии. 1993. № 2. С. 35—43.

- 9. Поливанова Н.И., Ривина И.В., Улановская И.М. Выявление умения учащихся начальной школы действовать совместно в условиях социо-когнитивного конфликта [Электронный ресурс] // Психологическая наука и образование psyedu.ru. 2013. Том 5. № 4. С. 312—322.
- 10. Развитие коммуникативно-рефлексивных способностей у детей 6—10 лет в зависимости от способов организации учебных взаимодействий: Коллективная монография / ред. В.В. Рубцова. М.: ФГБОУ ВО МГППУ, 2023. 203 с.
- 11. Райгородский Д.Я. Практическая психодиагностика. Методики и тесты. Учебное пособие. Самара: Издательский Дом «БАХРАХ-М», 2001. 672 с.
- 12. Санина С.П., Расторгуева М.Д. Психологопедагогические основы подготовки педагогов к развитию исходных представлений младших школьников (на материале курса «Окружающий мир») [Электронный ресурс] // Психолого-педагогические исследования. 2022. Том 14. № 4. С. 82—98.
- 13. Санина С.П., Тюхтина М.Д. Развитие коммуникативных компетенция у обучающихся 4-х классов при решении задач групповой работы // XVIII Всероссийская научно-практическая конференции, москва, 01—30 мая 2019 года. М.: Московский государственный психолого-педагогический университет, 2019. С. 324—325.
- 14. Совместная учебная деятельность и развитие детей: Коллективная монография / ред. В.В. Рубцова, И.М. Улановской. М.: ФГБОУ ВО МГППУ, 2021. 352 с.
- 15. *Уляшев К.Д.* Профессиональные затруднения педагогов при реализации ФГОС // Вестник образования. 2014. № 14. С. 29—41.

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Diagnosis of Learning Difficulties in the Field of Social Adaptation in Younger Schoolchildren

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The work is the result of studying the difficulties in teaching younger schoolchildren in the field of social adaptation. The materials of an empirical study obtained on a sample (N=2030) of students aged 9-11 years in various regions of the Russian Federation (Republic of Tatarstan (20,5%), Lipetsk Region (16,5%), Volgograd Region (20,0%), Chuvash Republic (22,4%), Samara Region (20,5%)) are presented. The method "Strengths and difficulties" by R.N. Goodman (SST) was used, which allows to assess behavior, emotional sphere and relationships with peers, the method of self-assessment and the level of claims by Dembo-Rubinstein modified by A.M. Prihozhan and the Scale of apparent anxiety CMAS by J. Taylor in the adaptation of A.M. Prihozhan. The results obtained make it possible to say that the difficulties of establishing cooperative or friendly relations with peers, rejection by peers, aggressiveness towards others, irritability, difficulty or unwillingness to follow the rules of behavior are the most characteristic for younger schoolchildren. In girls of primary school age, emotional difficulties come to the fore, i.e. they are more susceptible to stress and its manifestations, anxiety and fears, while girls are more prone to manifestations of voluntary behavior designed to benefit another person and society as a whole, adherence to generally accepted rules, attentiveness to others.

Keywords: learning difficulties; social adaptation; primary school students; anxiety; self-esteem; behavior problems.

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Диагностика трудностей в обучении в области социальной адаптации у младших школьников

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Работа представляет собой результат изучения трудностей в обучении младших школьников в сфере социальной адаптации. Представлены материалы эмпирического исследования, полученные на выборке (N=2030) обучающихся 9—11 лет из различных регионов Российской Федерации (Республика Татарстан (20,5%), Липецкая область (16,5%), Волгоградская область (20,0%), Чувашская республика (22,4%), Самарская область (20,5%)). Использовались методика «Сильные стороны и трудности» Р.Н. Гудман (ССТ), позволяющая провести оценку поведения, эмоциональной сферы и взаимоотношений со сверстниками, методика самооценки и уровня притязаний Дембо-Рубинштейн в модификации А.М. Прихожан и Шкала явной тревожности CMAS Дж. Тейлора в адаптации А.М. Прихожан. Полученные результаты дают возможность говорить о том, что для младших школьников наиболее характерными являются трудности установления сотрудничающих или дружеских отношений со сверстниками, неприятие сверстниками, агрессивность по отношению к другим, раздражительность, трудность или нежелание следовать правилам поведения. У девочек младшего школьного возраста на первый план выступают трудности эмоционального характера, то есть они в большей степени подвержены стрессу и его проявлениям, тревожности и страхам; при этом девочки более склонны к проявлениям добровольного поведения, призванного приносить пользу другому человеку и обществу в целом, приверженности общепринятым правилам, внимательности к другим.

Ключевые слова: трудности в обучении; социальная адаптация; младшие школьники; тревожность; самооценка; проблемы в поведении.

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Introduction

In the modern world, the problems of social adaptation become more acute at all ages. It becomes particularly relevant at the primary school age, when the social environment of primary school pupils is differentiated and stratified. Yu.V. Gromyko, A.A. Margolis and V.V. Rubtsov note the complexity and ambiguousness of the social environment in their studies: "...challenges and risks of modern society, ... are provoked by the rapid disintegration of existing social institutions and established communities, the intensive process of functioning and forming new types of communities and activities. The need to live in a changing and ambiguous social environment presents the individual with a problem of simultaneously being involved in different types of activities and social communities, i.e. with the task that he/she did not face so clearly at previous stages of society development" [2, p. 58]. However, environmental factors influencing social adjustment cannot be considered without taking into account the learner's personality: "Nature and society give every child the opportunity for individual development within overall human development. Every child gradually "learns" to be a human. This "learning" occurs in the context of culture and education. L.S. Vygotsky wrote that each person's life path is always the interaction of a developmental series: natural (organism's development) and social (individual's acquisition of culture)" [3, p. 45]. These provisions are reflected in school standards: "The school standards outline the qualities of schoolchildren's personality that should be formed in the learning process: a responsible attitude to learning; the readiness and ability for self-development, self-education; a conscious, respectful and benevolent attitude towards another person; mastering social norms and rules of behavior; developing moral awareness; developing communicative competence, etc. Developing these qualities is defined as the essence of the central line of a pupils' growth: the mastery of the object world and with the world of relations with the social reality, of the environment, and of the inner self" [4, p. 52].

Modern research has analyzed the concept of adaptation: "...the concept of adaptation can be interpreted not only as a process of adjustment to external changes for the sake of homeostatic maintenance, but also as the end result of the development of special skills and abilities necessary for a child's normal and successful existence and development" [5, p. 59]. In F.B. Berezin's works "adaptation processes are considered as a comparison of the social (educational) environment and the learner's personality. This allows the latter to meet his educational needs and compare them with the requirements of the environment" [5, p. 59]. Thus, both the social environment and the learner's personality formed in this environment influence adaptation success.

Difficulties in adjusting socially can become apparent when children start schooling. As stated in the "System of Psychological Services' functioning in general educational organizations" methodological recommendations: "At school the following are evident: weak links in the structure of the cognitive and emotional sphere; unformed arbitrary behavior forms — an insufficiency of self-regulation; immaturity of motivational formations; inability to assimilate group norms, school maladaptation (pupil's internal position); reduction of psycho-emotional well-being" [14, p. 54].

According to the general classification of learning difficulties developed within the framework of the "Development and Testing of the Target Model of the System of Prevention and Correction of Learning Difficulties in Pupils with Relevant Risks of Unfavorable Social Conditions" project in the sphere of social adaptation, learning difficulties can be classified into the following types: deviant behavior, social maladaptation, psycho-

emotional handicap, which manifests itself at the stage of primary school in difficulties in adapting to the rules of school life, the need for increased attention to oneself, or suspicion, tension, isolation, rejection in class, a lack of strong friendships with classmates, profanity, aggressive actions towards others.

Modern psycho-pedagogical practice has a number of psycho-diagnostic techniques aimed at identifying difficulties in various aspects of social adaptation. A special diagnostic program for the purpose of the psychological and pedagogical diagnostics of learning difficulties in 4th grade students in various spheres was developed within the "Development and Testing of the Target Model of the System of Prevention and Correction of Learning Difficulties in Students with Relevant Risks of Unfavorable Social Conditions" project. The developed diagnostic program will allow for the timely identification of emerging problems in the social adaptation of students. In turn, it will allow specialists to effectively build psychological and pedagogical interaction [10]. In 2020, Moscow State University of Psychology and Education together with the Institute of Education of the Higher School of Economics developed a model of the system of preventing and correcting learning difficulties in students. According to the authors of the model — E.I. Isaev, S.G. Kosaretsky and Y.P. Koroleva: "The core of the developed target model is the model of individualization of pedagogical activity in work with learning difficulties, which implies the use of three gradually deepening stages of individualization of learning, including a number of obligatory forms of organization of such work: individual planning within the framework of main classes, additional teaching in small groups and individual classes, psychological correction of detected psychological deficits" [6, p. 22]. Thus, the issues of the early identification of learning difficulties are key for organizing effective psychologicalpedagogical prevention.

This paper presents the results of a study of learning difficulties in the field of social adaptation in primary school children in accordance with the manifestations of these difficulties.

Research Procedure

Purpose. To identify the predominant learning difficulties in the field of social adaptation in primary school children.

Sample. The study involved 2030 students (51 % male) aged 9 to 11 years old (mean age = 10.0 ± 0.4 years) from different regions of the Russian Federation: the Republic of Tatarstan (20.5 %), Lipetsk Region (16.5 %), Volgograd Region (20.0 %), the Chuvash Republic (22.4 %), and Samara Region (20.5 %).

Methods. Three methods have been used to diagnose learning difficulties in the area of social adjustment: Goodman's Strengths and Difficulties Questionnaire (SDQ), which allows to assess behavior, the emotional sphere and relations with peers [16, 17, 18], the Dembo-Rubinstein method of self-esteem and the level of aspiration measurement modified by A.M. Prihozhan [8, p. 110] and Taylor's Children's Manifest Anxiety Scale (CMAS) adapted by A.M. Prihozhan [9, p. 233].

The study was conducted sequentially in a computerized form in groups of 12 to 20 people simultaneously for all the methods presented. The test lasted no more than 40 minutes. Parents gave informed consent for their child to participate in the study. The empirical data was collected between September 2022 and April 2023.

Statistical methods. Descriptive statistics were used to present the results. Student's t-test was used to compare the groups of boys and girls. Cohen's d was calculated to estimate effect size. To compare groups of students of different sex with different levels of the total number of problems (normative, borderline and deviant) on the subscales of Children's Manifest Anxi-

ety Scale (CMAS) a three-way ANOVA with the Duncan post hoc test was used, and on the subscales of Dembo-Rubinstein's method of self-esteem and level of aspiration measurement a four-way ANOVA with the Duncan post hoc test was used.

Results

Descriptive statistics for the scales of Goodman's Strengths and Difficulties Questionnaire (SDQ) and Dembo-Rubinstein's method of self-esteem and level of aspiration measurement for the whole sample and separately for boys and girls are presented in Table 1. The results of SDQ show that, on average, students aged 9-11 years old score within the norm on the prosocial behavior

and hyperactivity / inattention scales, while scores on emotional symptoms, conduct problems and peer relationship problems are slightly above the norm. As a result, both boys and girls show scores much closer to borderline (15 points) than to normal (up to 14 points) on Total difficulties score. Meanwhile, girls have more emotional problems, and boys have problems with peers.

The results of the self-esteem and aspiration measures show that almost all indicators are within the norm, but tend to be high (Table 1). The differences between boys and girls are small, as the effect size in no case reaches the medium (d<0.3). In the younger school age, the leading activity gradually changes; the immersion in a new

Table 1

Descriptive Statistics (mean ± standard deviation) for the Methods of Measuring
Social Adaptation: Goodman's Strengths and Difficulties Questionnaire and the
Dembo-Rubinstein Method of Self-Esteem and Level of Aspiration Measurement

Subscale	Whole sample N = 2030	Girls N = 994	Boys N = 1036	Norm							
Goodman's Strengths and Difficulties Questionnaire (SDQ)											
Prosocial behavior* (d=0.16)	7.8 ± 2.0	7.9 ± 2.0	7.6 ± 2.0	6–10							
Hyperactivity / inattention	3.2 ± 2.3	3.2 ± 2.2	3.3 ± 2.3	0–5							
Emotional symptoms* (d=0.29)	3.2 ± 2.6	3.6 ± 2.6	2.9 ± 2.5	0–3							
Conduct problems* (d=0.15)	2.7 ± 1.9	2.6 ± 1.8	2.8 ± 1.9	0–2							
Peer relationship problems* (d=0.22)	3.3 ± 2.0	3.0 ± 2.0	3.5 ± 2.1	0–3							
Total difficulties score	12.4 ± 6.4	12.4 ± 6.5	12.4 ± 6.4	0–14							
Dembo-Rubinstein's Method of Self-esteem and Level of Aspiration Measurement: Self-esteem											
Health	7.5 ± 2.0	7.5 ± 2.0	7.5 ± 2.0	4.5–7.4							
Intelligence	7.3 ± 2.0	7.3 ± 2.0	7.3 ± 2.0								
Character* (d=0.10)	7.3 ± 2.1	7.4 ± 2.1	7.2 ± 2.1								
Credibility	7.1 ± 2.2	7.1 ± 2.2	7.0 ± 2.3								
Ability* (d=0.26)	7.3 ± 2.2	7.6 ± 2.2	7.0 ± 2.3								
Appearance* (d=0.13)	7.6 ± 2.3	7.7 ± 2.2	7.4 ± 2.3								
Self-confidence	7.3 ± 2.3	7.2 ± 2.3	7.4 ± 2.2								
Average level of self-esteem* (d=0.09)	7.3 ± 1.5	7.4 ± 1.5	7.3 ± 1.5								
Dembo-Rubinstein's Method of Self-esteem and Level of Aspiration Measurement: Level of Aspiration											
Health* (d=0.10)	8.3 ± 2.1	8.4 ± 2.1	8.2 ± 2.2	6.0–8.9							

Subscale	Whole sample N = 2030	Girls N = 994	Boys N = 1036	Norm
Intelligence	8.3 ± 2.1	8.4 ± 2.1	8.2 ± 2.2	
Character* (d=0.17)	8.0 ± 2.2	8.2 ± 2.1	7.9 ± 2.2	
Credibility* (d=0.14)	8.1 ± 2.2	8.3 ± 2.1	8.0 ± 2.2	
Ability* (d=0.21)	8.3 ± 2.1	8.5 ± 2.0	8.0 ± 2.2	
Appearance* (d=0.24)	8.5 ± 2.1	8.7 ± 1.9	8.2 ± 2.1	
Self-confidence* (d=0.10)	8.4 ± 2.1	8.5 ± 2.1	8.3 ± 2.2	
Average level of aspiration* (d=0.19)	8.3 ± 1.7	8.4 ± 1.6	8.1 ± 1.7	

Note: * statistically significant differences at the level of p<0.05 by Student's t-test are marked, Cohen's d is given in brackets.

social development situation requires the primary school child to be active. Numerous activities constantly place the primary school child "in situations in which he/she must somehow relate his/her abilities to himself/herself, evaluate his/her activity, think about how to act in the future" [12,

p. 166], which in turn contributes to the formation of self-esteem.

Descriptive statistics on the scales of Children's Manifest Anxiety Scale (CMAS) for the whole sample and separately for boys and girls and for the ages of 9 and 10—11 are given in Table 2.

Table 2

Descriptive Statistics (mean ± standard deviation) for the Method

of Measuring Social Adaptation "Children's Manifest Anxiety Scale" (CMAS),

Adapted by A.M. Prihozhan

Children's Manifest Anxiety Scale (CMAS)							
	Measu	Measurement results			Norm		
Subscale	Whole sample N = 206	Girls N = 107	Boys N = 99	Girls	Boys		
9 years							
Social Anxiety* (d=0.41)	5.2 ± 2.5	5.7 ± 2.6	4.7 ± 2.2	-	-		
Defensiveness	4.7 ± 2.5	5.0 ± 2.5	4.5 ± 2.6	-	-		
Physiological Anxiety* (d=0.32)	2.7 ± 2.3	3.0 ± 2.4	2.3 ± 2.3	-	-		
Worry* (d=0.30)	5.4 ± 2.4	5.8 ± 2.3	5.1 ± 2.4	-	-		
Anxiety (total score)* (d=0.38)	18.1 ± 8.0	19.5 ± 8.1	16.6 ± 7.6	4–19	5–17		
10—11 years							
	Measu	Measurement results			Norm		
Subscale	Whole sample	Girls	Boys	Girls	Boys		

Subscale	Whole sample N = 1824	Girls N = 887	Boys N = 937	Girls	Boys	
Social Anxiety* (d=0.27)	5.3 ± 2.9	5.7 ± 3.0	4.9 ± 2.8	-	-	
Defensiveness* (d=0.19)	4.9 ± 2.7	5.2 ± 2.7	4.6 ± 2.6	-	-	
Physiological Anxiety* (d=0.11)	3.0 ± 2.3	3.1 ± 2.3	2.9 ± 2.3	-	-	
Worry* (d=0.35)	5.3 ± 2.6	5.7 ± 2.6	4.8 ± 2.5	-	-	
Anxiety (total score)* (d=0.28)	18.4 ± 9.0	19.7 ± 9.0	17.2 ± 8.8	8–21	7–20	

Note: * statistically significant differences at the level of p<0.05 by Student's t-test are marked, Cohen's d value is given in brackets.

Analysis of the results shows that 9-year-old girls have anxiety scores slightly above the norm, while 9-year-old boys are within the norm. Thus, girls are more anxious (the effect size is medium) and this is mainly due to higher social anxiety (Table 2, d=0.41). At age 11, both girls' and boys' anxiety scores level off and are within the normative range, but girls' anxiety scores are higher and on average exceed boys' anxiety scores by 2.5 points (the effect size is medium).

When comparing anxiety scores between girls and boys, differences were found for all measures of anxiety, but for the "Defensiveness" and "Physiological Anxiety" scales they are minimal: statistical effects are either insignificant or small.

More detailed statistics on the number and percentage of pupils with different levels of problems in different areas of their lives are given in Table 3 (Goodman's Strengths and Difficulties Questionnaire for measuring social adaptation). The results show that peer relationship problems (almost half of the children — 42.9% — have them) and behavioral problems (about one third of the children — 30.7% — have them) are most common at this age.

To test the effect of behavioral problems on other indicators of social adjustment, three groups of children (with normal, borderline and deviant values on Total difficulties score (SDQ)) were compared on self-esteem and aspiration.

A four-way ANOVA showed that the third-order interaction Sex*Group*Selfesteem*Aspiration was not statistically significant (F(12, 12144)=1.2; p=0.27),whereas the second-order interaction Group*Self-esteem*Aspiration was significant (F(12, 12144)=2.6; p=0.0016). This means that the relationship between the ratio of self-esteem and the level of aspiration depends on the number of difficulties and is same for both boys and girls. Fig. 1 shows the mean values of self-esteem and the levels of aspiration for the three groups of students. Children with a minimum number of problems have a slightly inflated self-esteem (7.5—8.0 points) and an optimal level of aspiration (8-9 points, which is an important factor in personal development). Differences between self-esteem and aspirations rarely exceed 1 point, indicating that these children set goals that they can achieve. Their aspirations are based on self-esteem and serve as a stimulus for personal development. It should also be noted that the differentiation of both selfesteem and the level of aspiration is the lowest in this group.

The level of self-esteem (average) and the level of aspiration (average) are much lower in children with borderline

Table 3
Intensity Levels for the Scales of Goodman's Strengths and Difficulties
Questionnaire: Number of People / Percent

Subscale		Subscale Intencity				
	Normal	Borderline	Deviant			
Prosocial behaviour*	1723 / 84.9 %	145 / 7.1 %	162 / 8.0 %			
Hyperactivity/inattention	1706 / 84.0 %	160 / 7.9 %	164 / 8.1 %			
Emotional symptoms*	1633 / 80.4 %	153 / 7.5 %	244 / 12.0 %			
Conduct problems*	1406 / 69.3 %	267 / 13.2 %	357 / 17.6 %			
Peer relationship problems*	1160 / 57.1 %	565 / 27.8 %	305 / 15.0 %			
Total difficulties score	1379 / 67.9 %	335 / 16.5 %	316 / 15.6 %			

scores on the total number of problems. At the same time, the gap between the levels of self-esteem and aspiration increases, and the differentiation in aspiration reaches its maximum value. The discrepancy between self-esteem level and aspiration level indicates that the aspirations not only do not contribute to personal development, but can significantly slow it down. The gap between self-esteem and aspiration is even greater in children with deviant values of the total number of problems. This indicates an emerging conflict between what a child aspires to and what he or she thinks is possible. Children in the third group have the most differentiated self-esteem. Pupils with low. highly differentiated self-esteem usually have a strong sense of insecurity and a strong desire to understand themselves and their abilities. We believe that this situation indicates the formation of self-esteem, restructuring it.

Similar analysis was performed for the Children's Manifest Anxiety Scale (CMAS). A three-way ANOVA showed that the second-order interaction Sex*Group*Anxiety_Factors was not statistically significant (F(6, 6072)=0.3; p=0.96), whereas the second-order interaction Group*Anxiety_Factors was significant (F(6, 6072)=14.5; p<0.00001). This means that the relationship between Manifest Anxiety Scale subscales depends on the number of difficulties and this relationship is the same for boys and girls. Fig. 2 shows the means

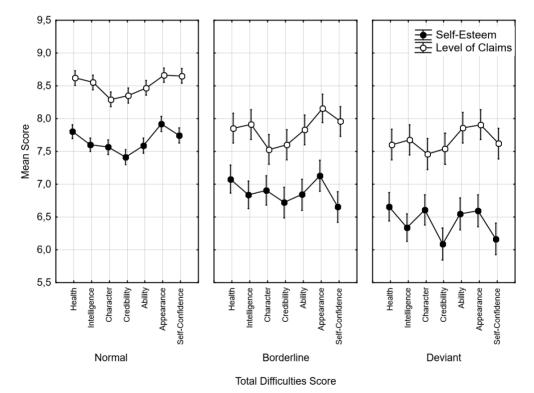


Fig. 1. The relationship between self-esteem and the level of aspiration (means and 95% confidence interval) for three groups with different scores on the Total difficulties score: normative, borderline and deviant

for all subscales for the three groups of students.

The results suggest that children in the group with a normal number of problems have the lowest levels of manifest anxiety. The borderline and abnormal problem groups differ from them on all scales, and they in turn differ on the scales of Social Anxiety and Physiological Anxiety. At the same time, there are no statistically significant differences in Defensiveness and Worry (according to Duncan's post hoc test, p=0.12 and p=0.48).

Discussion

As a result of the qualitative and quantitative analyses of the empirical data ob-

tained, the main learning difficulties in the area of social adaptation of primary school pupils were identified.

It was found that the most typical difficulties for primary school boys are difficulties in establishing cooperative or friendly relationships with peers, the rejection by peers, aggressiveness towards others, irritability, a difficulty or unwillingness to follow behavioral rules. In girls of primary school age, difficulties of an emotional nature predominate, i.e. they are more exposed to stress and its manifestations, anxieties and fears, and girls are more prone to manifestations of voluntary behavior for the benefit of another person and society as a whole, adherence to

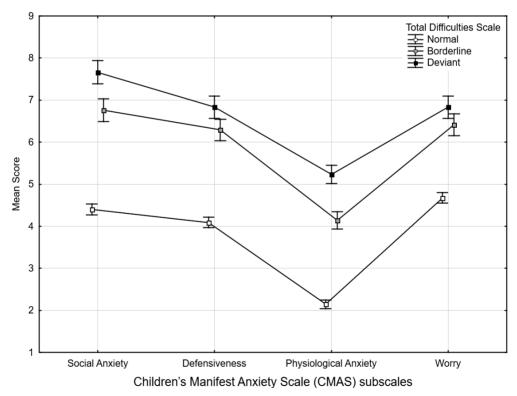


Fig. 2. Anxiety Subscales (Mean Values and 95% Confidence Interval) on Children's Manifest Anxiety Scale for Three Groups with Different Values of the SDQ Total difficulties Score: Normative, Borderline and Deviant

generally accepted rules, attentiveness towards others. Difficulties in establishing cooperative or friendly relationships with peers and the rejection of peers are more prominent in boys of primary school age. These results are consistent with the study of E.V. Slavutskaya, according to whom the difficulties in learning include "social infantility and emotional immaturity...", and in boys "low dominance and openness to interpersonal contacts" [15, p. 5]. Prosocial behavior is more expressed in girls, which, in our opinion, is explained by the fact that "women express emotions better and are more sensitive to the feelings of others (are empathic) than men" [7, p. 70], although this effect is not pronounced (Cohen's d <0.2). These results are consistent with the results of the study by V.N. Burkova, M.L. Butovskaya, D.A. Dronova and Y.I. Adam. who showed that "girls are distinguished by more pronounced prosociality in decision making in relation to unfamiliar peers" [1, p. 61—62].

Both girls and boys of primary school age are characterized by an optimal representation of their abilities, beliefs about themselves, self-esteem, while there is a tendency for them to be unable to set goals, correctly assess the results of their activities, compare themselves with others. Social anxiety, worry and defensiveness are more common in girls of primary school age. The number of difficulties in the social sphere depends on the relation between self-esteem and the level of aspiration: the least number of difficulties is shown by children with slightly exaggerated self-esteem and an optimal level of aspiration, and with a minimal gap between them. An increase in the gap between self-esteem and the level of aspiration contributes to behavioral problems in younger pupils: the conflict between what a child aspires to and what he or she thinks is possible contributes to a number of difficulties. The obtained results are consistent with the results presented in contemporary studies. For example, L.V. Semina in her study "Features of the Level of Primary School Children's Aspirations in Learning Activities" notes the normativity, but at the same time the instability of primary school children's aspirations. The author also notes that pupils of the 4th grade have a higher level of aspiration than pupils of the 1st grade and that "the formation of a pupil's level of aspiration at the lesson determines ... the confrontation of personal and social determinants (first of all, the value orientations of the class and reference groups)" [13, p. 19].

For the entire group of pupils, the anxiety indicators normalize by the age of 11. However, the anxiety indicators of girls are higher and, on average, 2.5 points higher than the anxiety indicators of boys. These results are in line with the findings of V.M. Rudomazina's research: "Up to the age of 11, anxiety indicators decrease, and a high level of anxiety is not found in children of this age" [11, p. 80]. Also, in A.M. Prihozhan's research it is noted that during the age of 8-10 years old anxiety indicators are stable, and at 11 years old anxiety indicators increase [9]. Anxiety indicators are slightly higher than normative values for 9-year-old girls and — within the norm — for 9-year-old boys, which is in accordance with the results of the research of A.M. Prihozhan, who notes higher anxiety indicators for girls [9], which, in our opinion, is reflected in the normative values of A.M. Prihozhan's questionnaire. At the same time, the obtained results do not agree with the results of the research of V.M. Rudomazina, who notes higher values of anxiety in girls in the first and fourth grades, and in boys in the second and third grades [11, p. 83].

Conclusion

This study is the result of pilot testing of one of the psychodiagnostic blocks

of the "Program for Diagnosing Primary School Students' Learning Difficulties in the Communicative Sphere and Social Adaptation, in the Sphere of General Academic and Universal Actions" and an attempt to supplement the current empirical data based on the classification of learning difficulties of students with relevant risks of unfavorable social conditions. This typology is developed in the framework of a unified approach to the educational process as a whole.

The results show that the main difficulties in the area of social adaptation are difficulties in establishing cooperative or friendly relationships with peer groups, peer rejection, aggression towards others, irritability, the difficulty or refusal to follow behavioral rules, emotional difficulties, difficulties in goal-setting, and difficulties in assessing the results of one's own activities and comparing one's self with others. Simultaneously, emotional problems are more pronounced in girls and peer and behavioral problems in boys.

It has also been found that the conflict between what a child wants to achieve and what he or she thinks is possible, as well as

References

1. Burkova V.N., Butovskaya M.L., Dronova D.A., Adam Yu.I. Al'truizm i parokhializm u detei i podrostkov: gendernye i vozrastnye razlichiya [Altruism and Parochialism Among Children and Adolescents: Sex and Age Differences]. *Eksperimental'naya psikhologiya* [*Experimental Psychology*], 2021. Vol. 14, no. 3, pp. 50—66. DOI:10.17759/exppsy.2021140304 (In Russ., abstr. in Engl.).

2. Gromyko Yu.V., Rubtsov V.V., Margolis A.A. Shkola kak ekosistema razvivayushchikhsya detskovzroslykh soobshchestv: deyatel'nostnyi podkhod k proektirovaniyu shkoly budushchego [The School as Ecosystem of Developing Child-Adult Communities: Activity Approach to Designing the School of the Future]. *Kul'turno-istoricheskaya psikhologiya* [Cultural-Historical Psychology], 2020. Vol. 16, no. 1, pp. 57—67. DOI:10.17759/chp.2020160106 (In Russ., abstr. in Engl.).

anxiety level contribute to problems relating to peers and behavior.

Research Limitations and Perspectives

While conducting this study some difficulties and limitations emerged. We believe that one of the main limitations is the insufficient number of standardized, valid and adapted psychodiagnostic methods for specific manifestations of difficulties in the selected area, with the possibility of using them in a computerized version with primary school children. The manifestations of learning difficulties in the area of social adaptation are much more diverse than those presented in this study and may be related not only to individual characteristics, but also, for example, to the situation in the family, educational context, etc. This polymorphism complicates the research process and makes it necessary to take into account the maximum number of manifestations of learning difficulties in the area of social adaptation when analyzing the results.

These limitations can also be considered directions or "growth points" for further research in this area.

- 3. Dubrovina I.V. Psikhologicheskie resursy lichnostnogo razvitiya sovremennykh shkol'nikov [Psychological resources for personal development of modern schoolchildren] [Elektronnyi resurs]. Vestnik prakticheskoi psikhologii obrazovaniya [Bulletin of Psychological Practice in Education], 2017. Vol. 14, no. 2, pp. 44—52. URL: https://psyjournals.ru/journals/bppe/archive/2017_n2/Dubrovina (Accessed 18.09.2023).
- 4. Dubrovina I.V. Psikhologicheskii aspekt fenomena «lichnostnye rezul'taty obrazovaniya» [The Psychological Aspect of the Phenomenon "Personal Results of Education"] [Elektronnyi resurs]. Vestnik prakticheskoi psikhologii obrazovaniya [Bulletin of Psychological Practice in Education], 2021. Vol. 18, no. 3, pp. 50—62. DOI:10.17759/bppe.2021180305 (In Russ., abstr. in Engl.).
- 5. Egorenko T.A., Bezrukavnyi O.S. Problema psikhologo-pedagogicheskoi adaptatsii detei k

obrazovateľ nomu prostranstvu [The problem of psychological adaptation of children to the education space] [Elektronnyi resurs]. Sovremennaya zarubezhnaya psikhologiya [Journal of Modern Foreign Psychology], 2016. Vol. 5, no. 3, pp. 59—65. DOI:10.17759/jmfp.2016050307 (In Russ., abstr. in Engl.).

- 6. Isaev E.I., Kosaretskii S.G., Koroleva Ya.P. Sovremennye modeli profilaktiki i korrektsii trudnostei v obuchenii v rabote shkol'nykh sluzhb podderzhki v zarubezhnykh stranakh [Modern models of prevention and correction of learning difficulties in the work of school support services in foreign countries] [Elektronnyi resurs]. Sovremennaya zarubezhnaya psikhologiya [Journal of Modern Foreign Psychology], 2022. Vol. 11, no. 3, pp. 17—26. DOI:10.17759/jmfp.2022110302 (In Russ., abstr. in Engl.).
- 7. Kukhtova N.V. Vozrastnye i gendernye razlichiya v proyavlenii prosotsial'nogo povedeniya [Age and gender differences in the manifestation of prosocial behavior]. Vesnik Vitsebskaga Dzyarzhaÿnaga Universiteta [Bulletin of the Vitebsk State University], 2004. no. 2(32), pp. 66—71.
- 8. Prikhozhan A.M. Primenenie metodov pryamogo otsenivaniya v rabote shkol'nogo psikhologa [The use of direct assessment methods in the work of a school psychologist]. Nauchno-metodicheskie osnovy ispol'zovaniya v shkol'noi psikhologicheskoi sluzhbe konkretnykh psikhodiagnosticheskikh metodik: Sb. Nauchn. Tr. / Redkol.: I.V. Dubrovina (otv. red.) i dr. Moscow: izd. APN SSSR, 1988. 272 p.
- 9. Prikhozhan A.M. Trevozhnost' u detei i podrostkov: psikhologicheskaya priroda i vozrastnaya dinamika [Anxiety in children and adolescents: psychological nature and age dynamics]. Moscow: Moskovskii psikhologo-sotsial'nyi institut; Voronezh: Izdatel'stvo NPO «MODEK», 2000. 304 p.
- 10. Programma diagnostiki trudnostei v obuchenii u obuchayushchikhsya nachal'noi shkoly v kommunikativnoi sfere i sotsial'noi adaptatsii, v sfere obshcheuchebnykh i universal'nykh deistvii [The program of diagnostics of learning difficulties in primary school students in the field of communication and social adaptation, in the field of general educational and universal actions]. Sost. Egorenko T.A., Isaev E.I., Lobanova A.V., Sanina S.P., Safronova M.A., Rastorgueva M.D. Moscow: FGBOU VO MGPPU, 2022. 12 p.
- 11. Rudomazina V.M. Sovremennaya kartina proyavleniya trevozhnosti u detei mladshego shkol'nogo vozrasta [Contemporary Picture of Anxiety

Литература

1. Буркова В.Н., Бутовская М.Л., Дронова Д.А., Адам Ю.И. Альтруизм и парохиализм у детей и подростков: гендерные и возрастные различия // Экспериментальная психология. 2021. Том 14. № 3. С. 50—66. DOI:10.17759/exppsy.2021140304

- Manifestations in Children of Primary School Age] [Elektronnyi resurs]. *Psikhologicheskaya nauka i obrazovanie psyedu.ru* [*Psychological Science and Education psyedu.ru*], 2016. Vol. 8, no. 1, pp. 76—85. DOI:10.17759/psyedu.2016080107 (In Russ., abstr. in Engl.).
- 12. Samylova O.A., Dmitrievskikh S.S. Osobennosti samootsenki mladshikh shkol'nikov [Features of self-esteem of younger schoolchildren]. Vestnik Shadrinskogo gosudarstvennogo pedagogicheskogo universiteta [Journal of Shadrinsk State Pedagogical University], 2016, no. 4(32), pp. 165—169.
- 13. Semina L.V. Osobennosti urovnya prityazanii mladshikh shkol'nikov v uchebnoi deyatel'nosti: avtoreferat [Features of the level of aspiration of younger schoolchildren in educational activities] dis. ... Kandidata psikhologicheskikh nauk: 19.00.07 / Psikhol. In-t Ros. Akad. Obrazovaniya. Moscow, 2003. 20 p.
- 14. Sistema funktsionirovaniya psikhologicheskikh sluzhb v obshcheobrazovateľnykh organizatsiyakh: metodicheskie rekomendatsii [The system of functioning of psychological services in general education organizations: methodological recommendations]. Avt. kollektiv. Moscow: Izdateľstvo FGBOU VO MGPPU, 2020. 120 p.
- 15. Slavutskaya E.V. Gendernye razlichiya lichnostnykh kachestvakh, opredelyayushchikh dezadaptatsiyu mladshikh podrostkov [Gender differences in personal qualities which maladaptation of younger adolescents] [Elektronnyi resurs]. Psikhologicheskaya nauka i obrazovanie psyedu.ru [Psychological Science and Education psyedu.ru], 2011. Vol. 3, no. 3. URL: https://psyjournals. ru/journals/psyedu/archive/2011 n3/47077
- 16. Goodman R., Meltzer H., Bailey V. The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child & Adolescent Psychiatry*, 1998. Vol. 7(3), pp. 125—130. 17. Goodman R. The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric casernes and consequent burden. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 1999. Vol. 40(5), pp. 791—799.
- 18. Kersten P., Czuba K., Mc Pherson K., Dudley M., Elder H., Tauroa R., Vandal A. A systematic review of evidence for the psychometric properties of the Strengths and Difficulties Questionnaire. *International Journal of Behavioral Development*, 2016, no. 40, pp. 64—75.
- 2. Громыко Ю.В., Рубцов В.В., Марголис А.А. Школа как экосистема развивающихся детсковзрослых сообществ: деятельностный подход к проектированию школы будущего // Культурно-историческая психология. 2020. Том 16. № 1. С. 57—67. DOI:10.17759/chp.2020160106

- 3. Дубровина И.В. Психологические ресурсы личностного развития современных школьников [Электронный ресурс] // Вестник практической психологии образования. 2017. Том 14. № 2. С. 44—52. URL: https://psyjournals.ru/journals/bppe/archive/2017 n2/Dubrovina
- 4. Дубровина И.В. Психологический аспект феномена «личностные результаты образования» [Электронный ресурс] // Вестник практической психологии образования. 2021. Том 18. № 3. С. 50—62. DOI:10.17759/bppe.2021180305
- 5. Егоренко Т.А., Безрукавный О.С. Проблема психолого-педагогической адаптации детей к образовательному пространству [Электронный ресурс] // Современная зарубежная психология. 2016. Том 5. № 3. С. 59—65. DOI:10.17759/jmfp.2016050306
- 6. Исаев Е.И., Косарецкий С.Г., Королева Я.П. Современные модели профилактики и коррекции трудностей в обучении в работе школьных служб поддержки в зарубежных странах [Электронный ресурс] // Современная зарубежная психология. 2022. Том 11. № 3. С. 17—26. DOI:10.17759/imfp.2022110302
- 7. *Кухтова Н.В.* Возрастные и гендерные различия в проявлении просоциального поведения // Веснік Віцебскага Дзяржаўнага Універсітэта. 2004. № 2(32). С. 66—71.
- 8. Прихожан А.М. Применение методов прямого оценивания в работе школьного психолога / Научно-методические основы использования в школьной психологической службе конкретных психодиагностических методик: Сб. Научн. Тр. / Редкол.: И.В. Дубровина (отв. ред.) и др. М.: изд. АПН СССР, 1988. 272 с.
- 9. Прихожан А.М. Тревожность у детей и подростков: психологическая природа и возрастная динамика. М.: Московский психолого-социальный институт; Воронеж: Издательство НПО «МОДЭК», 2000. 304 с.
- 10. Программа диагностики трудностей в обучении у обучающихся начальной школы в коммуникативной сфере и социальной адаптации, в сфере общеучебных и универсальных действий /

- сост. Егоренко Т.А., Исаев Е.И., Лобанова А.В., Санина С.П., Сафронова М.А., Расторгуева М.Д. М.: ФГБОУ ВО МГППУ, 2022. 12 с.
- 11. *Рудомазина В.М.* Современная картина проявления тревожности у детей младшего школьного возраста [Электронный ресурс] // Психологическая наука и образование. 2016. Том 8. № 1. С. 76—85. DOI:10.17759/psyedu.2016080107
- 12. Самылова О.А., Дмитриевских С.С. Особенности самооценки младших школьников // Вестник Шадринского государственного педагогического университета. 2016. № 4(32). С. 165—169.
- 13. Семина Л.В. Особенности уровня притязаний младших школьников в учебной деятельности: автореф. дисс. ... канд. психол. наук. Психол. Ин-т Рос. Акад. Образования. М., 2003. 20 с.
- 14. Система функционирования психологических служб в общеобразовательных организациях: методические рекомендации / Авт. коллектив. М.: Издательство ФГБОУ ВО МГППУ, 2020. 120 с.
- 15. Славутская Е.В. Гендерные различия в личностных качествах, определяющих дезадаптацию младших подростков [Электронный ресурс] // Психологическая наука и образование. 2011. Том 3. № 3. URL: https://psyjournals.ru/journals/psyedu/archive/2011_n3/47077
- 16. Goodman R., Meltzer H., Bailey V. The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version // European & Adolescent Psychiatry. 1998. Vol. 7(3). P. 125—130. DOI:10.1007/s007870050057
- 17. Goodman R. The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden // Journal of Child Psychology and Psychiatry and Allied Disciplines. 1999. No. 40(5). P. 791—799.
- 18. Kersten P., Czuba K., Mc Pherson K., Dudley M., Elder H., Tauroa R., Vandal A. A systematic review of evidence for the psychometric properties of the Strengths and Difficulties Questionnaire // International Journal of Behavioral Development. 2016. No. 40. P. 64—75 DOI:10.1177/0165025415570

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Approbation and Validation of the "Index of Autonomous Functioning" (IAF) in the Russian Sample

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One of the key issues in contemporary psychology is a correlation between determinism and indeterminism in understanding human behaviour. Autonomy as self-determined behaviour, as an individual's autonomous choice of behaviour, is one of the most significant and sought-after constructs in the study of personality functioning. In E. Deci and R. Ryan's self-determination theory (SDT), the need for autonomy is one of the basic innate needs of the personality, and this confirms the need for a person to feel as an actor, an initiator, the cause of one's own life and to act in harmony with one's integrated Self. The article presents the procedure of adaptation of the Russian-language version of the "Index of Autonomous Functioning" (IAF) developed within the macro-theory of self-determination by E. Deci and R. Ryan. The methodology assesses the need for autonomy, including such characteristics as authorship in life, self-interest and susceptibility to external control. In the article we studied the results of reliability and accuracy assessment (Cronbach's coefficient — 0,774) on a sample of 689 university students in Saint Petersburg. The structure of the questionnaire had three scales: authorship, susceptibility to control, and interest. Correlation analysis confirmed the correlation of the scales with other methods of measuring autonomous behavior, such as "Subjective Quality of Choice", "The Existence Scale", "World Assumptions Scale" and "Stolin Self-Relationship Questionnaire". Testing of diagnostic sensitivity of the Russian version of the questionnaire showed positive results, revealing significant level differences between three clusters: respondents with high, medium and low autonomous functioning index, as well as significant differences in gender and level of education of the respondents. A positive correlation was found between the overall IAF score, the interest-taking subscale, and the age of respondents (within Russian sample). According to the results, the Russian-language version of the "Index of Autonomous Functioning" has good psychometric characteristics and can be used as a qualitative research tool.

Keywords: index of autonomous functioning; self-determination; autonomy; adaptation of the scales; validity.

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Апробация и валидизация методики «Индекс автономного функционирования» (IAF) на российской выборке

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Одной из ключевых проблем современной психологии является соотношение детерминированности и индетерминированности в понимании поведения человека. Автономия как самоопределяемое поведение, как самостоятельный выбор человеком способа поведения представляет собой один из самых значимых и востребованных конструктов при изучении личностного функционирования. В теории самодетерминации (SDT) Э. Деси и Р. Райана потребность в автономии выступает одной из базовых врожденных потребностей личности, что подтверждает необходимость для человека ощущать себя деятелем, инициатором, причиной собственной жизни и действовать в гармонии со своим интегрированным Я. В статье представлена процедура адаптации русскоязычной версии методики «Index of Autonomous Functioning» — IAF («Индекс автономного функционирования» — ИАФ), разработанной в рамках макротеории самодетерминации Э. Деси и Р. Райана. Методика направлена на оценку потребности в автономии и включает характеристики авторства человека в собственной жизни, интерес к самому себе и степень восприимчивости к внешнему контролю. Описаны психометрические показатели русскоя-

зычной версии методики, результаты проверки ее надежности и согласованности (а Кронбаха — 0,774), структурной и конструктной валидности, диагностической чувствительности, полученные на выборке студентов вузов Санкт-Петербурга (N=689). Подтверждена оригинальная трехфакторная структура опросника, включающая в себя три шкалы: авторство/ самоконгруэнтность, восприимчивость к контролю и заинтересованность. На основании корреляционного анализа была подтверждена конструктная валидность адаптируемой методики, рассмотрены связи шкал с другими методиками, имеющими отношение к разным аспектам автономного поведения личности: «Субъективное качество выбора», «Шкала экзистенции», «Базисные убеждения» и «Опросник самоотношения». Проверка диагностической чувствительности русскоязычной версии опросника показала положительный результат, выявив значимые различия между тремя кластерами: респондентов с высоким, средним и низким индексом автономного функционирования, а также значимые различия по полу и уровню образования. Выявлена положительная корреляция общего показателя ИАФ и субшкалы заинтересованности с возрастом респондентов (в рамках данной выборки). Согласно полученным результатам, русскоязычная версия методики «Индекс автономного функционирования» обладает хорошими психометрическими характеристиками и может быть использована как качественный исследовательский инструмент.

Ключевые слова: индекс автономного функционирования; самодетерминация; автономия; адаптация методик; валидность.

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Introduction

The concept of autonomy (Greek: autos — self and nomos — law) has deep philosophical roots and is understood as the presence of an object or phenomenon with its own immanent laws of existence and development. If we talk about the ethical self-determination of a person on the basis of his own mind and strength in accordance with his nature, then, according to I. Kant, "only such self-determination is consistent with the dignity of a morally mature personality" [1]. It is of no coincidence that appealing to the phenomenon of autonomy attracts not only the attention of modern philosophers, but also psycholo-

gists, and becomes an urgent problem which requires a search for new approaches and solutions.

Autonomy, initiative, independence, involvement in life, responsibility, the ability to make decisions and choices are necessary qualities, the increasing importance of which is caused by (based on) global social transformations, an expansion of opportunities and life alternatives, the need for self-determination and self-expression. Each of the listed characteristics is closely related to a conscious attitude to life, to the processes of internal intentional movement: understanding oneself, realizing oneself, changing oneself, that is, the self-determi-

nation of personality. Meanwhile, there is no consensus among researchers regarding the definition of autonomy.

Autonomy is proposed to be considered as a synonym for freedom, as a separate individual disposition of personality, as self-regulation, and even as a characteristic of relationships with other people [35]. Freedom as an experience of self-determination is considered by W. Tageson, linking it with the development of self-awareness [30]. According to J. Rychlak, self-determination is the ability of a subject to determine his own activity based on his desires and meaningful goals arising from them [6].

Possession of autonomy is recognized as the main characteristic of a subject in the theory of R. Harre [19]. A full-fledged subject (agent) manifests himself in the ability to choose guiding principles of behavior, the ability to switch between different determinants, as well as the ability to self-intercede (control over influences from the external environment; change one's lifestyle) [6]. A. Bandura considers one of the main manifestations of subjective determination to be the ability to act contrary to the influence of external factors, and to resist them in situations of pressure and coercion [12].

The most famous and widespread theory at the moment, in which the concept of autonomy is developed from the point of view of a special basic need of personality is the self-determination theory (SDT) by E. Deci and R. Ryan [26]. According to the theory, autonomy is considered as self-determined behavior, which corresponds to the values, needs and interests of an individual [17, 33]. The choice of behavior is made by a person independently on the basis of intrapersonal determinants. According to E. Deci and R. Ryan, to be autonomous means to be self-initiated and self-regulated, to live in accordance with one's Self. An autonomous personality shows flexibility in regulating interactions with the environment, feels free, spontaneous and creative. The degree to which behavior is autonomous, volitional and regulated by the person himself rather than by external circumstances, can be determined by a variety of positively experienced events and behavioral reactions [24]. From the point of view of an individual's psychological well-being, a high level of autonomy is associated with many positive factors: from increased productivity to higher assessments of one's own well-being and relationships [24, 31].

In Russian psychology, much attention is also paid to the problem of personal autonomy. According to D.A. Leontiev et al., an autonomous personality is characterized by freedom — the highest form of activity, expressed in the ability to initiate, stop or change the direction of activity at any point, and responsibility — the highest form of self-regulation, expressed in the awareness and use of oneself as a cause for changes in oneself and the external world [4].

As O.E. Dergacheva, L.Ya. Dorfman, D.A. Leontiev (2008) point out, to measure the level of self-determination and autonomy of a person, there are a number of English-language methods: the Worthington Autonomy Scale, Gough and Heilbrun's Adjective Check List, the Jackson Personality Research Form, the Hogan Personality Inventory, the Interpersonal Dependency Inventory, Beck's Sociotropy-Autonomy Scale, however, they are little known and rarely used in Russian studies [3]. Other methods, for example, the General Causality Orientations Scale (GCOS), as well as the Russian version of the Freedom/Determinism Beliefs Inventory (FAD-Plus) are only indirectly related to assessing the level of personal autonomy [3, 8].

Meanwhile, as part of the empirical testing of self-determination theory, a technique was developed directly aimed at measuring autonomous functioning — the Index of Autonomous Functioning (hereinafter referred to as IAF) [33]. The authors proposed a dispositional autonomy scale

reflecting its main components: authorship/self-congruence, interest-taking and low susceptibility to control. As the developers of the method point out, before the advent of the IAF, there was no systematic assessment of all three components, although their individual components could be studied as part of the methods developed in previous years [3, 14, 27].

The first component of autonomy in the structure of the IAF is **authorship** or self-congruence. An autonomous person perceives his behavior as self-consistent and holistic, he is interested in self-exploration and can use the awareness of his values, feelings and needs to act congruently [14, 15, 23]. It should be noted that this understanding of self-congruence is similar to the concept of authenticity described in existential literature [33, 34].

The second component of autonomy is **interest-taking**, that is, a person's willingness to openly reflect on internal and external events, motivated attention and a person's receptiveness to both positive and negative experiences [32]. Interest-taking promotes an awareness and ongoing understanding of oneself and one's experiences, which in turn is important for a high level of self-management associated with autonomy [20, 25].

The third component of autonomy is the absence of external and internal pressure on behavior, or a low **susceptibility to control** [16]. People with a dispositionally low autonomy show less personal choice and initiative and view behavior as a response to pressure from others' expectations or to introjected pressure and self-imposed oughts (demands) [33].

This technique and its modifications are actively used in foreign research, and have also been included in the methodological tools in a number of Russian works [10, 22, 28, 29]. The data obtained indicates the practical applicability of the IAF scale, confirmed by publications in foreign languages

(Danish, French, German, etc.) [13, 18]. However, the psychometric validation and approbation of the scale in Russian-language studies has not been carried out before. The purpose of this article is to present a Russian-language adapted version of the Index of Autonomous Functioning (IAF).

Procedure and Methods for the Adaptation and Validation of the Questionnaire

At the first stage of adaptation, the original version of the method's text was subjected to direct and reverse translation in compliance with the following rules and sequence of actions:

- 1) Preparation of the initial translation from the original language (English) into another language (Russian) by specialists with psychological and pedagogical education.
- 2) Expert content assessment of the translation for the purpose of checking the adaptation of the vocabulary and grammar on a Russian-speaking sample, taking into account its cultural and linguistic characteristics.
- 3) Checking the correspondence of the translation to the original, i.e. the correlation of the resulting translation of the questionnaire with the original by a reverse translation from Russian into English.

The first stage of the psychometric testing of the Russian version of the questionnaire was carried out on a sample of students from the Faculty of Medicine of St. Petersburg State University (N = 101) — 29 boys, 62 girls, aged from 17 to 19 years). The purpose of the testing was to confirm the quality of the translation and the possibility of its use for the main stage of adaptation.

Students from several St. Petersburg universities and secondary educational institutions (N=588) took part in the **main stage** of the questionnaire adaptation. The proportion of men was 45% (n = 263), the

proportion of women was 55% (n = 325), the average age was 20.5 ± 2.39 , Mo = 21. The sample of students is heterogeneous in terms of education level and includes: college students (0.7%), those with completed secondary vocational education (3.6%), students in higher education programs (56.1%), those with completed higher education in bachelor's or specialist programs (28.2%), studying in master's degree programs (9.7%), having completed higher education in a master's program (1.2%), studying in graduate school (0.5%).

To test the construct validity of the Russian-language version of the questionnaire, a set of techniques was used to measure characteristics that are directly related to the construct of autonomy and autonomous behavior:

- 1. The Subjective Quality of Choice questionnaire by D.A. Leontiev et al. (2007) was used to study individual strategies for making a choice and the characteristics of an individual's attitude towards his own choice [7].
- 2. The Langle-Orgler Existence Scale adapted by S.V. Krivtsova et al. (2009) is aimed at measuring the subjective feeling of existential fulfillment, which corresponds to a meaningfulness of life, authenticity and congruence of the individual, his self-identity in various life situations, decisions and actions [5].
- 3. Self-attitude questionnaire by V.V. Stolin and S.R. Pantileev (1988) was included to evaluate the structure of a person's self-attitude [11] and its impact on autonomy.
- 4. World Assumptions Scale (WAS) or the "Basic Beliefs" scale by R. Yanov-Bulman, adapted by M.A. Padun and A.V. Kotelnikova (2007) was used to study a person's integral, implicit and stable ideas about themselves and the world, which influence the cognitive, emotional and behavioral spheres of an individual [9], and which could affect autonomous functioning.

Since the empirical data obtained has a normal distribution (the measures of kurtosis and skewness do not exceed 1 modularly), the parametric methods of statistical analysis were used to test the validity of IAF. Data processing was carried out in the IBM SPSS Statistics 28.0 and AMOS 28.0 programs.

Results

Checking the consistency of the items in the Russian version of the questionnaire showed the following results. The overall consistency of the questionnaire items (Cronbach's alpha reliability coefficient) $\alpha = 0.741$. At the same time, the highest consistency indicator $\alpha = 0.758$ was obtained for the "susceptibility to control" subscale, for the "authorship/selfcongruence" subscale it was = 0.680, and for the "interest" subscale it was = 0.579.

However, with the step-by-step exclusion of the "susceptibility to control" and "interest-taking" subscales, consistency on the "authorship/self-congruence" subscale increases to fairly high values — = 0.781. The overall reliability and consistency of the questionnaire with stepwise elimination of two subscales was = 0.774. It can be concluded that the characteristics of individual items are not ideal, however, work on further adaptation at this stage can be continued.

In testing the validity of the adapted questionnaire, **descriptive statistics** were also calculated for the subscale and total score of the Index of Autonomous Functioning(Table 1).

To test **the structural validity** of the Russian version of the IAF questionnaire, factor analysis was used with the principal component method using Varimax rotation. The Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy — 0.906, Bartlett's test — p=0.000. The results showed that the number and structure of the obtained factors completely coincide with the origi-

Table 1

Descriptive Statistics for the Subscale of the "Index of Autonomous Functioning"

Subscale	Mean	Median	SD	Skewness	Kurtosis	Distribution
Authorship	3,69	3,8	0,91	-0,69	-0,11	Normal
Susceptibility to control	2,74	2,6	0,88	0,30	-0,40	Normal
Interest-taking	3,58	3,8	1,06	-0,53	-0,56	Normal
IAF (total score)	3,34	3,3	0,47	-0,07	-0,22	Normal

nal structure, which indicates in favor of the theoretical model. An additional check of the factor structure using the method of oblique (non-orthogonal) rotation ("Direct oblimin") confirmed the original three-factor structure, as well as the assignment of the second question to the third factor (r=0.322, for the "authorship" factor r=0.155). The resulting factor loadings are presented in Table 1.

To test the three-factor structure of the questionnaire, confirmatory factor analysis was used with the AMOS 28.0 program. The results showed that all variables corresponded to latent factors (Figure 1). Scores for the "authorship" factor ranged from 0.77 to 0.85, for the "interest-taking" factor — from 0.72 to 0.80, for the "susceptibility to control" factor — from 0.60 to 0.68, (p <0.001). The correspondence of the

Table 2
Factor Structure of the Russian Version of the Index of Autonomous
Functioning (Principal component analysis)

Scale item	Authorship/Self- congruence	Interest- Taking	Susceptibility to Control
My decisions represent my most important values and feelings.	0,820	0,171	-0,001
4. I strongly identify with the things that I do.	0,753	0,201	0,016
8. My actions are congruent with who I really am.	0,860	0,085	0,030
10. My whole self stands behind the important decisions I make	0,845	0,173	0,046
15. My decisions are steadily informed by things I want or care about.	0,807	0,148	0,068
12. I am interested in why I act the way I do.	0,114	0,823	0,230
3. I often reflect on why I react the way I do.	0,122	0,785	0,274
5. I am deeply curious when I react with fear or anxiety to events in my life.	0,155	0,757	0,174
9. I am interested in understanding the reasons for my actions.	0,237	0,788	0,254
13. I like to investigate my feelings.	0,337	0,749	0,163
14. I often pressure myself.	-0,026	0,176	0,834
7. I try to manipulate myself into doing certain things.	0,028	0,230	0,833
6. I do a lot of things to avoid feeling ashamed.	-0,015	0,262	0,707
11. I am interested in why I act the way I do.	0,447	0,218	0,492
2. I do things in order to avoid feeling badly about myself.	0,384	0,289	0,374

three-factor model to the obtained data can be considered acceptable: the adjusted comparative fit index (CFI) = 0.9; the root mean square error of approximation (RM-SEA) = 0.095; ratio of chi-square minimum and DF (CMIN/DF) = 6.3 (p<0.05). According to these findings, a three-level structure is an appropriate description of the data.

Thus, the original three-factor structure of the questionnaire, identified by the authors of the original "Index of Autonomous Functioning — IAF" method [33], was confirmed. The results of factor analysis showed that in order to maintain compatibility with the original structure of the questionnaire, it is advisable to refuse to make any additional modi-

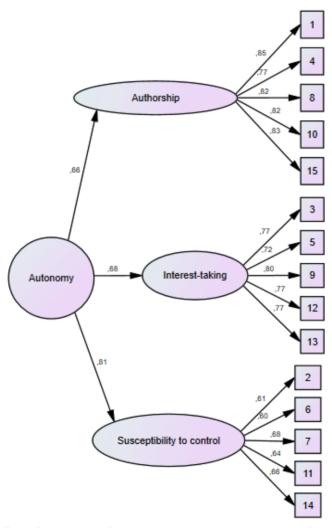


Fig. 1. Factor Structure of the Russian Version of the Index of Autonomous Functioning (Confirmatory factor analysis)

fications to the resulting Russian-language text, due to the fact that changing individual items can lead to a decrease in the accuracy of the translation and a decrease in the semantic consistency of the Russian-language and original questionnaire options.

The construct validity of the Russian version of the "Index of Autonomous Func-

tioning" questionnaire was tested using correlation analysis of the data using methods on a sample of St. Petersburg universities students (N= 588). The results of the correlation analysis are shown in Table 3.

The subscales of the Index of Autonomous Functioning have significant relationships with all scales of the "Subjective

Table 3
Indicators of the Pearson Correlation Coefficient Between the Scales
of the IAF Method and Other Constructs (N=588)

	IAF: Au- thorship	IAF: Susceptibility to Control	IAF: Interest- Taking	IAF: General Indicator
	Subjective Q	uality of Choice:		1
Elaboration of choice	0,344**	-0,016	0,100°	0,291**
Emotional valence of choice of choice	0,280**	0,210**	-0,154**	0,199**
Autonomy of choice	0,297**	0,057	-0,023	0,214**
Satisfaction with the outcome of choice	0,412"	0,071	0,027	0,336**
	Existe	nce Scale:		
Self-distance	0,179**	0,193**	-0,073	0,183**
Self-transcendence	0,521"	0,126**	0,074	0,477"
Freedom	0,469"	0,252**	-0,099*	0,391**
Responsibility	0,371**	0,294**	-0,154**	0,312**
	Self-	Attitude:		
Global self-relationship (S)	0,413"	0,172**	-0,041	0,348**
Self-esteem (I)	0,414"	0,207**	-0,076	0,344**
Autosympathy (II)	0,344**	0,206**	-0,095*	0,283**
Expected attitude from others (III)	0,345**	-0,009	0,116**	0,309**
Self-interest (IV)	0,366**	-0,028	0,097*	0,295**
Self-confidence	0,421"	0,186**	-0,068	0,342**
Attitude of others	0,342**	-0,056	0,130**	0,287**
Self-acceptance	0,348**	0,115**	-0,059	0,256**
Self-leadership	0,274**	0,036	0,073	0,258**
Self-blame	-0,188**	-0,214**	0,095*	-0,186**
Self-interest	0,357**	-0,032	0,103°	0,292**
Self-understanding	0,237**	0,220**	-0,173**	0,163**
	Basi	c Beliefs:		
Benevolence of the world	0,161**	0,051	-0,003	0,135**
Justice	0,097*	-0,001	0,023	0,081*
Self-image	0,191**	0,050	0,056	0,199**
Luck	0,228**	0,027	0,132**	0,266**
Beliefs about control	0,167**	-0,016	0,136**	0,202**

Note: ** — correlation is significant at p<0.01 level; * — correlation is significant at p<0.05 level.

Quality of Choice", "Existence Scale", "Self-Attitude Questionnaire" and "Basic Beliefs Scale" methods. Let us consider in detail the highest significant correlations (Table 3).

The highest and most significant correlation coefficients were obtained between the indicators of the scales and the indicators on the IAF subscale "authorship/ self-congruence". The feeling of being the author of one's behavior corresponds to high satisfaction with one's own choices and decisions, a positive global self-attitude, a high expression of self-esteem and self-confidence. Autonomous functioning, which implies the implementation of personally significant choices that are congruent with one's own values and beliefs, is associated with the subjective well-being of the individual, which is also manifested in the satisfaction with one's decisions and adequate positive self-esteem.

In addition, self-congruity according to the IAF questionnaire is associated with the ability for self-transcendence (going beyond one's "I") and internal personal freedom. The general indicator according to the IAF method also positively correlates with a high level of self-transcendence.

To test **the differentiating ability** of the resulting Russian-language version of the questionnaire, a cluster analysis of the data was carried out. Using the method of hierarchical clustering and k-means clustering according to the IAF scales, 3 clusters are identified (p<0.05) (Figure 2).

Thus, the first cluster (298 people, 50.6%) consisted of respondents with high values on all scales of the "Index of Autonomous Functioning", except for the opposite scale "susceptibility to control." The second cluster (120 people, 20.4%) — of respondents with low values on all scales of the Index of Autonomous Functioning, with the exception of the "susceptibility to control" subscale, which is characterized by high values in this group. The third cluster (170 people, 28.9%) consisted of respondents with average values on the "interest" and "sensitivity to control" scales and a high level on the "authorship/self-congruence" scale.

The diagnostic sensitivity of the questionnaire was tested using Student's T-test, a one-way analysis of variance and the Pearson correlation analysis.

Using Student's T-test, significant differences in the average values of the questionnaire indicators by gender were identi-

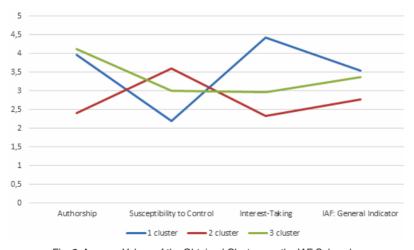


Fig. 2. Average Values of the Obtained Clusters on the IAF Subscales

fied: the average values on the "Interest" subscale are lower in men (M= 3.4 ± 1.07 , p<0.01) than in women (M = 3.8 ± 1.01); the average values for the general IAF indicator are also lower in men (M= 3.3 ± 0.45 , p<0.05) than in women (M= 3.4 ± 0.48) (Figure 3).

According to the results of the one-way analysis of variance, significant differences were found in groups with different levels of

education for the subscales: susceptibility to control (F=2.67, p<0.05), interest-taking (F=7.29, p<0.01) and for the general indicator on the IAF scale (F=2.47, p<0.05).

The highest results for the general IAF index were found in the group of postgraduate students (M=3.8±0.41), and the lowest — among those receiving secondary vocational education (M=3.0±0.48) (Figure 4).

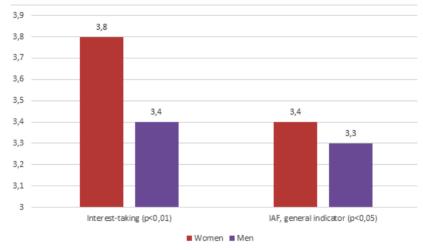


Fig. 3. Differences in the Average Values of the IAF Questionnaire Indicators by Gender

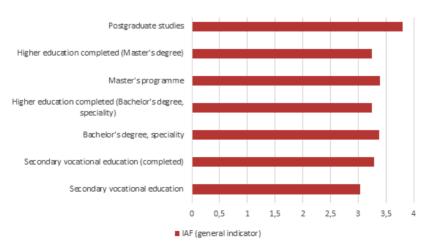


Fig. 4. Differences in the Average Values of the General Indicator of the IAF Questionnaire by Level of Education (p<0.05)

Correlation analysis of Pearson's r showed weak positive relationships with age for two IAF subscales: the interest indicator is positively correlated with age ($r=0.11^{**}$, p<0.01); and the overall measure of autonomous functioning was also positively associated with age ($r=0.08^*$, p<0.05).

Discussion

As follows from the presented results. the Russian translation of the method, designated as the "Index of Autonomous Functioning (IAF)," reveals good psychometric characteristics, which are manifested in the parameters of the structural model, assuming the relationship of its scales with each other, as well as in the indicators of internal consistency of the scales (Cronbach's alpha =0.741). The original structure of the technique is well reproduced. The number and structure of the obtained factors completely coincide with it, which testifies in favor of the theoretical model and allows us to talk about the technique as a high-quality diagnostic tool. The "sensitivity to control" subscale demonstrates the need for additional testing or consideration of the influence of other (cross-cultural or age-related) characteristics. However, we note that the authors of the original version of the method, based on the results of seven studies, using the subscales separately, also draw attention to the ambiguity of the data obtained [34].

The adapted Russian-language version of the questionnaire demonstrates a high differentiating ability. The wording of a number of points of the method can be further clarified, which could increase the homogeneity of the scales, but their current parameters allow for the method to be used in its current form, without additional textual changes.

The performed validation and adaptation of the Russian-language version of the IAF questionnaire not only confirm the construct validity of the method, but also lead to interesting substantive conclusions. The construct of "authorship/self-congruence,"

which is a key component of autonomous functioning, is closely related in meaning to the problems of existential psychology, the concepts of self-transcendence and internal freedom of the individual, which are components of existential fulfillment. The results obtained prove the effectiveness of the adapted method in the study of existential aspects of choice, features of the manifestation of authenticity and self-identity of the individual, characteristics of the value-semantic sphere.

Also, the subscales of the questionnaire are consistent with other constructs that are similar in meaning and included in the current problem field of modern personality psychology. Personal self-determination and its ability to function autonomously are closely related to the key characteristics of self-attitude, self-esteem and self-confidence, as well as the subjective assessment of one's own choices as independent, thorough, positive and satisfactory. A high level of personal autonomy is consistent with the expression of basic beliefs about the benevolence and fairness of the world. a positive image of one's own "I," faith in luck and the ability to control events occurring in life.

Conclusion

Thus, the results obtained made it possible to discover the correlations between the components of self-determination and relatively stable personality characteristics, including the global self-attitude and characteristics of the value-semantic sphere of the individual — deep beliefs, the belief in a just and safe world, and the idea of the value of one's own "I". In addition, according to our research, the autonomous functioning of the individual is associated with the procedural and existential aspects of choice, the desire to find and realize individual life meaning. A prospect for further research may be to clarify the nature of the identified relationships, as well as cross-cultural studies of the specification of subscales of the questionnaire and autonomous selfregulation of behavior in general.

It can be concluded that the adapted version of the Index of Autonomous Functioning (IAF) questionnaire is a valid and qualitative research instrument. The work done allows us to supplement the currently available arsenal of Russian-language methodological tools for studying the phenomenon of self-determination and autonomous behavior of the personality.

References

- 1. Avtonomiya [Autonomy] [Elektronnyi resurs]. Natsional'naya elektronnaya entsiklopediya: [sait]. 2023. URL: https://terme.ru/termin/avtonomija.html (Accessed 19.09.2023). (In Russ.).
- 2. Dergacheva O.E. Lichnostnaya avtonomiya kak predmet psikhologicheskogo issledovaniya: Avtoref. Dis. kand. psikhol. nauk [Personal Autonomy as a Subject of Psychological Research]. Moscow, 2005. URL: institut.smysl.ru/article/documents/ardergacheva.doc (In Russ.).
- 3. Dergacheva O.E., Dorfman L.Ia., Leont'ev D.A. Russkoiazychnaia adaptatsiia oprosnika kauzal'nykh orientatsii [Russianlanguage adaptation of the questionnaire causal orientations]. Vestnik moskovskogo universiteta. Ser. 14. Psikhologiia [Bulletin of Moscow University. Ser. 14, Psychology], 2008. Vol. 3, pp. 91—106. (In Russ.).
- 4. Kaliteevskaya E.R., Leont'ev D.A., Osin E.N. Lichnostnyi potentsial pri perekhode ot detstva k vzroslosti i stanovlenie samodeterminatsii [Personal Potential in the Transition from Childhood to Adulthood and Self-Determination]. In: Lichnostnyi potentsial: struktura i diagnostika [Personal Potential: Structure and Diagnosis]. Ed. by D.A. Leont'ev. Moscow: Smysl, 2011, pp. 611—641. (In Russ.).
- 5. Krivtsova S.V. Shkala ekzistentsii (Existenzskala) A. Lengle i K. Orgler. [Existence Scale (Existenzskala) by A. Langle and K. Orgler] In: S.V. Krivtsova, A. Lengle, K. Orgler Ekzistentsial'nyi analiz [Existential Analysis.], 2009, no. 1, pp. 141—170. (In Russ.).
- 6. Leont'ev D.A. Psikhologiya svobody: k postanovke problemy samodeterminatsii lichnosti [Psychology of Freedom: To the statement of the problem of self-determination of personality]. *Psikhologicheskii zhurnal* [*Psychological Journal*], 2000, no. 1, pp. 15—25. (In Russ.).
- 7. Leont'ev D.A., Mandrikova E.Yu., Fam A.Kh. Razrabotka metodiki diagnostiki protsessual'noi storony vybora [Development of Technique of Diagnostics of the Procedural Side of Choice]. *Psikhol. Diagnostika* [*Psychological Diagnostics*], 2007, no. 6, pp. 4—25. (In Russ.).
- 8. Mospan A.N., Leont'ev D.A. Aprobatsiya i validizatsiya metodiki very v svobodu/determinizm (FAD—Plus) na rossiiskoi vyborke [Approbation and validation of the Freedom/Determinism belief technique (FAD-Plus) on the Russian sample]. *Psikhologiya*.

Zhurnal Vysshei shkoly ekonomiki [Psychology. Journal of the Higher School of Economics], 2021, no. 18, pp. 109—128. DOI:10.17323/1813-8918-2021-1-109-128 (In Russ.).

- 9. Padun M.A., Kotel'nikova A.V. Metodika issledovaniya bazisnykh ubezhdenii lichnosti [Technique of research of basic beliefs of personality]. Moscow: Laboratorii psikhologii i psikhoterapii posttravmaticheskogo stressa IPRAN [Laboratory of psychology and psychotherapy of posttraumatic stress IPRAN], 2007. 95 p. (In Russ.).
- 10. Rasskazova E.I. Psikhologicheskie faktory, svyazannye s zhalobami na narusheniya sna i dnevnogo funktsionirovaniya v period samoizolyatsii (COVID-19): rol' trevogi, blagopoluchiya, avtonomii i sovladaniya [Psychological factors associated with complaints of sleep disorders and daytime functioning in the period of self-isolation (COVID-19): The role of anxiety, well-being, autonomy and coping]. Zhurnal nevrologii i psikhiatrii im. S.S. Korsakova. Spetsvypuski [Journal of neurology and psychiatry. S.S. Korsakov. Special issues], 2021. Vol. 121(42), pp. 24—30. DOI:10.17116/inevro202112104224 (In Russ.).
- 11. Stolin V.V., Pantileev S.R. Oprosnik samootnosheniya [Self-perception questionnaire]. Praktikum po psikhodiagnostike: Psikhodiagnosticheskie materialy [Practicum on psychodiagnostics: Psychodiagnostic materials]. Moscow, 1988, pp. 123—130. (In Russ.).
- 12. Bandura A. Self-efficacy. The Exercise of Control. New York, NY: W.H. Freeman and Co, 1997.
- 13. Deci E., Flaste R. Pourquoi faisons-nous ce que nous faisons?: Motivation, auto-d termination et autonomie (Accompagnement et Coaching) (French Edition) Kindle Edition, 2018. 256 p.
- 14. Deci E.L., Eghrari H., Patrick B.C., Leone D. Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, 1994. Vol. 62, pp. 119—142. DOI:10.1111/j.1467-6494.1994. tb00797.x
- 15. Deci E.L., Ryan R.M. The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 1985, no. 19, pp. 109—134. DOI:10.1016/0092-6566(85)90023-6
- 16. Deci E.L., Ryan R.M. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 2000, no. 4, pp. 227—268. DOI:10.1207/S15327965PLI1104_01

- 17. Deci E.L., Ryan R.M. Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology / Psychologie canadienne*, 2008. Vol. 49(3), pp. 182—185. DOI:10.1037/a0012801
- 18. Frühwirth G. Selbstbestimmt unterrichten dürfen Kontrolle unterlassen können: Der Motivationsstil von Mentorinnen und Mentoren in Schulpraktika (German Edition) Inter Edition, 2020. 340 p. DOI:10.1007/978-3-658-29071-9
- 19. Harre R. Personal being. Blackwell, 1983.
- 20. Hmel B.A., Pincus A.L. The meaning of autonomy: On and beyond the interpersonal circumplex. *Journal of Personality*, 2002. Vol. 70(3), pp. 277—310. DOI:10.1111/1467-6494.05006
- 21. Längle A., Orgler C., Kundi M. The Existence Scale: A New Approach to Assess the Ability to Find Personal Meaning in Life and to Reach Existential Fulfillment. European Psychotherapy, 2003. Vol. 4(1), pp. 135—151. 22. Mouratidis A., Michou A., Vassiou A. Adolescents' autonomous functioning and implicit theories of ability as predictors of their school achievement and week-toweek study regulation and well-being. Contemporary Educational Psychology, 2017. Vol. 48, pp. 56—66. DOI:10.1016/j.cedpsych.2016.09.001
- 23. Ryan R.M., Deci E.L. Autonomy is no illusion: Self-determination theory and the empirical study of authenticity, awareness, and will. In J. Greenberg, S.L. Koole, T. Pyszczynski (Eds.). Handbook of experimental existential psychology. New York: Guilford, 2004.
- 24. Ryan R.M., Deci E.L. Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will? *Journal of Personality*, 2006. Vol. 74, pp. 1557—1586. DOI:10.1111/j.1467-6494.2006.00420.x
- 25. Ryan R.M., Deci E.L. Self-determination theory: Basic psychological needs in motivation, development, and wellness. The Guilford Press, 2017.
- 26. Ryan R.M. Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 1995. Vol. 63, pp. 397—427. DOI:10.1111/j.1467-6494.1995. tb00501.x

Литература

- 1. Автономия [Электронный ресурс] // Национальная электронная энциклопедия: [сайт]. 2023. URL: https://terme.ru/termin/avtonomija.html (дата обращения: 19.09.2023).
- 2. Дергачева О.Е. Личностная автономия как предмет психологического исследования: Автореф. Дисс. канд. психол. наук. М., 2005. URL: institut.smysl.ru/article/documents/ar-dergacheva.doc 3. Дергачева О.Е., Дорфман Л.Я., Леонтьев Д.А. Русскоязычная адаптация опросника каузальных ориентаций // Вестник Московского Университета. Сер. 14. Психология. 2008. № 3. С. 91—106.

- 27. Sheldon K.M. Creativity and self-determination in personality. *Creativity Research Journal*, 1995. Vol. 8, pp. 25—36.
- 28. Sheldon K.M., Gordeeva T., Leontiev D., Lynch M.F., Osin E., Rasskazova E., Dementiy L. Freedom and responsibility go together: Personality, experimental, and cultural demonstrations. *Journal of Research in Personality*, 2018. Vol. 73, pp. 63—74. DOI:10.1016/j.jrp.2017.11.007
- 29. Steffenhagen M.A. "Purpose and Autonomous Functioning in Emerging Adults". *All Electronic Theses and Dissertations*, 2021. 605. URL: https://spark.bethel.edu/etd/605
- 30. Tageson W. Hymanistic psychology: a synthesis. Homewood (III.): The Dorsey Press, 1982.
- 31. Vansteenkiste M., Ryan R.M., Deci E.L. Self-determination theory and the explanatory role of psychological needs in human well-being. In L. Bruni, F. Comim, M. Pugno (Eds.). Capabilities and happiness. Oxford: Oxford University Press, 2008, pp. 187—223.
- 32. Weinstein N., Deci E., Ryan R.M. Motivational determinants of integrating positive and negative past identities. *Journal of Personality and Social Psychology*, 2011. Vol. 100, pp. 527—544. DOI:10.1037/a0022150
- 33. Weinstein N., Przybylski A.K., Ryan R.M. The index of autonomous functioning: Development of a scale of human autonomy. *Journal of Research in Personality*, 2012. Vol. 46(4), pp. 397—413. DOI:10.1016/j.jrp.2012.03.007
- 34. Wood A.M., Linley P.A., Maltby J., Baliousis M., Joseph S. The Authentic Personality: A Theoretical and Empirical Conceptualization and the Development of the Authenticity Scale. Journal of Counseling Psychology, 2008. Vol. 55, no. 3, pp. 385—399. DOI:10.1037/0022-0167.55.3.385
- 35. Zimmer-Gembeck M.J., Collins W.A. Autonomy development during adolescence. In G.R. Adams, M.D. Berzonsky (Eds.). Blackwell handbook of adolescence. Blackwell Publishing, 2003, pp. 175—204.
- 4. Калитеевская Е.Р., Леонтьев Д.А., Осин Е.Н. Личностный потенциал при переходе от детства к взрослости и становление самодетерминации // Личностный потенциал: структура и диагностика / Под ред. Д.А. Леонтьева. М.: Смысл, 2011. С. 611—641.
- 5. *Кривцова С.В.* Шкала экзистенции (Existenzskala) А. Лэнгле и К. Орглер / С.В. Кривцова, А. Лэнгле, К. Орглер // Экзистенциальный анализ. 2009. № 1. С. 141—170.
- 6. Леонтьев Д.А. Психология свободы: к постановке проблемы самодетерминации личности // Психологический журнал. 2000. № 1. C. 15—25.

- 7. Леонтьев Д.А., Мандрикова Е.Ю., Фам А.Х. Разработка методики диагностики процессуальной стороны выбора // Психол. диагностика. 2007. № 6. С. 4—25.
- 8. *Моспан А.Н., Леонтьев Д.А.* Апробация и валидизация методики веры в свободу/ детерминизм (FAD—Plus) на российской выборке // Психология. Журнал Высшей школы экономики. 2021. Т. 18. № 1. С. 109—128. DOI:10.17323/1813-8918-2021-1-109-128
- 9. Падун М.А., Котельникова А.В. Методика исследования базисных убеждений личности. М.: Лаборатории психологии и психотерапии посттравматического стресса ИПРАН, 2007. 95 с.
- 10. Рассказова Е.И. Психологические факторы, связанные с жалобами на нарушения сна и дневного функционирования в период самоизоляции (COVID-19): роль тревоги, благополучия, автономии и совладания // Журнал неврологии и психиатрии им. С.С. Корсакова. Спецвыпуски. 2021. № 121(42). С. 24—30. DOI:10.17116/inevro202112104224
- 11. *Столин В.В., Пантилеев С.Р.* Опросник самоотношения // Практикум по психодиагностике: Психодиагностические материалы. М., 1988. С. 123—130.
- 12. Bandura A. Self-efficacy. The Exercise of Control. New York, NY: W.H. Freeman and Co, 1997.
- 13. Deci E., Flaste R. Pourquoi faisons-nous ce que nous faisons?: Motivation, auto-d termination et autonomie (Accompagnement et Coaching) (French Edition) Kindle Edition, 2018. 256 p.
- 14. *Deci E.L., Ryan R.M.* The general causality orientations scale: Self-determination in personality // Journal of Research in Personality. 1985. № 19. P. 109—134. DOI:10.1016/0092-6566(85)90023-6
- 15. Deci E.L., Ryan R.M. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior // Psychological Inquiry. 2004. № 4. P. 227—268. DOI:10.1207/S15327965PLI1104_01
- 16. Deci E.L., Eghrari H., Patrick B.C., Leone D. Facilitating internalization: The self-determination theory perspective // Journal of Personality. 1994. № 62. P. 119—142. DOI:10.1111/j.1467-6494.1994. tb00797.x
- 17. Deci E.L., Ryan R.M. Self-determination theory: A macrotheory of human motivation, development, and health // Canadian Psychology / Psychologie canadienne. 2008. Vol. 49(3). P. 182—185. DOI:10.1037/a0012801
- 18. Frühwirth G. Selbstbestimmt unterrichten dürfen Kontrolle unterlassen können: Der Motivationsstil von Mentorinnen und Mentoren in Schulpraktika (German Edition) Inter Edition, 2020. 340 p. DOI:10.1007/978-3-658-29071-9
- 19. Harre R. Personal being. Blackwell, 1983.

- 20. *Hmel B.A., Pincus A.L.* The meaning of autonomy: On and beyond the interpersonal circumplex // Journal of Personality. 2002. Vol. 70(3). P. 277—310. DOI:10.1111/1467-6494.05006
- 21. Längle A., Orgler C., Kundi M. The Existence Scale: A New Approach to Assess the Ability to Find Personal Meaning in Life and to Reach Existential Fulfillment // European Psychotherapy. 2003. Vol. 4(1). P. 135—151.
- 22. Mouratidis A., Michou A., Vassiou A. Adolescents' autonomous functioning and implicit theories of ability as predictors of their school achievement and week-to-week study regulation and well-being // Contemporary Educational Psychology. 2017. Vol. 48. P. 56—66. DOI:10.1016/j.cedpsych.2016.09.001
- 23. Ryan R.M. Psychological needs and the facilitation of integrative processes // Journal of Personality. 1995. Vol. 63. P. 397—427. DOI:10.1111/j.1467-6494.1995. tb00501.x
- 24. Ryan R.M., Deci E.L. Autonomy is no illusion: Self-determination theory and the empirical study of authenticity, awareness, and will / In J. Greenberg, S.L. Koole, T. Pyszczynski (Eds.). // Handbook of experimental existential psychology. New York: Guilford, 2004.
- 25. Ryan R.M., Deci E.L. Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will? // Journal of Personality. 2006. Vol. 74. P. 1557—1586. DOI:10.1111/j.1467-6494.2006.00420.x
- 26. Ryan R.M., Deci E.L. Self-determination theory: Basic psychological needs in motivation, development, and wellness. The Guilford Press, 2017.
- 27. Sheldon K.M. Creativity and self-determination in personality // Creativity Research Journal. 1995. Vol. 8. P. 25—36.
- 28. Sheldon K.M., Gordeeva T., Leontiev D., Lynch M.F., Osin E., Rasskazova E., Dementiy L. Freedom and responsibility go together: Personality, experimental, and cultural demonstrations // Journal of Research in Personality. 2018. Vol. 73. P. 63—74. DOI:10.1016/j.jrp.2017.11.007
- 29. Steffenhagen M.A. Purpose and Autonomous Functioning in Emerging Adults // All Electronic Theses and Dissertations. 2021. 605. URL: https://spark.bethel.edu/etd/605
- 30. *Tageson W*. Hymanistic psychology: a synthesis. Homewood (III.): The Dorsey Press, 1982.
- 31. Vansteenkiste M., Ryan R.M., Deci E.L. Self-determination theory and the explanatory role of psychological needs in human well-being / In L. Bruni, F. Comim, M. Pugno (Eds.) // Capabilities and happiness. Oxford: Oxford University Press, 2008. P. 187—223.
- 32. Weinstein N., Deci E., Ryan R.M. Motivational determinants of integrating positive and negative past identities // Journal of Personality and Social

Psychology. 2011. Vol. 100. P. 527—544. DOI:10.1037/a0022150

33. Weinstein N., Przybylski A.K., Ryan R.M. The index of autonomous functioning: Development of a scale of human autonomy // Journal of Research in Personality. 2012. Vol. 46(4). P. 397—413. DOI:10.1016/j.jrp.2012.03.007

34. Wood A.M., Linley P.A., Maltby J., Baliousis M., Joseph S. The Authentic Personality: A Theoretical

and Empirical Conceptualization and the Development of the Authenticity Scale // Journal of Counseling Psychology. 2008. Vol. 55. № 3. P. 385—399. DOI:10.1037/0022-0167.55.3.385

35. Zimmer-Gembeck M.J., Collins W.A. Autonomy development during adolescence / In G.R. Adams, M.D. Berzonsky (Eds.) // Blackwell handbook of adolescence. Blackwell Publishing, 2003. P. 175—204.

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Predictive Value of Differential Assessment of Schoolchildren's Maladaptation from Parent and Teacher Perspectives

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Based on a comprehensive socio-psychological and medico-psychological studies schoolchildren's maladaptation and individual risk factors conducted among second-graders in 12 secondary schools of Nizhny Novgorod (857 students in total), we evaluated the differences in the predictive value of the survey data, which was receiveded from parents and teachers. On the basis of the data obtained from parents and teachers, we assesed the factor loadings. The correlation and factor analyses confirmed the assumption about different predictive value of the survey data obtained from teachers and parents, they gave information about mental disorder signs development in behavior of junior schoolchildren. The average predictive error was higher among teachers, which also indicates a higher predictive value of parents' estimates compared to teachers'. This conclusion largely contradicts the theory that a teacher's assessment of a child being in the educational environment is more objective than a parent's assessment based on observations made in the family environment.

Keywords: school maladaptation; elementary school student; adaptation difficulties; behavior of schoolchildren; behavioral disorders; adaptation disorders; expert assessment.

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Прогностическая значимость дифференциальной оценки школьной дезадаптации учащихся с позиций родителя и педагога

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На основе данных сплошного социально-психологического и медикопсихологического исследования школьной дезадаптации и факторов индивидуального риска ее развития, проведенного среди школьников 2-х классов (857 чел.), были оценены различия в прогностической значимости данных опроса родителей и педагогов 12-ти средних общеобразовательных школ г. Нижнего Новгорода. На основе полученных от педагогов и родителей учащихся начальной школы данных проведена оценка факторных нагрузок. Проведенные корреляционный и факторный анализы полученных данных подтвердили выдвинутое предположение о различной предиктивной значимости данных опроса педагогов и родителей как в целом, так и по отдельным факторам развития признаков психических нарушений в состоянии и поведении младшего школьника. При этом средняя ошибка предиктивности среди учителей выше, что также указывает на более высокую прогностическую значимость оценок родителей в сравнении с учителями. Этот вывод во многом противоречит теории о том, что оценка ребенка педагогом в учебной среде является более объективной по сравнению с оценкой родителя на основе наблюдения в семейной среде.

Ключевые слова: школьная дезадаптация; учащийся младших классов; трудности адаптации; поведение школьника; нарушения поведения; нарушения адаптации; экспертная оценка.

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Introduction

The problem of school maladaptation is a classic problem in educational psychology, but it is largely interscientific in nature — it is studied in pedagogy, personality psychology, social and pedagogical psychology, psychophysiology. [1; 8; 14; 24].

When considering school maladaptation, we were based on the system and activity approach, the doctrine of patterns and motive forces of a child's mental development (L.S. Vygotsky, A.V. Zaporozhets, A.N. Leontiev, B.F. Lomov, S.L. Rubinstein, D.B. Elkonin, etc.). Additionally, we took into account the provisions of the psychoanalytical approach (S. Freud, E. Fromm, C.G. Jung) that studies the internal mechanisms of maladaptation. We reviewed the socio-psychological approach that studies the violations of a personality and interaction with society as a stage of personality development in the process of its socialization (E. Erikson, E. Berne) and the basic provisions of the activity approach in psychology and pedagogy (P.Ya. Galperin, V.V. Davydov, A.N. Leontiev, etc.). We kept in mind the clinical and psychological approach, devoted to the study of human adaptation disorders and the manifestations of the maladaptive syndrome (V.V. Kogan, N.V. Vostroknutov, E.L. Grigorenko, Wolraich M.L., etc.) and the psychological and pedagogical approach (H. Selye, L.S. Vygotsky, E. A. Yamburg, Ja. Korczak, etc.) which investigates the psychological foundations of students' adaptation to their educational environment.

School maladaptation is "a systemic formation affecting a child's development at the level of the cognitive, regulatory and communicative spheres" [7, p. 4]. The success of school adaptation has a significant impact on the emotional and general psychological state of children [4; 19], on

their educational behavior [11; 18], attitude towards school and learning motivation [9; 27], personal and educational self-esteem [22], the overall level of academic success [10; 27], the general level of psychological health [2; 13; 20; 21]. Maladaptation of different severity is the object of research not only for psychologists, but also for doctors of various specializations [2; 3; 15; 16].

The first two years of a child's schooling are the most important for the development of school adaptation [12]. According to classical concepts of educational adaptation dynamics, during the first year of schooling it goes through the main stages of its development approximate and adaptive. As a result of the interaction of the psychophysiological, personal and social skills of the child himself with the learning conditions during this time, one form of educational adaptation or another is established [12]. But it is important to emphasize that an evaluative approach to the results of material assimilation and the demonstration of learning skills by a child in a modern general education school starts only from the second year of study. Therefore, it is important to assess school adaptation, as well as to identify the signs of school maladaptation, not earlier than at the 2nd grade level. It is usually during this period that school maladaptation, if already formed, manifests itself to the fullest extent, but at the same time in its initial, most easily correctable form [3; 26].

The immaturity of the child's self-consciousness and self-reflection is a rather big problem for the psychological assessment of a child's behavior and condition as the indicators of school adaptation disorders at this age. Classical behavioral and condition assessment tests are not appropriate for a child as a respondent, since the answers and the categorization of their assessment are still very

difficult for children to comprehend. A child of primary school age is not yet capable of a systematic analysis and presentation of his feelings for describing his condition and evaluating his behavior. This fact forces the psychologist to resort to an expert assessment of the child's behavior usually by his parents and school teachers. An expert assessment in psychology is a conclusion or opinion given by a person or a group of persons endowed with expert knowledge. In this case, experts act as sources of information based on their professional, scientific and practical experience. Both parents and teachers observe the child's behavior for a long period of time and can assess it more competently than a psychologist or the child themself.

A preliminary analysis of targeted interviews with school and other psychologists that assess the mental parameters of students showed that they consider expert assessments of teachers to be more competent and objective in terms of identifying the signs of school maladaptation. Many psychologists believe that school teachers can assess a child's behavior in the context of the behavior of other children in the class (which is most often more than 20 people) based on many years of experience of working with children of a similar age and in similar conditions [4: 28]. So, as experts, teachers interact with the more variable and less dynamic school class system in comparison to a family system, which often has only 1-2 children, in the majority of cases of different ages. Some psychologists, however, tended to believe that parents may be considered experts in assessing a child's behavior and condition, as they view them in a long-term perspective and observe them in a more focused manner.

In terms of screening for school maladaptation disorders, it is important for us to know in which questions do parents and teachers most reliably assess certain forms and types of disorders in children. Therefore, the purpose of this study was to assess the difference in the predictive value of the expert sur-

vey data obtained from parents and teachers based on the data of a continuous psychological examination of younger schoolchildren in order to identify the individual risk factors of mental and behavioral disorders. As a hypothesis, the study tested the assumption that the assessments of schoolchildren's maladaptation from parent and teacher perspectives have a different predictive value.

Materials, Methods, Basis and Research program

The research was based on the results of an expert survey of teachers and parents of 2nd grade schoolchildren (2018—2020), which assessed the presence and severity of behavioral and mental disorders in primary school students. The study included 857 second grade students (505 girls and 352 boys) from 12 general education schools of Nizhny Novgorod, observed and examined according to the principle of informed consent within the period of June 2018 to January 2020.

Within six months, the studied sample of primary school students revealed signs of school maladaptation, assessed by both parents and teachers. Children with revealed medium and high levels of school maladaptation were additionally examined by psychiatrists on the base of the Privolzhsky Research Medical University for identifying the clinical parameters of maladaptation and assessing its nosological significance. The detection of the severity of school maladaptation and its indicators was carried out by the team of doctors consisting of a psychiatrist, a neuropsychologist and a child psychologist, it lasted from 60 to 90 minutes and included a survey of parents, the examination and neuropsychological testing of the child.

We used socio-psychological, psychodiagnostic and clinical research methods during the course of our work. The employed psycho-diagnostic research methods are recognized to be specific in relation to signs of school maladaptation [1, 2]: the sociodemographic questionnaire for parents, the Vanderbilt Assessment Test (Vanderbilt Assessment Scales, VADRS, 1998) in the adaptation of M.L. Wohlraich, — forms for parents and teachers [25], the method of early prediction of school difficulties by M.M. Bezrukhih (2009) — forms for parents and teachers [5]. Neuropsychological testing of children was conducted according to the method developed in the Scientific and Therapeutic Center of Prophylaxis and Treatment of Psychoneurological Disabilities by Skvortsov I.A., Adashinskaya G.A., Nefedova I.V. [17]. The psychiatric examination of the child was carried out using a clinical and anamnestic method and a number of clinical recommendations approved by the Ministry of Health for various nosological categories, in the presence of one of the child's parents (or persons officially replacing them), after this parent had signed an official informed consent for the examination. Before the examination, the psychiatrist was provided with the screening examination data of the child from the position of the teacher for the neutralization of the parent's influence on the doctor as an expert while conducting the survey during the child's testing.

For a reliable assessment of the data obtained, we also applied methods of statistical analysis, the method of computer visualization of the data using the "Statsoft Statistica 10.0" statistical software package.

The comparison of the predictive value of the questionnaire data of parents and teachers was carried out in three stages. At the first stage, a descriptive analysis of the obtained data was carried out with the calculation of the general level and the level of individual indicators of school maladaptation for all schoolchildren of the study group. The measures of the central tendency and scattering were determined, the Lilliefors and Shapiro-Wilk criteria was used to assess the normality of the statistical distribution of the studied signs. Further application of statistical methods was determined by the nature of sign distribution. At the second stage, a statistical analysis of the differences in the calculated indicator of school maladaptation was carried out according to parents' and teachers' data in subgroups of children with and without identified school maladaptation using the variance analysis (ANOVA) and Wilcoxon T-test. The third stage consisted of assessing the predictive value of the school maladaptation level, as well as its individual parameters. Statistically, the third stage was implemented through nonparametric correlation. The measure of the association between the variables was evaluated through the level of Spearman's rank correlation coefficient, calculated at p<0.05 and evaluated on the Chaddock scale, taking into account the sample size (N=857): from 0.1 to 0.3 — as slight; from 0.3 to 0.5 — as moderate; from 0.5 to 0.7 — as noticeable: from 0.7 to 1 — as severe.

Study results

The results of the retrospective cohort study of the approbation and identification of the predictive value of assessing the level of school maladaptation by teachers and parents based on the statistical link of the calculated risk indicator for the development of school maladaptation and its real detectability in the study group of students, allowed us to reveal the following peculiarities (Tab. 1).

According to the data of Table 1, we can see that the signs of severe visible school maladaptation are much more often noted by teachers than by parents, slight school maladaptation disorders — often almost equally by both experts. Signs of hyperactivity, impulsiveness and deviant behavior of primary school children are evaluated almost equally by both teachers and parents. Both the slight and severe decreases in educational motivation are much more often noted by teachers than by parents. Both slight and severe reactions of opposition in the behavior of children are much more often noted by parents (3.8 and 2.2 times respectively). Severe attention disorders are almost equally often noted by both parents and teachers. But slight signs of attention disorders in students are much more often noted by teachers (3.3 times). Slight signs of depressive behavior in children is almost equally often noted by both teachers and parents; severe disorders are more often noted by parents in a family environment (1.5 times).

Average assessments of the severity of school maladaptation and related behavioral disorders in younger schoolchildren, given by their parents and teachers, also differ (Tab. 2).

Table 1
Comparative Results of Assessing the Severity of School Maladaptation
in Second Grade Students (N=857) and the Individual Factors
of its Behavioral Manifestation

Parents' A			sments	Teachers' Assessments			
Parameter to be Diagnosed	N of children without disor- ders, %	Nof children with mild disorders, %	N of children with severe disorders, %	N of children without disor- ders, %	N Nof children wirh mild disor- ders, %	N of children with severe disorders, %	
School Maladaptation	76,2	16,0	7,8	69,8	17,6	12,6	
Related Behavioral Disorders Including:							
— educational motivation decrease	84,8	12,5	2,7	44,5	41,7	13,9	
— attention deficit disorder	42,4	42,4	15,3	58,3	27,8	13,9	
— behavioral hyperactivity	90,8	5,4	3,9	92,4	3,3	4,3	
— behavioral impulsiveness	92,8	4,3	2,9	94,4	3,4	2,2	
— reactions of opposition	79,2	15,1	5,7	93,5	4,0	2,6	
— deviant behavior	73,5	17,7	8,8	79,9	10,7	9,3	
— anxiety-depressive manifestations	73,9	16,9	9,2	77,9	16,1	6,0	

Table 2
Comparative Results of Assessing the Average Representation of School
Maladaptation Signs in Second Grade Students (N=857) and the Individual Factors
of its Behavioral Manifestation

	Parents' assessments			chers'	Reliability of Differ- ences between the		
Parameter to be Diagnosed	average score	standard deviation	average score	standard deviation	Assessments of Parents and Teachers (Wilcoxon T-test)		
School Maladaptation	11,28	4,31	12,85	3,63	7,92**		
Related Behavioral Disorders Including:							
— educational motivation decrease	1,21	1,06	2,54	1,77	17,36**		
— attention deficit disorder	8,44	4,99	6,27	6,04	10,80**		
— behavioral hyperactivity	2,53	2,78	1,68	2,83	8,47**		
— behavioral impulsiveness	2,63	2,37	1,52	2,41	12,35**		
— reactions of opposition	4,56	4,24	1,84	3,70	17,40**		
— deviant behavior	1,31	2,20	0,97	2,31	7,70**		
— anxiety-depressive manifestations	4,13	3,63	2,98	3,46	8,75**		

Notes: differences are significant when *p≤0,05; ** p≤0,01.

The most significant disproportions between the assessments of parents and teachers were revealed during a comparative analysis of the average representation of school maladaptation signs among the entire sample of second grade students. In particular, the average representation of children's attention deficit (1.34 times), hyperactivity (1.50 times), impulsiveness (1.73 times), reactions of opposition (2.48 times) deviant behavior (1.35 times) and anxious-depressive manifestations (1.39 times) were noted higher in parents' assessments (difference for each sign is given in parentheses) than in teachers' assessments. At the same time, the level of average representation of the school maladaptation signs in the entire sample of secondgraders in general is evaluated similarly by both teachers and parents. The only factor more critically assessed by teachers than by parents is the decrease in educational motivation (2.10 times).

An additional examination of 7.8% (67 people) of students who, according to the assessments of teachers or parents, had a high risk of school maladaptation

development (medium and high levels according to the screening test), by a psychologist and a child psychiatrist allowed us to establish a general indicator of the predictiveness of screening estimates for these parameters (Fig. 1).

According to the screening test results of the predictiveness evaluation and examination of students, we can see that out of 67 schoolchildren whose condition and behavior were additionally assessed by a psychologist and a psychiatrist, 79.1% of children (53 people) showed signs of mild (61.2%, 41 people) and severe (17.9%, 12 people) maladaptation. In 20.9% of children (14 people) no clinical signs of maladaptation were detected, which means their condition was assessed as having a borderline character.

A statistical analysis of the differences in the calculated indicator of the individual risk level of school maladaptation according to parents and teachers in the subgroups of children with identified school maladaptation and with no signs of maladaptation (according to in-depth medicopsychological examination) using variance analysis (ANOVA) allowed to determine



Figure 1. The overall results of the predictive value assessment study of school maladaptation in second grade students (N=857)

measures of central tendency and scattering of the obtained level indicators. The degree of correspondence between the expert assessment of school maladaptation indicators by parents and teachers of the child and the level of their severity was evaluated.

Significant differences in the average assessments of school maladaptation risk factors development in children by their parents and teachers pushed us to conduct an in-depth study of the differences among the children with various degrees of clinically confirmed school maladaptation as a separate clinical diagnosis (Fig. 2—3).

The smallest difference between the expert assessments of parents and teachers was found in the group of children with a low level of school maladaptation (its level according to parents was 14.7% higher than that of teachers). In the groups of children with verified mild and severe school maladaptation, these differences were distinguished as 24.7% and 21.2%, respectively.

As shown in Figures 2 and 3, the average values of the school maladaptation level assessments among the surveyed schoolchildren, according to the clinical diagnosis established later, differed significantly: the average value of the school maladaptation risk assessments is higher according to the parents' survey data. Which means, the assessments of school maladaptation severity given by parents are closer to the real conditions of the children established later during the medico-psychological examination.

At the same time, the average predictive error of these assessments among teachers as experts is generally higher, which also indicates a higher predictive value of the assessments of children's behavior and condition among parents as experts compared to teachers. Especially high values of errors were revealed when parents and especially teachers assessed the level of severe (heavy) school maladaptation in children, which suggests that

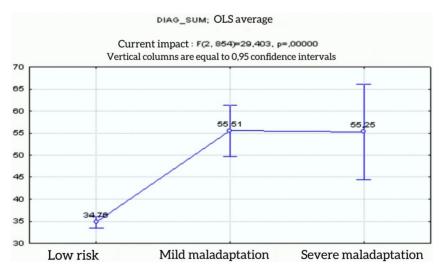


Figure 2. Analysis of the Surveyed Second Grade Student Groups (N=857) by the Magnitude of School Maladaptation Risk Evaluation Severity According to the Parents' Survey (Y axis), the Numbers Indicate the Average Values of Scores in Groups

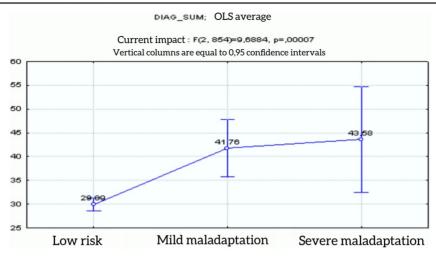


Figure 3. Analysis of the Surveyed Second Grade Student Groups (N=857) by the Magnitude of School Maladaptation Risk Evaluation Severity According to the Teachers' Survey (Y axis), the Numbers Indicate the Average Values of Scores in Groups

the severity of school maladaptation as the child's condition was underestimated by both parents and teachers. The extremely high variation in teachers' assessments of school maladaptation risks among children with identified maladaptation is a particular cause for concern. The error in this indicator was so large that it overlapped the confidence interval of the indicator of a low school maladaptation level. The fact that the risk of school maladaptation in the group of children with revealed severe (heavy) maladaptation was estimated by teachers on average even lower than among children with mild maladaptation is worthy of in-depth analysis. A possible reason for this could be, in particular, that a number of teachers underestimated the degree of school maladaptation in their students.

At the third stage, the statistical relationship between the data obtained from parents and teachers was evaluated consistently for individual behavioral indicators of student school maladaptation. Statistically, the third stage was realized through the

calculating of nonparametric correlations using Spearman's Rank Correlation Coefficient (Tab. 3).

General assessments of the school maladaptation individual risk level in second-graders and its individual factors given by parents and teachers showed moderate correlation on the average. Minimal correlation was revealed in the assessments of school maladaptation risk (r=0.17), which indicates the average significance of the statistical relationship and a high heterogeneity in the answers of parents and teachers in regard to the same children. This revealed pattern is also consistent with the data of the variance analysis presented above. All the other factors showed a high level of mutual consistency. A maximum (very high) correlation was found between the assessments of the attention deficit (r=0.41) and deviant behavior (r=0.43) levels.

Results and Discussion

When using screening tests, it is important to remember that their results alone do

Table 3

Matrix of Correlation Between the Level of School Maladaptation and its Separate Indicators in Second Grade Students (N=857) According to their Parents and Teachers (Spearman's Rank Correlation Coefficient, p<0,05)

Parents' Assessments			Related Behavioral Disorders Including:						ling:
Teacher	's' Assessments	School maladaptation level	educational motivation decrease	attention deficit disorder	behavioral hyperactivity	behavioral impulsiveness	reactions of opposition	deviant behavior	anxiety- depressive symptoms
School N	Maladaptation Level	0,17	0,15	0,23	0,17	0,15	0,14	0,12	0,08
= ::	educational motivation decrease	0,28	0,27	0,28	0,18	0,16	0,20	0,20	0,20
iora	attention deficit disorder	0,23	0,24	0,41	0,29	0,28	0,28	0,29	0,20
behavioral s including:	behavioral hyperactivity	0,15	0,11	0,32	0,33	0,37	0,30	0,30	0,14
s in	behavioral impulsiveness	0,10	0,08	0,28	0,30	0,38	0,27	0,28	0,09
ted	reactions of opposition	0,16	0,16	0,34	0,34	0,37	0,38	0,36	0,20
Related behavioral disorders including:	deviant behavior	0,13	0,16	0,34	0,37	0,36	0,38	0,43	0,22
д р	anxiety-depressive symptoms	0,18	0,18	0,25	0,17	0,11	0,19	0,19	0,30

Notes: 0,00 — low, 0,00 — medium, 0,00 — high level of parameter correlation.

not reveal deviations in the child's behavior or condition; they assess the risk level of its detection. When assessing such a risk as "medium" or "high", it is necessary to carry out an additional examination of the child by a psychologist or a doctor. The combination of individual indicators of such a risk on separate scales of screening techniques will allow for the assessment of the primary care needed and the specialization of the practitioner.

In this regard we insist that it is important to choose the right expert assessment subjects for targeting screening techniques, which can undoubtedly serve as a factor improving the accuracy of the results obtained.

Our research allowed us to establish the difference in the accuracy and objectivity of the perceptions of parents and school teachers in terms of behavior and disorder assessments of second grade students on the example of school maladaptation and its individual manifestations.

It is noteworthy that the initial hypothesis about a more accurate perception of these factors by teachers as experts in relation to students was confirmed only in regard to two factors — school maladaptation and educational motivation of primary school children. These factors are most closely related to learning behavior and academic success [8; 10; 25], so they are more noticeable and important from a school educator's perspective. The pattern of parents' more frequent assessments of children's educational motivation and school maladaptation as having high levels is guite illustrative. In other words, parents are more likely to notice the manifestations of these disorders when they become guite severe, and before that their vigilance in the assessing of behavioral disorders in children is weakened.

According to the results of our study, behavioral impulsiveness, reactions of opposition (disobedience), and manifestations of deviant behavior (especially those of a borderline nature) appeared to be much more visible for parents, as those, who can observe the child's behavior in a variety of life situations and environments more diversely and richly in external factors than the school ones. Or it may be due to quite a common situation, when children consider the family environment to be less directive and more comfortable and behave more naturally and relaxed.

According to teachers, these same children are more categorically assessed as having weak and strong manifestations in regard to such factors as behavioral hyperactivity and impulsiveness. And in assessments of reactions of opposition, anxiety-depressive manifestations and attention deficit, teachers are less sensitive in identifying categories of children with low levels of disorders, being more inclined to identify groups with high levels of them. In any case, these patterns need to be better analyzed in terms of the sociopsychological and environmental factors determining them.

The level of individual school maladaptation risk development in primary school children included in the study, as assessed by parents and teachers, also differed significantly. In the groups of children with verified mild and severe maladaptation, the differences in risk assessment by parents were significantly higher than in the low-risk group (24.7% and 21.2% versus 14.7% respectively). According to the severity of school maladaptation, the risk was assessed by parents as 13.9% lower on average.

A high average error among teachers' assessments indicates a relatively low predictive value of teachers' assessments in comparison to those of parents. Thus, the risk in the group of children with severe maladaptation was assessed by teachers on average as even lower than among children with a mild level of school maladaptation. The

low correlation of the risk assessments of the severity of school maladaptation given by teachers and parents confirms the data on the higher reliability of parents' assessments on this issue in general.

As our study has shown, teachers can assess the condition of schoolchildren quite objectively, but less predictively compared to parents. At the same time, they primarily assess the student in terms of their academic success and compliance with the rules of behavior at school, and often do not have any information about the personal characteristics of the child and their behavior in other circumstances.

The results of this study as a whole lead us to rely, in the issue of expert assessments, on the complex survey data of both the parents and teachers of schoolchildren, as well as on the need to develop in parents and teachers the so called "mental alertness" or "psychological sensitivity" in recognizing of behavioral deviations of various kinds and the signs of psychological disorders in primary school children. In this case, for parents we can talk about the development of skills for the recognizing of school maladaptation signs and a decrease in educational motivation, for teachers — the recognizing of clinical pathologies (anxiety-depressive disorders, attention deficit disorder) and personality-significant conditions, as well as their behavioral manifestations (reactions of opposition and attention disorders as a response to difficult life situations, conflict or resource scarcity).

Conclusions

The individual risk of development of various behavioral disorders in primary school children can be considered as a criterion in assessing the risk of school maladaptation development. A quali-

tative and quantitative assessment of these risk factors will allow specialists to choose the appropriate treatment or correction methods for school maladaptation signs at early stages, which is important in the face of limited resources and capacities of school medicine and school psychologists. This retrospective cohort study assessed the individual risk of school maladaptation development in second grade schoolchildren according to the expert assessments of parents and teachers compared to its actual detectability. The difference in the predictive value of the expert survey of parents and teachers based on the data of a continuous psychological examination of primary school children revealed a relatively high reliability of their individual and mental risk assessments and the development of behavioral disorders.

However, according to the results of a detailed study, the greater predictive value of parents' data as experts in assessing school maladaptation and the individual factors of its manifestation in children's behavior has been statistically confirmed. Thus, we can make a general conclusion that the assessments of students' school maladaptation from parent and teacher perspectives have a different predictive value — which confirms the earlier hypothesis.

The predictive value of such screening questionnaires can be enhanced with the simultaneous use of two-way expert assessment — data provided by both parents and school teachers. When assessing the risk of school maladaptation development in primary school, it is recommended to

organize a request for assessment data from both teachers (class teachers) and parents, in order to make the assessment complete and reliable.

However, these and similar screening questionnaires alone should not be used to make a diagnosis or a reliable predictive assessment of children's behavior and condition because of the insufficiently high overall predictive validity of such tools. A practicing psychologist should consider additional survey information and personal observations of a child's behavior during examination. Nevertheless, screening questionnaires may serve as a convenient tool for assessing the adverse conditions and behavioral disorders development risks in schoolchildren at a large scale. The data obtained from the guestionnaires may help to predict the number of children requiring additional psychological examination.

Prospects for further research on this topic can be aimed at the development of screening techniques with a higher level of predictive value and combined techniques that will take into account the assessments of the child's behavior and condition both by teachers and parents, based on their predictive significance.

The willingness of teachers and parents to monitor violations in children's condition and behavior plays an important role in the general system of mental health disorder prevention [1; 4; 6; 23; 28]. Therefore, the systematic improvement of general psychological and clinical-psychological competence of all subjects of children's education and upbringing is of exceptional importance.

References

1. Arzikulov A.Sh. Diagnostika rannikh priznakov narusheniya shkol'noi adaptatsii u detei shkol'nogo vozrasta v usloviyakh obshcheobrazovatel'noi shkoly [Diagnosis of early signs of school adaptation disorders in school-age children in a comprehensive

school]. Ekonomika i sotsium = Economy and Society, 2022, no. 4—1(95), pp. 220—223. (In Russ.).

2. Artyukhova T.Yu. Adaptatsionnye vozmozhnosti kak pokazatel' psikhologicheskogo zdorov'ya uchastnikov obrazovatel'nogo protsessa [Adaptive capabilities as an indicator of the psychological health

- of participants in the educational process]. *Sibirskii psikhologicheskii zhurnal = Siberian Psychological Journal*, 2005, no. 22, pp. 49—53. (In Russ.).
- 3. Balandina O.V., Bozhkova E.D., Dvoryaninova V.V., Katunova V.V., Konovalov A.A. Korrektsiya shkol'noi dezadaptatsii na osnove mezhdistsiplinarnogo podkhoda [Correction of school maladaptation based on an interdisciplinary approach]. *Meditsinskii al'manakh = Medical Almanac*, 2019, no. 2(59), pp. 24—29. (In Russ.).
- 4. Bezrukikh M.M. Zdorov'esberegayushchaya shkola [Health-saving school]. Moscow: Moskovskii psikhologo-sotsial'nyi institut, 2004. 240 p. (In Russ.).
- 5. Bezrukikh M.M. Trudnosti obucheniya v nachal'noi shkole: Prichiny, diagnostika, kompleksnaya pomoshch' [Learning difficulties in primary school: Causes, diagnosis, comprehensive assistance]. Moscow: Eksmo, 2016. 277 p. (In Russ.).
- 6. Bezrukikh M.M. Shkol'nye i semeinye faktory riska, ikh vliyanie na fizicheskoe i psikhicheskoe zdorov'e detei [School and family risk factors, their impact on the physical and mental health of children]. Vestnik prakticheskoi psikhologii obrazovaniya = Bulletin of Practical Psychology of Education, 2011. Vol. 8, no. 1, pp. 16—21. (In Russ.).
- 7. Borisova E.Ju. Sistemnyj podhod k profilaktike shkol'noj dezadaptacii: diss. ... kand. psihol. nauk [Systematic approach to the prevention of school maladjustment. PhD (Psychology) Diss.]. Kazan', 2000. 201 p. (In Russ.).
- 8. Gordeeva T.O., Sychev O.A., Lunkina M.V. Shkol'noe blagopoluchie mladshikh shkol'nikov: motivatsionnye i obrazovatel'nye prediktory [School well-being of junior schoolchildren: motivational and educational predictors]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2019. Vol. 24, no. 3, pp. 32—42. DOI:10.17759/pse.2019240303 (In Russ.).
- 9. Grigor'eva M.V., Shamionov R.M., Grinina E.S., Sozonnik A.V., Krasnova S.V. Komponentnaya struktura akademicheskoi adaptatsii v mladshem shkol'nom vozraste [Component structure of academic adaptation in primary school age]. *Perspektivy nauki i obrazovaniya = Prospects for Science and Education*, 2021, no. 4(52), pp. 247—262. (In Russ.).
- 10. Izotova E.G. Vzaimosvyaz' sotsial'nopsikhologicheskoi adaptatsii i uspevaemosti v mladshem shkol'nom vozraste [The relationship between socio-psychological adaptation and academic performance in primary school age]. Problemy sovremennogo pedagogicheskogo obrazovaniya = Problems of Modern Pedagogical Education, 2021, no. 71—2, pp. 428—431. (In Russ.).
- 11. Il'chenko K.A. Narushenie norm povedeniya kak proyavlenie shkol'noi dezadaptatsii [Violation of behavioral norms as a manifestation of school maladjustment]. *Pedagogika: istoriya, perspektivy* =

- Pedagogy: History, Perspective, 2021, no. 4, pp. 13—20. DOI:10.17748/2686-9969-2021-4-4-13-20 (In Russ.).
- 12. Katunova V.V. Praktiko-orientirovannyi podkhod k tipologii shkol'noi dizadaptatsii [Practice-oriented approach to the typology of school maladjustment]. Klinicheskaya i spetsial'naya psikhologiya = Clinical and Special Psychology, 2019. Vol. 8, no. 3, pp. 19—39. DOI:10.17759/psyclin.2019080302 (In Russ.).
- 13. Katunova V.V., Balandina O.V., Bozhkova E.D., Dvoryaninova V.V. Itogi skriningovogo etapa proekta po vyyavleniyu sindroma shkol'noi dezadaptatsii «Zdorovoe budushchee» [Results of the screening stage of the project "Healthy Future" to identify school maladjustment syndrome]. Sovremennye problemy zdravookhraneniya i meditsinskoi statistiki = Modern Problems of Public Health and Medical Statistics, 2019, no. S5, pp. 81—82. (In Russ.).
- 14. Krasnikova T.V. Tekhnologiya psikhologopedagogicheskogo soprovozhdeniya protsessa adaptatsii mladshikh shkol'nikov [Technology of psychological and pedagogical support for the adaptation process of younger schoolchildren]. Problemy sovremennogo pedagogicheskogo obrazovaniya = Problems of Modern Pedagogical Education, 2018, no. 58—1, pp. 126—129. (In Russ.).
- 15. Novikova G.R. Printsipy organizatsii medikosotsial'noi pomoshchi detyam mladshego shkol'nogo vozrasta s pogranichnymi psikhicheskimi rasstroistvami [Principles of organizing medical and social assistance to children of primary school age with borderline mental disorders]. *Rossiiskii psikhiatricheskii zhurnal = Russian Psychiatric Journal*, 2007, no. 1, pp. 54—60. (In Russ.).
- 16. Pal'chik A.B., Pashkov A.Yu., Petrova N.A., Pervunina T.M., Savel'eva N.A. Legkaya nevrologicheskaya disfunktsiya kak vozmozhnyi marker kognitivnykh i povedencheskikh rasstroistv u detei [Mild neurological dysfunction as a possible marker of cognitive and behavioral disorders in children]. Spetsial'noe obrazovanie = Special Education, 2021, no. 1(61), pp. 167—179. (In Russ.).
- 17. Skvorcov I.A., Adashinskaja G.A., Nefedova I.V. Modificirovannaja metodika nejropsihologicheskoj diagnostiki i korrekcii pri narushenijah razvitija vysshih psihicheskih funkcij u detej [Modified method of neuropsychological diagnosis and correction for developmental disorders of higher mental functions in children]. Moscow: Trivola, 2000. 50 p. (In Russ.).
- 18. Sidorov N.R. Psikhologiya deviantnogo povedeniya [Psychology of deviant behavior] [Elektronnyi resurs]. *Vestnik prakticheskoi psikhologii obrazovaniya = Bulletin of Practical Psychology of Education*, 2008. Vol. 5, no. 2, pp. 47—51. URL: https://psyjournals.

- ru/journals/bppe/archive/2008_n2/28627 (Accessed 12.05.2023). (In Russ.).
- 19. Slobodskaya E.R., Gudman R., Ryabichenko T.I. Psikhosotsial'nye faktory emotsional'nykh problem i otklonenii v povedenii podrostkov [Psychosocial factors of emotional problems and behavioral deviations in adolescents]. *Psikhiatriya = Psychiatry*, 2006, no. 2, pp. 28—36. (In Russ.).
- 20. Strigin V.M., Vdovin V.M. Pogranichnye sostoyaniya kak indikator v monitoringe psikhicheskogo zdorov'ya detei i podrostkov (obzor literatury) [Borderline states as an indicator in monitoring the mental health of children and adolescents (literature review)]. *Byulleten' meditisinskoi nauki = Bulletin of Medical Science*, 2022, no. 3(27), pp. 138—144. (In Russ.).
- 21. Khukhlaeva O.V. Formirovanie psikhologicheskogo zdorov'ya mladshikh shkol'nikov: diss. ... d-ra ped. nauk [Formation of psychological health of junior schoolchildren. PhD (Pedagogy) Diss.]. Moscow, 2001. 299 p. (In Russ.).
- 22. Tsylev V.R. O probleme psikhologicheskoi adaptatsii shkol'nikov [On the problem of psychological adaptation of schoolchildren]. Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education, 1998. Vol. 3, no. 3, pp. 31—37. (In Russ.).
- 23. Yaroshinskaya A.P., Palatkina G.V., Yankevich I.E. Deyatel'nost' pedagoga po sozdaniyu uslovii dlya adaptatsii detei mladshego shkol'nogo vozrasta k usloviyam obshcheobrazovatel'nogo uchrezhdeniya [Activities of the teacher to create conditions for the adaptation of children of primary school age to the conditions of a general education institution].

Литература

- 1. *Арзикулов А.Ш.* Диагностика ранних признаков нарушения школьной адаптации у детей школьного возраста в условиях общеобразовательной школы // Экономика и социум. 2022. № 4—1(95). С. 220—223.
- 2. *Артюхова Т.Ю.* Адаптационные возможности как показатель психологического здоровья участников образовательного процесса // Сибирский психологический журнал. 2005. № 22. С. 49—53.
- 3. Баландина О.В., Божкова Е.Д., Дворянинова В.В., Катунова В.В., Коновалов А.А. Коррекция школьной дезадаптации на основе междисциплинарного подхода // Медицинский альманах. 2019. № 2(59). С. 24—29.
- 4. *Безруких М.М.* Здоровьесберегающая школа. М.: Московский психолого-социальный институт, 2004. 240 с.
- 5. *Безруких М.М.* Трудности обучения в начальной школе: Причины, диагностика, комплексная помощь. М.: Эксмо, 2016. 277 с.
- 6. Безруких М.М. Школьные и семейные факторы риска, их влияние на физическое и психическое

- Upravlenie obrazovaniem: teoriya i praktika = Education Management: Theory and Practice, 2022, no. 2(48), pp. 221—227. (In Russ.).
- 24. Yakhudina E.N., Serbina L.F. Poznavatel'nye protsessy i lichnostnye kharakteristiki detei s raznym urovnem shkol'noi adaptatsii [Cognitive processes and personal characteristics of children with different levels of school adaptation]. Vestnik LGU im. A.S. Pushkina = Bulletin of Leningrad State University A.S. Pushkin, 2022, no. 2, pp. 43—53. (In Russ.).
- 25. Bard D.E., Wolraich M.L., Neas B., Doffing M., Beck L. The psychometric properties of the Vanderbilt attention-deficit hyperactivity disorder diagnostic parent rating scale in a community population. *Journal of developmental and behavioral pediatrics*, 2013. Vol. 34(2), pp. 72—82. DOI:10.1097/dbp.0b013e31827a3a22
- 26. Bozhkova E.D., Konovalov A.A., Katunova V.V. International experience in mental health provisison in seconadry schools. *Amazonia Investiga*, 2022. Vol. 11, no. 59, pp. 130—140. DOI:10.34069/ AI/2022.59.11.12
- 27. Lakhani P., Jain K., Chandel P. School adjustment, motivation and academic achievement among students. *International Journal of Management and Social Sciences*, 2017. Vol. 7, no. 10, pp. 333—348
- 28. Wolraich M.L., Feurer I., Hannah J.N., Baumgaertel A., Pinnock Th.Y. Obtaining systematic teacher reports of disruptive behavior disorders utilizing DSM-IV. *Journal of Abnormal Child Psychology*, 1998, no. 26, pp. 141—152. DOI:10.1023/a:1022673906401
- здоровье детей // Вестник практической психологии образования. 2011. Том 8. № 1. С. 16—21.
- 7. *Борисова Е.Ю.* Системный подход к профилактике школьной дезадаптации: дисс. ... канд. психол. наук. Казань, 2000. 201 с.
- 8. Гордеева Т.О., Сычев О.А., Лункина М.В. Школьное благополучие младших школьников: мотивационные и образовательные предикторы // Психологическая наука и образование. 2019. Том 24. № 3. С. 32—42. DOI:10.17759/pse.2019240303
- 9. Григорьева М.В., Шамионов Р.М., Гринина Е.С., Созонник А.В., Краснова С.В. Компонентная структура академической адаптации в младшем школьном возрасте // Перспективы науки и образования. 2021. № 4(52). С. 247—262.
- 10. *Изотова Е.Г.* Взаимосвязь социальнопсихологической адаптации и успеваемости в младшем школьном возрасте // Проблемы современного педагогического образования. 2021. № 71—2. С. 428—431.
- 11. *Ильченко К.А.* Нарушение норм поведения как проявление школьной дезадаптации // Педагогика:

- история, перспективы. 2021. № 4. С. 13—20. DOI:10.17748/2686-9969-2021-4-4-13-20
- 12. *Катунова В.В.* Практико-ориентированный подход к типологии школьной дезадаптации // Клиническая и специальная психология. 2019. Т. 8. № 3. С. 19—39. DOI:10.17759/psyclin.2019080302
- 13. Катунова В.В., Баландина О.В., Божкова Е.Д., Дворянинова В.В. Итоги скринингового этапа проекта по выявлению синдрома школьной дезадаптации «Здоровое будущее» // Современные проблемы здравоохранения и медицинской статистики. 2019. № S5. С. 81—82.
- 14. *Красникова Т.В.* Технология психологопедагогического сопровождения процесса адаптации младших школьников // Проблемы современного педагогического образования. 2018. № 58—1. С. 126—129.
- 15. *Новикова Г.Р.* Принципы организации медикосоциальной помощи детям младшего школьного возраста с пограничными психическими расстройствами // Российский психиатрический журнал. 2007. № 1. С. 54—60.
- 16. Пальчик А.Б., Пашков А.Ю., Петрова Н.А., Первунина Т.М., Савельева Н.А. Легкая неврологическая дисфункция как возможный маркер когнитивных и поведенческих расстройств у детей // Специальное образование. 2021. № 1(61). С. 167—179.
- 17. Скворцов И.А., Адашинская Г.А., Нефедова И.В. Модифицированная методика нейропсихологической диагностики и коррекции при нарушениях развития высших психических функций у детей. М.: Тривола, 2000. 50 с.
- 18. *Сидоров Н.Р.* Психология девиантного поведения [Электронный ресурс] // Вестник практической психологии образования. 2008. Том 5. № 2. С. 47—51. URL: https://psyjournals.ru/journals/bppe/archive/2008_n2/28627 (дата обращения: 12.05.2023).
- 19. *Слободская Е.Р., Гудман Р., Рябиченко Т.И.* Психосоциальные факторы эмоциональных проблем и отклонений в поведении подростков // Психиатрия. 2006. № 2. С. 28—36.

- 20. *Стригин В.М., Вдовин В.М.* Пограничные состояния как индикатор в мониторинге психического здоровья детей и подростков (обзор литературы) // Бюллетень медицинской науки. 2022. № 3(27). С. 138—144.
- 21. *Хухлаева О.В.* Формирование психологического здоровья младших школьников: дисс. ... д-ра пед. наук. М., 2001. 299 с.
- 22. *Цылев В.Р.* О проблеме психологической адаптации школьников // Психологическая наука и образование. 1998. Том 3. № 3. С. 31—37.
- 23. Ярошинская А.П., Палаткина Г.В., Янкевич И.Е. Деятельность педагога по созданию условий для адаптации детей младшего школьного возраста к условиям общеобразовательного учреждения // Управление образованием: теория и практика. 2022. № 2(48). С. 221—227.
- 24. *Яхудина Е.Н., Сербина Л.Ф.* Познавательные процессы и личностные характеристики детей с разным уровнем школьной адаптации // Вестник ЛГУ им. А.С. Пушкина. 2022. № 2. С. 43—53.
- 25. Bard D.E., Wolraich M.L., Neas B., Doffing M., Beck L. The psychometric properties of the Vanderbilt attention-deficit hyperactivity disorder diagnostic parent rating scale in a community population // Journal of developmental and behavioral pediatrics. 2013. Vol. 34(2). P. 72—82. DOI:10.1097/dbp.0b013e31827a3a22
- 26. Bozhkova E.D., Konovalov A.A., Katunova V.V. International experience in mental health provisison in seconadry schools // Amazonia Investiga. 2022. Vol. 11. № 59. P. 130—140. DOI:10.34069/ AI/2022.59.11.12
- 27. Lakhani P., Jain K., Chandel P. School adjustment, motivation and academic achievement among students // International Journal of Management and Social Sciences. 2017. Vol. 7. № 10. P. 333—348.
- 28. Wolraich M.L., Feurer I., Hannah J.N., Baumgaertel A., Pinnock Th.Y. Obtaining systematic teacher reports of disruptive behavior disorders utilizing DSM-IV // Journal of Abnormal Child Psychology. 1998. № 26. P. 141—152. DOI:10.1023/a:1022673906401

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Extra Section | Вне тематики

DEVELOPMENTAL PSYCHOLOGY | ПСИХОЛОГИЯ РАЗВИТИЯ

Sociocultural Adaptation Strategies as Psychological Well-Being Predictors among Children of Foreign Citizens in Russia

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The aim of the study is to examine how the psychological well-being of children of foreign citizens is determined by their focusing on preserving the culture of their country of origin and accepting Russian culture, as well as by the level of expression of their national (Russian) and ethnic identity. Methods: Multidimensional Students' Life Satisfaction Scale by E.S. Huebner, adapted by O.A. Sychev et al., Acculturation Scale for Children and Adolescents by O.E. Khukhlaev and M.Y. Chibisova, Measure of Youth's Ethnic and National Identity, MYENI adapted by O.E. Khukhlaev, sociometric testing. The sample consisted of 669 children of foreign citizens, immigrants from the countries of Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Ukraine, Armenia, Azerbaijan, aged 7 to 17 years. As a result of regression analysis, significant positive correlations between sociocultural adaptation and psychological well-being indicators were obtained in the sample of primary school, middle school and high school students. It was revealed that among primary and middle school students, integration strategy orientation serves as predictor of psychological well-being, while among high school students, such a predictor is assimilative strategy.

Keywords: strategies of sociocultural adaptation; psychological well-being; life satisfaction; children of foreign citizens; migrant children.

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Стратегии социокультурной адаптации как предикторы психологического благополучия детей иностранных граждан в России

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Цель исследования — изучение характера детерминации психологического благополучия детей иностранных граждан ориентацией на сохранение культуры страны исхода и на включенность в российскую культуру, а также выраженностью гражданской (российской) и этнической идентичности. Использовались методики: Mногомерная шкала удовлетворенности жизнью школьников (Multidimensional Students' Life Satisfaction Scale, MSLSS) Е.С. Хюбнер, адаптированная О.А. Сычевым с коллегами, Опросник аккультурации для детей и подростков О.Е. Хухлаева, М.Ю. Чибисовой, Методика измерения этнической и национальной идентичности детей и подростков (Measure of Youth's Ethnic and National Identity, MYENI) в адаптации

О.Е. Хухлаева, социометрическая процедура. Выборку составили 669 детей иностранных граждан — выходцев из стран Таджикистана, Узбекистана, Кыргызстана, Казахстана, Украины, Армении, Азербайджана в возрасте от 7 до 17 лет. В результате регрессионного анализа в выборке школьников младших, средних и старших классов получены значимые положительные взаимосвязи между показателями социокультурной адаптации и показателями психологического благополучия. Выявлено, что у учащихся начальной и средней школы предиктором психологического благополучия выступает ориентация на стратегию интеграции, тогда как у старшеклассников таким предиктором является ассимилятивная стратегия.

Ключевые слова: стратегии социокультурной адаптации; психологическое благополучие; удовлетворенность жизнью; дети иностранных граждан; дети-мигранты.

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Introduction

According to statistics from the official website of the Russian Ministry of Internal Affairs, the number of migrants of other ethnicities in the Russian Federation is growing every year [9], which draws increasing attention to the problem of their adaptation and successful entry into Russian society. The adaptation of migrant children is of particular importance. Firstly, in the context of population decline, migrant children may provide the opportunity to acquire valuable young human capital of a considerable size for the Russian state. Secondly, children of migrants constitute a separate category of foreign citizens: through them, their parents also adapt more successfully to the host community [5], thereby the children of migrants can act as intermediaries or guides between two cultures. Educational institutions face the need to provide psychological support for the sociocultural adaptation

of children of foreign citizens [3], and researchers are faced with the task of studying the content, mechanisms, and criteria for its success.

In the course of sociocultural adaptation, migrants typically answer two important questions: to what extent to preserve the culture of the country of origin and to what extent to master the culture of the host community [15]. Depending on the answers to these questions, according to J. Berry, the migrant makes a choice in favor of one of four possible acculturation strategies: assimilation, separation, marginalization or integration.

Assimilation means that the migrant assimilates the values, norms, and traditions of a new culture, identifying with the host society; separation, on the contrary, implies that he tries to preserve his own culture and cultural identity; marginalization means that the migrant does not seek to identify himself with either his culture or the culture of the host society. And finally, integration, recognized by most researchers as the most successful strategy of sociocultural adaptation, means that a migrant strives to integrate into a new culture, while simultaneously trying to preserve both the culture of his origin and his cultural (ethnic) identity [15].

Many different markers (indicators) of the adaptation/maladaptation of migrant children at the personal and group level have been identified: ideas about the future, a lack of life prospects in a new place and the desire to return to their homeland, the readiness for interethnic interaction, positive personal and social identity, the mastery of social skills, a favorable psychoemotional state and many more others [6].

A key indicator of the successful adaptation of a migrant child, as many researchers emphasize, is the psychological well-being and satisfaction with various aspects of one's life [4]. Life satisfaction is considered as a multifaceted phenomenon, which is defined as the subjective assessment of the quality of life, as a characteristic of the inner world, as a synonym for happiness and psychological well-being [17]. Numerous empirical studies have shown that a high level of life satisfaction is closely related to an individual's adaptive coping behavior [10; 19; 20]. For migrant children, the satisfaction with various aspects of life as an integral characteristic of their internal state acts, on the one hand, as a determining criterion for the success of adaptation, and on the other, is a powerful resource [2; 12].

The predictors of the psychological well-being of migrant children have been studied intensively [13]. These include the psychological characteristics of the children themselves (acculturation strategies, expression of ethnic identity), the composition of the ethnic contact environment, the characteristics of parental upbringing, the social capital of the parental family, etc. [13; 14; 24; 27].

At the same time, the determinants of the psychological well-being of mi-

grant children have not been studied in the Russian context. In this research, we pose the following research question: in what way does the orientation towards preserving the norms of one's own and a new culture, as well as the salience of national (Russian) and ethnic identity, determine the psychological well-being of migrant students?

The purpose of the study is to study the pattern of the determination of the psychological well-being of children of foreign citizens by their orientation towards preserving the culture of their country of origin and accepting Russian culture, as well as the salience of national (Russian) and ethnic identity.

Study sample. The study involved 669 children of foreign citizens. Of these, 328 (55% boys) were primary school children, 220 (58.6% boys) were middle school students and 121 (54.5% boys) were high school students. We included children receiving primary general education and studying from grades 1 to 4 as primary school students; the average age was 9.3 years. Secondary school students were on the level of basic general education and studying from grades 5 to 9; the average age was 12.24 years. The average age of high school students receiving secondary general education and studying in grades 10—11 was 15.97 years. The majority (58.8%) of children were from Central Asian countries (Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan), 19% were children were from Ukraine, 15.8% were children from Armenia and Azerbaijan, and 6.4% were from other countries. The average length of stay for primary school children was 3.47 years, for middle school children — 4.31 years, and for high school children — 4.97 years. 10.6% of the total number of children participating in the study spoke Russian at an elementary level, 32.1% at an average level, 38.2% at a good level, and 19.1% at an excellent level.

The study was conducted by a research team led by O.E. Khukhlaev as part of the

testing of the Program for Assessing the Special (Additional) Educational Needs of a Migrant Child in the Areas of Psychological Well-being, Social Skills and Cultural Adaptation in 2022 in the following regions: Moscow and Moscow Region, St. Petersburg and Leningrad Region, Krasnodar Region, Kaluga Region, Novosibirsk Region, Rostov Region, Samara Region, Sverdlovsk Region, Tyumen Region. [7; 8]. Empirical data was collected with the help of educational psychologists working in educational organizations where children of foreign citizens studied. Educational psychologists took part in the program of additional professional education "Assessment of the Special Educational Needs of Children of Foreign Citizens", within the framework of which they mastered the diagnostic tools listed below. Participation in the continuing education program provided the level of proficiency in the diagnostic tools necessary to conduct the study. Diagnostics were carried out individually, in a location familiar to the students. Also, educational psychologists collected information about the socio-demographic characteristics of each student (gender, age, country of origin, level of Russian language proficiency, family migration intentions: to stay in Russia, return to their homeland, leave for a third country, or unspecified intentions).

Research methods. To assess psychological well-being, the "Multidimensional Students' Life Satisfaction Scale, MSLSS" method by E.S. H bner was used [18], adapted for Russian schoolchildren [11]. The Russian version of the "Multidimensional Scale of Life Satisfaction for Schoolchildren" (abbreviated MSLSS) contains 30 statements grouped into five subscales, which are aimed at diagnosing the degree of satisfaction with the relationships with family members, classmates, teachers, friends, as well as the degree of satisfaction with oneself. Each statement is rated on a 5-point Likert scale, where 1 is "never," 2 is "sometimes," 3 is "often," 4 is "almost always," and 5 is "always." Responses are scored according to the key and summed for each scale separately and for all scales together. Cronbach's α coefficients for the scales range from 0.812 (School scale) to 0.900 (Friends scale), which indicates the high reliability of the scale.

To assess the adaptation to a new culture, the Acculturation Questionnaire for Children and Adolescents, developed by O.E. Khukhlaev and M.Y. Chibisova, was used [8]. Separate versions of the questionnaire were developed for primary, middle and high school students. The version for primary school includes 8 statements (Cronbach's alpha 0.704), for middle school — 12 statements (Cronbach's alpha 0.811), and for high school — 28 statements (Cronbach's alpha 0.916). Statements are scored on a 5-point scale, where -2 means "never" or "completely disagree"; -1 means "rarely" or "disagree"; 0 means "from time to time" or "agree with some things, disagree with others"; +1 means "often" or "agree"; +2 means "always" or "completely agree". The statements of the method are grouped into two scales: "Preservation of the native cultural environment by the migrant child" and "Inclusion of the migrant child in the culture of the host (Russian) society."

Measuring the national (Russian) identity of children of foreign citizens and their identity with the country of origin was carried out using the Method of Measuring the Ethnic and National Identity of Children and Adolescents (Measure of Youth's Ethnic and National Identity, MYENI) [21], which was translated into Russian and adapted by O.E. Khukhlaev [8]. The questionnaire includes 12 statements (Cronbach's alpha 0.882), the degree of agreement with which students rated on a five-point scale, where 1 was "do not agree at all" and 5 was "completely agree." As a result, the sum of points was calculated on the scales: Identity with the country of origin (homeland) (questions No. 1—6) and Russian identity (questions No. 7—12). This technique was carried out only with middle and high school students, since, according to the existing consensus in psychology, it is possible to talk about a formed ethnic and national identity only starting from adolescence [16].

A sociometric procedure was also carried out. The questions and principles for calculating sociometric status are presented in the program [8].

Data processing and analysis was carried out using the IBM SPSS Statistics 23 statistical package. Descriptive statistics methods were used, a scale reliability analysis was carried out (Cronbach's a coefficient), difference analysis was carried out (Student's t-test), and a hierarchical linear regression analysis was carried out with control of social demographic variables (gender, age, length of residence in Russia, level of Russian language proficiency, migration intentions of parents, sociometric status of the child in the school community). The dependent variables were the overall indicators of life satisfaction, as well as each of its five components: the satisfaction with relationships with family members, classmates, teachers, friends, and oneself. Separate models were built for each dependent variable. The predictors in the models were the following variables: the migrant child's preservation of his native cultural environment, the migrant child's inclusion in the culture of the host society, the national (Russian) and ethnic identities.

Research Results

Descriptive statistics are presented in Table. 1.

In accordance with the calculated test standards for children who are children of foreign citizens for the "Multidimensional Scale of Life Satisfaction among School-children", integral average scores characterize the average level of psychological well-being [8]. The indicators of national (Russian) and ethnic identity also correspond to the average values in accordance with the test norms we calculated for children — minor foreign citizens.

The average scores for the accepting of the host society's culture by migrant children correspond to the normative level of this parameter in all three groups of respondents, however, the indicators for the preserving of the native cultural environment correspond to a level below aver-

Descriptive Statistics

Table 1

	Primary School (N=328, M=181, F=147)		(N=220,	school M=129, 91)	High school (N=121, M=66 F=55)	
	М	SD	M	SD	M	SD
Level of Russian Language Proficiency	2.46	0.90	2.71	0.88	3.12	0.79
Sociometric Status	2.09	0.60	2.09	0.65	1.88	0.50
Preserving the culture of the country of origin	0.40	0.83	0.31	0.87	0.41	0.83
Accepting the Culture of the Host Society	1.19	0.69	1.29	0.65	1.34	0.59
National Identity			22.83	4.95	23.60	4.22
Ethnic Identity			24.34	4.89	23.29	4.99
Overall Life Satisfaction	121.20	18.19	115.8	19.17	120.5	19.78
Satisfaction with Relationships with Family Members	25.60	3.87	24.53	4.16	24.38	5.08
Satisfaction with Relationships with Classmates	22.77	4.72	21.67	4.80	22.79	4.37
Satisfaction with Relationships with Teachers	23.78	4.83	22.36	5.38	23.59	4.86
Self-satisfaction	23.52	4.38	22.59	4.52	23.19	4.72
Satisfaction with Relationships with Friends	25.17	4.37	24.56	4.86	26.15	4.12

age. According to these parameters, there are significant differences between the groups: high school students demonstrate significantly more salient host culture acceptance, compared to primary and middle school students, and middle school students are less focused on preserving the culture of their country of origin.

Table 2 presents the results of a hierarchical linear regression analysis of the connection between the general level of life satisfaction of primary, middle and high school students with their attitudes towards the preservation of the culture of their country of origin and accepting the host society's culture, as well as with the national (Russian) and ethnic identities when controlling such variables as gender, age, length of residence in Russia, level of proficiency of the Russian language, the sociometric status of the child in the class and the migration

intentions of his/her family. At the first step of the analysis, we assessed the contribution of control variables towards the variance of the indicator of overall life satisfaction, and at the second step, the contribution of indicators of preserving the culture of the country of origin and accepting the host society's culture, national and ethnic identities.

As can be seen from the data in Table 2, such control variables as gender, age, family migration intentions and sociometric status make a statistically significant contribution to the dispersion of the general life satisfaction of primary school children. The level of language proficiency and sociometric status make a statistically significant contribution to the dispersion of the general life satisfaction of high school students (the corresponding models are statistically significant). At the same time, none of the control variables make a statistically significant contribution

Table 2
Hierarchical Linear Analysis of the Relationship between Life Satisfaction
with Indicators of Sociocultural Adaptation of Migrant Children Studying
in Primary, Middle and High Schools

Predictor	Primary	School	Middle	School	High 9	School
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Control Variables						
Gender	0,12*	0,08	0,05	-0,01	0,16	0,12
Age	-0,17**	-0,16**	-0,03	0,05	-0,12	-0,16
Length of Residence in Russia	-0,11	-0,01	-0,13	-0,12	0,07	0,06
Level of Russian Language Proficiency	0,10	-0,06	0,09	0,08	0,24*	0,13
Family's Migration Intentions	-0,17**	-0,11	0,07	0,18*	-0,18	-0,22
Sociometric Status (Reverse Scale)	-0,17**	-0,12*	-0,16	-0,14	-0,35**	-0,36*
Preserving the Culture of the Country of Origin		0,18**		0,07		0,19
Accepting the Culture of the Host Society		0,44***		0,12		0,17
National (Russian) Identity				0,38***		0,25
Ethnic Identity				0,25***		0,09
R ²	0.12***	0.24***	0.02	0.28***	0.21**	0.28**
F	6.65***	11.24***	1.70	7.50***	3.86**	3.48**

Notes: *p < 0.05, **p < 0.01, ***p < 0.001; β — standardized regression coefficients; R2 — proportion of explained adjusted variance; F is the Fisher statistic.

to the variance in the overall satisfaction of middle school students (the model is not statistically significant (Table 2).

As we can see, in the sample of primary school children, significant predictors of overall life satisfaction turned out to be the attitudes towards both preserving the migrant child's country of origin culture (β =0.175, p<0.01) and his/her host society culture acceptance (β =0.438, p<0.001). In the sample of middle school students, significant predictors of overall life satisfaction are national (β =0.384, p<0.001) and ethnic identities (β =0.253, p<0.001). In the sample of high school students, no statistically significant connections were found between overall life satisfaction and the indicators of sociocultural adaptation.

Let us now consider the results of hierarchical linear regression analysis of the relationship between the indicators of sociocultural adaptation and each of the five components of life satisfaction: satisfaction with the relationships with classmates, teachers, family members, friends, and oneself, while controlling for the same above-mentioned variables.

When constructing a regression model in which the dependent variable was satisfaction with relationships classmates, it was found that the sociodemographic characteristics of students explained a very small proportion of the variance in the satisfaction with their relationships with classmates and the models that included them were not significant. In the sample of primary school children, the second regression model also turned out to be insignificant. The models describing the contribution of the indicators of sociocultural adaptation and identity among middle and high school students into the satisfaction with relationships with classmates are significant, but allow us to explain a small percentage of the variance (18.5% and 13.6%, respectively). At the middle and high school levels, national identity is a significant predictor (β=0.345, p<0.001 and β =0.340, p<0.05, respectively).

The results of a hierarchical regression linear analysis of the relationship between satisfaction with relationships with teachers and indicators of sociocultural adaptation demonstrate that in a sample of primary school children, this component of life satisfaction, as well as the previous component — satisfaction with relationships with classmates, is positively related to the acceptance of the host society's culture (β =0.340, p<0.001). However, the regression model for primary school children turned out to be insignificant. The regression models for the middle and high school levels turned out to be significant, and here the share of explained variance is also slightly higher — 31.2% for middle school students and 28.2% for high school students. National identity $(\beta = 0.403,$ p<0.001 and β =0.353, p<0.01) turned out to be a significant predictor of middle and high school students' satisfaction with relationships with teachers, and among middle school students, ethnic identity (β = 0.262, p < 0.001).

Regression models for analyzing the connections between students' satisfaction with *relationships with friends* for primary and middle school students turned out to be insignificant, and for high school students, although the model is significant, it explains a very insignificant proportion of the variance (17%), and none of the parameters of interest to us turned out to be significant.

The results of a regression analysis of the relationship between *satisfaction with relationships with family members* and indicators of sociocultural adaptation indicate that among younger school children this component of life satisfaction is positively associated with the acceptance of the host society's culture (β = 0.294, p < 0.001) and the preservation of their native culture (β =0.208, p<0.01). Middle school students' satisfaction with relationships with family members is positively related to national (β =0.313, p<0.001) and ethnic (β =0.357, p<0.001) identities. No similar connections were found among high school students.

The regression model for middle school students explained 30% of the variance, while the regression models for primary and high school students explained 13% and 18.2% of the variance, respectively.

As a result of regression analysis of the connections between a migrant child's satisfaction with himself/herself and indicators of sociocultural adaptation, positive connections were obtained for this component of life satisfaction among middle school students — with the salience of national (β =0.223, p<0.01) and ethnic $(\beta=0.212, p<0.01)$ identities; in the sample of high school children, no significant connections were found with the parameters of interest. At the same time, the regression model for primary school students turned out to be insignificant, the regression model for high school explains 32.6% of the variance (but significant predictors are not related to acculturation), and for middle school — 13.7% of the variance.

Discussion of the Results

Thus, among primary school children, an orientation towards preserving the norms of their country of origin's culture and host society's culture acceptance are predictors of a general psychological wellbeing, as well as the satisfaction with relationships with family members.

These results generally coincide with the body of empirical data obtained from studying various samples of migrants [13; 23]. However, the vast majority of such studies involve respondents starting in adolescence. The data we obtained allows us to assert that the importance of acculturation strategies as a determinant of psychological well-being manifests itself already at the primary school age, and since the orientation towards both the culture of origin and the host society is important, this confirms J. Berry's thesis about integration as the acculturation strategy to the greatest extent contributing to life satisfaction.

It seems important to note the importance of acculturation strategies for the

satisfaction with relationships with family members. The key role of the family in the process of the adaptation of migrant children to the host society has been noted by a number of researchers [22]. On the one hand, by preserving the norms of the country of origin's culture the child maintains contact with the family as its carrier. On the other hand, mastering the norms of the host society also predicts a satisfaction with relationships with family members. Perhaps the child's adaptation to a new society is interpreted by the family as an indicator of his success and allows for the child to receive a positive reaction from family members, which, in turn, leads to an increase in his psychological wellbeing in this area.

For middle school students, the predictors of general psychological well-being are the salience of national (Russian) and ethnic identity, and these parameters are also predictors of the satisfaction with relationships with teachers, family members and themselves, and regression models of satisfaction with relationships with teachers and family members help explain a relatively high percentage variance. These results are also generally consistent with data obtained in similar studies [25]. And they can be explained by agerelated patterns: the formation of identity, both personal and social, is a key task of adolescence [26]. For migrant teenagers, this process is complemented by the understanding of belonging to their culture of origin and to the host society. It has been shown that the salience of ethnic identity allows us to come to the conclusion that the teenager is at the stage of achieved identity, according to J. Finney [26]. Having an answer to the question of his belonging to cultural groups allows a migrant teenager to achieve a satisfaction with the relationships with teachers as representatives of the host society, and relationships with family members as representatives of his native culture, and an overall satisfaction with himself.

Among high school students, national (Russian) identity is a predictor of satisfaction with relationships with classmates and teachers.

The high school age is traditionally viewed as a period of personal and professional self-determination [1], which involves the construction of life plans in the context of the education system of a particular state, for which national identity can be of significant importance. It can be assumed that the salience of national identity promotes agreement with certain school requirements and expectations, which ultimately leads to the greater satisfaction with relationships with teachers. Also, the salience of national identity contributes to the construction of life plans similar to those of classmates, which can also contribute to increased satisfaction in relationships with them.

Note that our regression models allow us to explain a larger percentage of variance compared to similar studies, where the maximum explained variance varies from 18% to 23.2% [13; 14] However, in general, even the maximum share of explained variance remains low. This may be explained by the fact that the psychological well-being of migrant children is determined not only by factors directly related to acculturation, but also by other determinants (for example, it has been shown that the main predictors of the psychological well-being

References

- 1. Ginzburg M.R. Psikhologicheskoe soderzhanie lichnostnogo samoopredeleniya [Psychological content of personal self-determination]. *Vopr. Psikhologii = Questions of psychology*, 1994, no. 3, pp. 43—52. (In Russ.).
- 2. Gritsenko V., Shustova N. Sotsial'nopsikhologicheskaya adaptatsiya detei iz semei migrantov [Socio-psychological adaptation of children from families of migrants]. Moscow: Forum, 2011. 223 p. (In Russ.).
- 3. Gulyaeva A.N. Sotsiokul'turnaya adaptatsiya detei migrantov [Sociolcultural adaptation of Migrant Children] [Elektronnyi resurs]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2010, no. 5, pp. 158—167. URL: https://psyjournals.ru/journals/psyedu/archive/2010_n5/Gulyaeva (Accessed 25.07.2023). (In Russ.).

of adolescents are the support from parents and peers, as well as anxiety [28]).

Conclusions

Thus, the orientation of primary school children towards preserving the norms of their country of origin's culture and the host society's culture acceptance, i.e. the orientation towards the integration strategy is a predictor of general psychological well-being, as well as the satisfaction with relationships with family members. For middle school students, predictors of general psychological well-being, as well as the satisfaction with relationships with teachers, family members and themselves, are the salience of national (Russian) and ethnic identities, which can also be considered the result of the implementation of an integrative strategy of sociocultural adaptation. For high school students, the only predictor of satisfaction with relationships with teachers, family members and themselves is the national (Russian) identity, which suggests the importance of the assimilative adaptation strategy for their psychological well-being.

The limitations of our study include the ethnocultural heterogeneity of the sample. Perhaps dividing the students — children of foreign citizens into groups according to country of origin would allow us to obtain more detailed data.

- 4. Dudareva P.M. Faktory sotsial'nopsikhologicheskoi adaptatsii detei migrantov k uchebnomu soobshchestvu [Socio-psychological adaptation factors of migrant children to the educational community]. Sovremennye problemy nauki i obrazovaniya = Modern problems of science and education, 2020, no. 4, pp. 34—43. (In Russ.).
- Ledeneva V.Yu. Yazykovaya i sotsiokul'turnaya adaptatsiya detei migrantov v malom gorode [Language and Socio-Cultural Adaptation of Children of Migrants in a Small Town]. Sotsial'naya politika i sotsiologiya = Social Policy and Sociology, 2021. Vol. 20, no. 3, p. 109—117. DOI:10.17922/2071-3665-2021-20-3-109-117 (In Russ.).
- Makarov A.Ya. Osobennosti etnokul'turnoi adaptatsii detei migrantov v moskovskikh shkolakh [Features of ethnocultural adaptation of migrants' children in Moscow schools]. Sotsiologicheskie

issledovaniya = Sociological research, 2010, no. 8, pp. 94—101. (In Russ.).

- 7. Metodicheskie rekomendatsii po provedeniyu programmy psikhologo-pedagogicheskogo soprovozhdeniya protsessov obucheniya, sotsial'noi, yazykovoi i kul'turnoi adaptatsii detei inostrannykh grazhdan [Guidelines for the implementation of the program of psychological and pedagogical support for learning processes, social, linguistic and cultural adaptation of children of foreign citizens]. In O.E. Khukhlaev, M.Yu. Chibisova, N.V. Tkachenko. Moscow: MGPPU, 2022. 221 p.
- 8. Programma otsenki osobykh obrazovateľnykh potrebnostei detei-inostrannykh grazhdan v sferakh psikhologicheskogo blagopoluchiya, sotsiaľnykh navykov i kuľturnoi adaptatsii [Program for assessing the special educational needs of children-foreign citizens in the areas of psychological well-being, social skills and cultural adaptation]. In O.E. Khukhlaev, M.Yu. Chibisova, N.V. Tkachenko (eds.). Moscow: MGPPU, 2022. 238 p. (In Russ.).
- 9. Svodka osnovnykh pokazatelei deyatel'nosti po migratsionnoi situatsii v Rossiiskoi Federatsii za yanvar'-dekabr' 2022 goda [Summary of key performance indicators on the migration situation in the Russian Federation for January-December 2022] [Elektronnyi resurs]. URL: https://mvd.rf/dejatelnost/statistics/migracionnaya/item/35074904/ (Accessed 25.07.2013). (In Russ.).
- 10. Smotrova T.N., Gritsenko V.V. Udovletvorennosť razlichnymi storonami zhiznedeyateľ nosti kak pokazateľ uspeshnosti sotsiaľ no-psikhologicheskoi adaptatsii sootechestvennikov v Rossii [Satisfaction with Different Life Aspects as an Indicator of Social and Psychological Adaptation Success of Fellow Countrymen in Russia]. *Izv. Sarat. un-ta. Nov. ser. Ser. Akmeologiya obrazovaniya. Psikhologiya razvitiya = Izv. Saratov Univ. (N.S.), Ser. Educational Acmeology. Developmental Psychology,* 2017. Vol. 6, no. 1, pp. 53—58. DOI:10.18500/2304-9790-2017-6-1-53-58 (In Russ.).
- 11. Sychev O.A., Gordeeva T.O., Lunkina M.V., Osin E.N., Sidneva A.N. Mnogomernaya shkala udovletvorennosti zhizn'yu shko'nikov [Multidimensional Students' Life Satisfaction Scale]. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2018. Vol. 23, no. 6, pp. 5—15. DOI:10.17759/pse.2018230601 (In Russ.).
- 12. Chirkina R.V., Aruin S.E. Resursy sotsializatsii detei i podrostkov iz semei russkoyazychnykh migrantov v Germanii [Socialization resources in children and adolescents from Russian speaking migrants in Germany]. Психологическая наука и образование www.psyedu.ru = Psychological science and education www.psyedu.ru, 2013, no. 3, pp. 138—148. (In Russ.).
- 13. Abubakar A. et al. Ethnic Identity, Acculturation Orientations, and Psychological Well-Being among Adolescents of Immigrant Background in Kenya. *Contributions to Human Development*, 2012. Vol. 24, pp. 49—63. DOI:10.1159/000331026

- 14. Beiser M. et al. Predictors of immigrant children's mental health in Canada: selection, settlement contingencies, culture, or all of the above? *Social Psychiatry and Psychiatric Epidemiology*, 2014. Vol. 49(5), pp. 743—756. DOI:10.1007/s00127-013-0794-8
- 15. Berry J.W. Immigration, Acculturation and Adaptation. *Applied Psychology: An International Review*, 1997. Vol. 46(1), pp. 5—68. DOI:10.1111/j.1464-0597.1997.tb01087.x
- Cheon Y.M., Ip P.S., Haskin M., Yip T. Profiles of Adolescent Identity at the Intersection of Ethnic/ Racial Identity, American Identity, and Subjective Social Status. Front. Psychol, 2020. Vol. 11, pp. 959. DOI:10.3389/fpsyq.2020.00959
- 17. Diener E., Suh E.M., Lucas R.E., Smith H.L. Subjective well-being: three decades of progress. *Psychol Bull*, 1999. Vol. 25(2), pp. 276—302. DOI:10.1037/0033-2909.125.2.276
- 18. Huebner E.S., Zullig J., Saha R. Factor structure and reliability of an abbreviated version of the Multidimensional Students' Life Satisfaction Scale. *Child Indicator Research*, 2012. Vol. 5, pp. 561—657. DOI:10.1007/s12187-012-9140-z
- 19. Jiang X., Fang L., Lyons M.D. Is life satisfaction an antecedent to coping behaviors for adolescents? *J. Youth Adolesc*, 2019. Vol. 48(11), pp. 2292—2306. DOI:10.1007/s10964-019-01136-6
- 20. Jung S., Choi E. Life satisfaction and delinquent behaviors among Korean adolescents. *Pers. Individ. Differ*, 2017. Vol. 104, pp. 104—110. DOI:10.1016/j. paid.2016.07.039
- 21. Leszczensky L., Santiago A. The Development and Test of a Measure of Youth's Ethnic and National Identity. *Methods, data, analyses*, 2015. Vol. 9(1), pp. 87—110. DOI:10.12758/mda.2015.003
- Medarić Z., Gornik B., Sedmak M. What about the family? The role and meaning of family in the integration of migrant children: Evidence from Slovenian schools. Front. Educ., 2022. Vol. 7, pp. 1003759. DOI:10.3389/ feduc.2022.1003759
- 23. Oh H., Kim J. Affective acculturation and psychological well-being of children: The case of children from multicultural families in Korea. Children and Youth Services Review, 2021. Vol. 129, pp. 106210. DOI:10.1016/j.childyouth.2021.106210
- 24. Saminathen G.M., Löfstedt P., Låftman S.B. Classroom Immigrant Density Predicts Psychological Well-Being among Adolescents with an Immigration Background: Findings From the 2017/18 Swedish Health Behaviour in School-Aged Children Study. *J. Public Health*, 2021. Vol. 19, pp. 647380. DOI:10.3389/ijph.2021.647380 25. Smith T.B., Silva L. Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology*, 2011. Vol. 58(1), pp. 42—60. DOI:10.1037/a0021528
- 26. Umaña-Taylor A.J. et al. Ethnic and racial identity during adolescence and into young adulthood: an integrated conceptualization. *Child Development*, 2014. Vol. 85(1), pp. 21—39. DOI:10.1111/cdev.12196

27. Weber S., Stiglbauer B., Kronberger N., Appel M. The individual development of cultural identity and psychological well-being among adolescents with a migrant background in Austria: A longitudinal study. Cultural Diversity and Ethnic Minority Psychology, 2021. Vol. 27(4), pp. 684—695. DOI:10.1037/cdp0000451

28. Wu Y.J., Lee J. The most salient global predictors of adolescents' subjective Well-Being: parental support, peer support, and anxiety. *Child Indicators Research*, 2022. Vol. 15, pp. 1601—1629. DOI:10.1007/s12187-022-09937-1

Литература

- 1. *Гинзбург М.Р.* Психологическое содержание личностного самоопределения // Вопросы психологии. 1994. № 3. С. 43—52.
- 2. *Гриценко В.В., Шустова Н.Е.* Социальнопсихологическая адаптация детей из семей мигрантов. М.: Форум, 2011. 223 с.
- 3. Гуляева А.Н. Социокультурная адаптация детей мигрантов [Электронный ресурс] // Психологическая наука и образование psyedu.ru. 2010. Том 2. № 5. URL: https://psyjournals.ru/journals/psyedu/archive/2010_n5/Gulyaeva (дата обращения: 25.07.2023).
- 4. *Дударева П.М.* Факторы социальнопсихологической адаптации детей мигрантов к учебному сообществу // Современные проблемы науки и образования. 2020. № 4. С. 34—43.
- 5. Леденёва В.Ю. Языковая и социокультурная адаптация детей мигрантов в малом городе // Социальная политика и социология. 2021. Т. 20. № 3(140). С. 109—117. DOI:10.17922/2071-3665-2021-20-3-109-117
- 6. *Макаров А.Я.* Особенности этнокультурной адаптации детей мигрантов в московских школах // Социологические исследования. 2010. № 8. С. 94—101.
- 7. Методические рекомендации по проведению программы психолого-педагогического сопровождения процессов обучения, социальной, языковой и культурной адаптации детей иностранных граждан / под ред. О.Е. Хухлаева, М.Ю. Чибисовой и Н.В. Ткаченко. М.: ФГБОУ ВО МГППУ, 2022. 221 с.
- 8. Программа оценки особых образовательных потребностей детей-иностранных граждан в сферах психологического благополучия, социальных навыков и культурной адаптации / под ред. О.Е. Хухлаева, М.Ю. Чибисовой, Н.В. Ткаченко М.: ФГБОУ ВО МГППУ, 2022. 238 с.
- 9. Сводка основных показателей деятельности по миграционной ситуации в Российской Федерации за январь-декабрь 2022 года [Электронный ресурс]. URL: https://мвд.рф/dejatelnost/statistics/migracionnaya/item/35074904/ (дата обращения: 25.07.2023).
- 10. Смотрова Т.Н., Гриценко В.В. Удовлетворенность различными сторонами жизнедеятельности как показатель успешности социально-психологической адаптации соотечественников в России // Изв. Сарат. унта. Нов. сер. Сер. Акмеология образования. Психология развития. 2017. Т. 6, вып. 1(21). С. 53—58. DOI:10.18500/2304-9790-2017-6-1-53-58
- 11. *Сычев О.А., Гордеева Т.О., Лункина М.В., Осин Е.Н., Сиднева А.Н.* Многомерная шкала удовлетворенности жизнью школьников //

- Психологическая наука и образование. 2018. Т. 23. № 6. С. 5—15. DOI:10.17759/pse.2018230601
- 12. Чиркина Р.В., Аруин С.Е. Ресурсы социализации детей и подростков из семей русскоязычных мигрантов в Германии // Психологическая наука и образование www.psyedu.ru. 2013. № 3. С. 138—148. 13. Abubakar A. et al. Ethnic Identity, Acculturation Orientations, and Psychological Well-Being among Adolescents of Immigrant Background in Kenya // Contributions to Human Development. 2012. Vol. 24. P. 49—63. DOI:10.1159/000331026
- 14. Beiser M. et al. Predictors of immigrant children's mental health in Canada: selection, settlement contingencies, culture, or all of the above? // Social Psychiatry and Psychiatric Epidemiology. 2014. Vol. 49(5). P. 743—756. DOI:10.1007/s00127-013-0794-8
- 15. Berry J.W. Immigration, Acculturation and Adaptation // Applied Psychology: An International Review. 1997. Vol. 46(1). P. 5—68. DOI:10.1111/j.1464-0597.1997.tb01087.x
- 16. Cheon Y.M., Ip P.S., Haskin M., Yip T. Profiles of Adolescent Identity at the Intersection of Ethnic/Racial Identity, American Identity, and Subjective Social Status // Front. Psychol. 2020. Vol. 11. P. 959. DOI:10.3389/fpsyg.2020.00959
- 17. Diener E., Suh E.M., Lucas R.E., Smith H.L. Subjective well-being: three decades of progress // Psychol Bull. 1999. Vol. 25(2). P. 276—302. DOI:10.1037/0033-2909.125.2.276
- 18. Huebner E.S., Zullig J., Saha R. Factor structure and reliability of an abbreviated version of the Multidimensional Students' Life Satisfaction Scale // Child Indicator Research. 2012. Vol. 5. P. 561—657. DOI:10.1007/s12187-012-9140-z
- 19. *Jiang X., Fang L., Lyons M.D.* Is life satisfaction an antecedent to coping behaviors for adolescents? // J. Youth Adolesc. 2019. Vol. 48(11). P. 2292—2306. DOI:10.1007/s10964-019-01136-6
- 20. Jung S., Choi E. Life satisfaction and delinquent behaviors among Korean adolescents // Pers. Individ. Differ. 2017. Vol. 104. P. 104—110. DOI:10.1016/j. paid.2016.07.039
- 21. Leszczensky L., Santiago A. The Development and Test of a Measure of Youth's Ethnic and National Identity // Methods, data, analyses. 2015. Vol. 9(1). P. 87—110. DOI:10.12758/mda.2015.003
- 22. Medarić Z., Gornik B., Sedmak M. What about the family? The role and meaning of family in the integration of migrant children: Evidence from Slovenian schools // Front. Educ. 2022. Vol. 7. P. 1003759. DOI:10.3389/feduc.2022.1003759
- 23. Oh H., Kim J. Affective acculturation and psychological well-being of children: The case of

children from multicultural families in Korea // Children and Youth Services Review. 2021. Vol. 129. P. 106210. DOI:10.1016/j.childyouth.2021.106210

24. Saminathen G.M., Löfstedt P., Låftman S.B. Classroom Immigrant Density Predicts Psychological Well-Being among Adolescents with an Immigration Background: Findings From the 2017/18 Swedish Health Behaviour in School-Aged Children Study // J. Public Health. 2021. Vol. 19. P. 647380. DOI:10.3389/ijph.2021.647380

25. *Smith T.B., Silva L.* Ethnic identity and personal well-being of people of color: A meta-analysis // Journal of Counseling Psychology. 2011. Vol. 58(1). P. 42—60. DOI:10.1037/a0021528

26. Umaña-Taylor A.J. et al. Ethnic and racial identity during adolescence and into young

adulthood: an integrated conceptualization // Child Development. 2014. Vol. 85(1) P. 21—39. DOI:10.1111/cdev.12196

27. Weber S., Stiglbauer B., Kronberger N., Appel M. The individual development of cultural identity and psychological well-being among adolescents with a migrant background in Austria: A longitudinal study // Cultural Diversity and Ethnic Minority Psychology. 2021. Vol. 27(4). P. 684—695. DOI:10.1037/cdp0000451

28. Wu Y.J., Lee J. The most salient global predictors of adolescents' subjective Well-Being: parental support, peer support, and anxiety // Child Indicators Research. 2022. Vol. 15. P. 1601—1629. DOI:10.1007/s12187-022-09937-1

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