

Predictive Value of Differential Assessment of Schoolchildren’s Maladaptation from Parent and Teacher Perspectives

Valeriya V. Katunova

Privolzhsky Research Medical University of the Ministry of Health,
Nizhny Novgorod, Russia

ORCID: <https://orcid.org/0000-0002-7775-1545>, e-mail: katunova@mail.ru

Alexey A. Konovalov

Privolzhsky Research Medical University of the Ministry of Health,
Nizhny Novgorod, Russia

ORCID: <https://orcid.org/0000-0001-5251-778X>, e-mail: konovalov.mobile@gmail.com

Elena D. Bozhkova

Privolzhsky Research Medical University of the Ministry of Health,
Nizhny Novgorod, Russia

ORCID: <https://orcid.org/0000-0003-0105-0360>, e-mail: readytotalk@mail.ru

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 received from parents and teachers. On the basis of the data obtained from parents and teachers, we assessed 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.

Funding. The study was financially supported by the Ministry of Science and Higher Education of the Russian Federation as part of the “Priority 2030” program.

For citation: Katunova V.V., Konovalov A.A., Bozhkova E.D. Predictive Value Of Differential Assessment Of Schoolchildren’s Maladaptation From Parent And Teacher Perspectives. *Psikhologicheskaya nauka i obrazovanie = Psychological Science and Education*, 2023. Vol. 28, no. 5, pp. 184—199. DOI: <https://doi.org/10.17759/pse.2023280514> (In Russ.).

Прогностическая значимость дифференциальной оценки школьной дезадаптации учащихся с позиций родителя и педагога

Катунова В.В.

ФГБОУ ВО «Приволжский исследовательский медицинский университет
Министерства здравоохранения Российской Федерации»

(ФГБОУ ВО ПИМУ Минздрава России),

г. Нижний Новгород, Российская Федерация

ORCID: <https://orcid.org/0000-0002-7775-1545>, e-mail: katunova@mail.ru

Конвалов А.А.

ФГБОУ ВО «Приволжский исследовательский медицинский университет
Министерства здравоохранения Российской Федерации»

(ФГБОУ ВО ПИМУ Минздрава России),

г. Нижний Новгород, Российская Федерация

ORCID: <https://orcid.org/0000-0001-5251-778X>, e-mail: kononov.mobile@gmail.com

Божкова Е.Д.

ФГБОУ ВО «Приволжский исследовательский медицинский университет
Министерства здравоохранения Российской Федерации»

(ФГБОУ ВО ПИМУ Минздрава России),

г. Нижний Новгород, Российская Федерация

ORCID: <https://orcid.org/0000-0003-0105-0360>, e-mail: readytotalk@mail.ru

На основе данных сплошного социально-психологического и медико-психологического 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.

Финансирование. Исследование выполнено при финансовой поддержке Министерства науки и высшего образования Российской Федерации в рамках программы «Приоритет 2030».

Для цитаты: Катунова В.В., Коновалов А.А., Божкова Е.Д. Прогностическая значимость дифференциальной оценки школьной дезадаптации учащихся с позиций родителя и педагога // Психологическая наука и образование. 2023. Том 28. № 5. С. 184—199. DOI: <https://doi.org/10.17759/pse.2023280514>

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. Vostroknu-tov, 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 himself.

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, psycho-diagnostic 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 socio-demographic 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. Bezrukhii (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

| Parameter to be Diagnosed | Parents' Assessments | | | Teachers' Assessments | | |
|---|------------------------------------|--------------------------------------|--|------------------------------------|--------------------------------------|--|
| | N of children without disorders, % | N of children with mild disorders, % | N of children with severe disorders, % | N of children without disorders, % | N of children with mild disorders, % | 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

| Parameter to be Diagnosed | Parents' assessments | | Teachers' assessments | | Reliability of Differences between the Assessments of Parents and Teachers (Wilcoxon T-test) |
|---|----------------------|--------------------|-----------------------|--------------------|--|
| | average score | standard deviation | average score | standard deviation | |
| 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 second-graders 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 medico-psychological examination) using variance analysis (ANOVA) allowed to determine

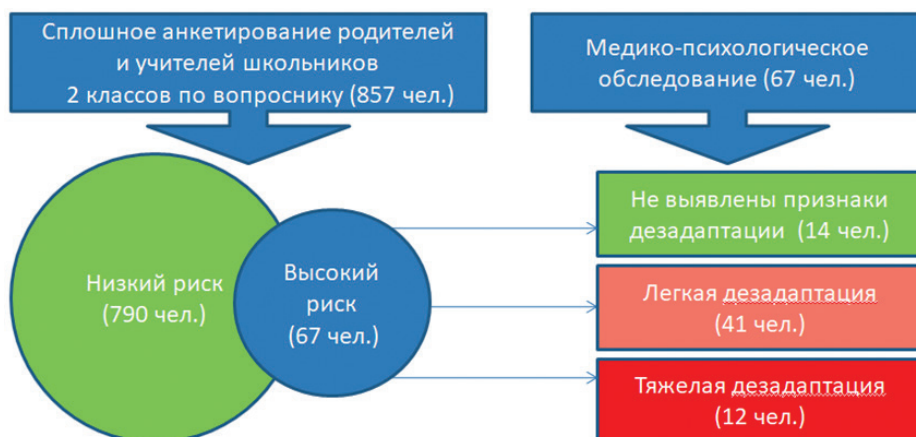


Figure 1. The overall results of the predictive value assessment study of school maladaptation in second grade students (N=857)

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

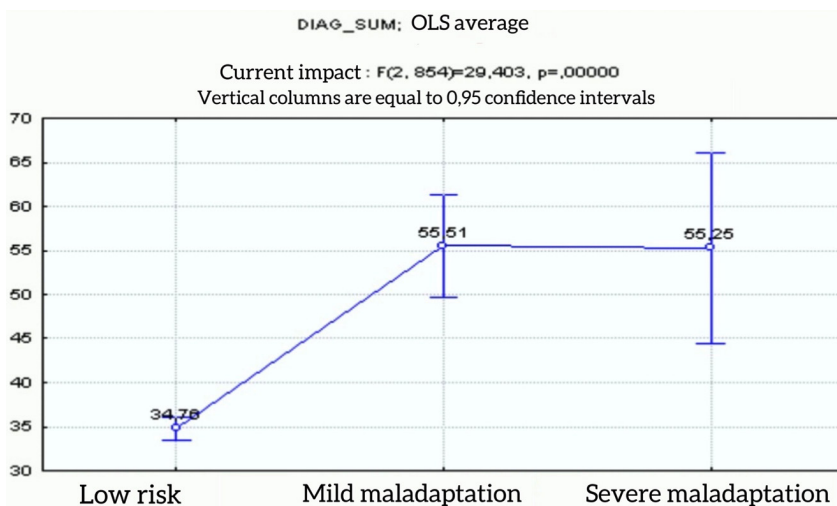


Figure 2. Analysis of the Surveyed Second Grade Student Groups (N=857) by the Magnitude of School Maladaptation Risk Evaluation Severity According to the Parents' Survey (Y axis), the Numbers Indicate the Average Values of Scores in Groups

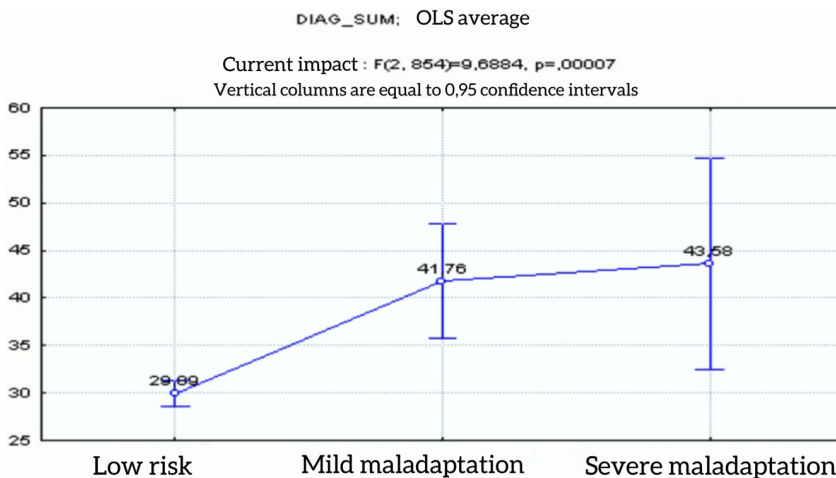


Figure 3. Analysis of the Surveyed Second Grade Student Groups (N=857) by the Magnitude of School Maladaptation Risk Evaluation Severity According to the Teachers' Survey (Y axis), the Numbers Indicate the Average Values of Scores in Groups

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: | | | | | | |
|---|---------------------------------|----------------------------|---------------------------------|---|--------------------------|--------------------------|-------------------------|------------------|-----------------------------|--|
| | | School maladaptation level | educational motivation decrease | attention deficit disorder | behavioral hyperactivity | behavioral impulsiveness | reactions of opposition | deviant behavior | anxiety-depressive symptoms | |
| Teachers' Assessments | | School maladaptation level | educational motivation decrease | attention deficit disorder | behavioral hyperactivity | behavioral impulsiveness | reactions of opposition | deviant behavior | anxiety-depressive symptoms | |
| School Maladaptation Level | | 0,17 | 0,15 | 0,23 | 0,17 | 0,15 | 0,14 | 0,12 | 0,08 | |
| Related behavioral disorders including: | educational motivation decrease | 0,28 | 0,27 | 0,28 | 0,18 | 0,16 | 0,20 | 0,20 | 0,20 | |
| | attention deficit disorder | 0,23 | 0,24 | 0,41 | 0,29 | 0,28 | 0,28 | 0,29 | 0,20 | |
| | behavioral hyperactivity | 0,15 | 0,11 | 0,32 | 0,33 | 0,37 | 0,30 | 0,30 | 0,14 | |
| | behavioral impulsiveness | 0,10 | 0,08 | 0,28 | 0,30 | 0,38 | 0,27 | 0,28 | 0,09 | |
| | reactions of opposition | 0,16 | 0,16 | 0,34 | 0,34 | 0,37 | 0,38 | 0,36 | 0,20 | |
| | deviant behavior | 0,13 | 0,16 | 0,34 | 0,37 | 0,36 | 0,38 | 0,43 | 0,22 | |
| | 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 quite illustrative. In other words, parents are more likely to notice the manifestations of these disorders when they become quite 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 socio-psychological 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 questionnaires 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 vliyaniye 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 dezadaptatsii: 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'no-psikhologicheskoi adaptatsii i uspevaemosti v mladshem shkol'nom vozraste [The relationship between socio-psychological adaptation and academic performance in primary school age]. *Problemy sovremenogo 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 proyavleniye 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 skringingovogo 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 zdavoookhraneniya i meditsinskoi statistiki = Modern Problems of Public Health and Medical Statistics*, 2019, no. S5, pp. 81—82. (In Russ.).
14. Krasnikova T.V. Tekhnologiya psikhologo-pedagogicheskogo soprovozhdeniya protsessa adaptatsii mladshikh shkol'nikov [Technology of psychological and pedagogical support for the adaptation process of younger schoolchildren]. *Problemy sovremenogo pedagogicheskogo obrazovaniya = Problems of Modern Pedagogical Education*, 2018, no. 58—1, pp. 126—129. (In Russ.).
15. Novikova G.R. Printsipy organizatsii mediko-sotsial'noi pomoshchi detyam mladshogo 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 nevrogicheskaya disfunktsiya kak vozmozhnyi marker kognitivnykh i povedencheskikh rasstroivst 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 nejropsihologicheskoy diagnostiki i korrektsii pri narushenijah razvitiya vysshih psichicheskikh funktsij u detei [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. Pogranichnyesostoyaniya 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' meditsinskoi 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].
- 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 provision in secondary 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

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. Баладина О.В., Божкова Е.Д., Дворянинова В.В., Катунва 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 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., Сосонник 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 социально-психологической 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 психолого-педагогического сопровождения процесса адаптации младших школьников // Проблемы современного педагогического образования. 2018. № 58—1. С. 126—129.
15. Новикова Г.Р. Принципы организации медико-социальной 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., Kononov A.A., Katunova V.V. International experience in mental health provision in secondary 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

Information about the authors

Valeriya V. Katunova, PhD in Biological Sciences, Docent, Associate Professor of the Department of General and Clinical Psychology, Privolzhsky Research Medical University of the Ministry of Health, Nizhny Novgorod, Russia, ORCID: <https://orcid.org/0000-0002-7775-1545>, e-mail: katunova@mail.ru

Aleksey A. Kononov, Doctor of Medical Sciences, Professor, Professor of the Department of Epidemiology, Microbiology and Evidence-Based Medicine, Privolzhsky Research Medical University of the Ministry of Health, Nizhny Novgorod, Russia, ORCID: <https://orcid.org/0000-0001-5251-778X>, e-mail: kononov.mobile@gmail.com

Elena D. Bozhkova, PhD in Medical Sciences, Docent, Head of the Department of General and Clinical Psychology, Privolzhsky Research Medical University of the Ministry of Health, Nizhny Novgorod, Russia, ORCID: <https://orcid.org/0000-0003-0105-0360>, e-mail: readyto-talk@mail.ru

Информация об авторах

Катунова Валерия Валерьевна, кандидат биологических наук, доцент, доцент кафедры общей и клинической психологии, ФГБОУ ВО «Приволжский исследовательский медицинский университет Министерства здравоохранения Российской Федерации» (ФГБОУ ВО ПИМУ Минздрава России), г. Нижний Новгород, Российская Федерация, ORCID: <https://orcid.org/0000-0002-7775-1545>, e-mail: katunova@mail.ru

Коновалов Алексей Андреевич, доктор медицинских наук, профессор, профессор кафедры эпидемиологии, микробиологии и доказательной медицины, ФГБОУ ВО «Приволжский исследовательский медицинский университет Министерства здравоохранения Российской Федерации» (ФГБОУ ВО ПИМУ Минздрава России), г. Нижний Новгород, Российская Федерация, ORCID: <https://orcid.org/0000-0001-5251-778X>, e-mail: konovalov.mobile@gmail.com

Божкова Елена Димитрова, кандидат медицинских наук, доцент, заведующий кафедрой общей и клинической психологии, ФГБОУ ВО «Приволжский исследовательский медицинский университет Министерства здравоохранения Российской Федерации» (ФГБОУ ВО ПИМУ Минздрава России), г. Нижний Новгород, Российская Федерация, ORCID: <https://orcid.org/0000-0003-0105-0360>, e-mail: readytotalk@mail.ru

Получена 25.07.2023

Received 25.07.2023

Принята в печать 30.11.2023

Accepted 30.11.2023