

## ORIGINAL

# Psychological and educational support strategies for individuals with disharmonious personality traits

*Estrategias de apoyo psicológico y educativo para personas con rasgos de personalidad discordantes*

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## Abstract

**Background:** The relevance of the research is determined by the problem of implementing timely and effective psycho-pedagogical support for children with special educational needs, and composition requires consolidating efforts from teachers, psychologists, and parents. The research aims to highlight the peculiarities of psycho-pedagogical support and correctional-developmental work with individuals with disharmonious personality compositions.

**Methods:** The research methods used include questionnaires and surveys, analysis of learning outcomes, experimental research, and evaluation of results. The calculation of the effectiveness indicators of the educational technology for children with a disharmonious personality composition in the experimental and control groups was carried out using the Student's t-test.

**Results:** The results showed that the basic level indicators increased by 17% in the experimental group and 22.7% in the control group. Meanwhile, the average level indicators in the experimental groups increased by 20.9% and in the control groups by 19.1%. As for the high level, the indicator in the experimental groups increased by 21.8%, while in the control groups, it increased by 15%. In this study, the empirical value of the Student's t-test  $t(19.5)$  is within the significance zone, indicating that the proposed technology is effective.

**Conclusions:** Thus, the proposed concept of psycho-pedagogical support for the studied category of individuals encompasses using targeted online platforms and educational resources, stimulation practices, multimedia materials, adaptive individualised learning technologies, problem-oriented correction methods, and ensuring feedback composition and can significantly improve communicative skills, social behaviour, and overall learning level.

**Key words:** disharmonious development, personality, psychological and pedagogical support, psychopathy, behavioural and emotional disorders.

## Resumen

**Antecedentes:** La pertinencia de la investigación está determinada por el problema de la aplicación oportuna y eficaz del apoyo psicopedagógico a los niños con necesidades educativas especiales y la composición requiere la consolidación de los esfuerzos de los maestros, psicólogos y padres. La investigación pretende poner de relieve las peculiaridades del apoyo psicopedagógico y del trabajo correccional-desarrollador con individuos con composiciones de personalidad disarmónicas.

**Métodos:** Los métodos de investigación utilizados incluyen cuestionarios y encuestas, análisis de los resultados del aprendizaje, investigación experimental y evaluación de los resultados. El cálculo de los indicadores de eficacia de la tecnología educativa para niños con una composición de personalidad disarmónica en los grupos experimental y de control se llevó a cabo mediante la prueba t de Student.

**Resultados:** Los resultados mostraron que los indicadores de nivel básico aumentaron un 17% en el grupo experimental y un 22,7% en el grupo de control. Por su parte, los indicadores de nivel medio aumentaron un 20,9% en el grupo experimental y un 19,1% en el grupo de control. En cuanto al nivel alto, el indicador en los grupos experimentales aumentó un 21,8%, mientras que en los grupos de control lo hizo en un 15%. En este estudio, el valor empírico de la prueba t de Student (19,5) está dentro de la zona de significación, lo que indica que la tecnología propuesta es eficaz.

**Conclusiones:** Así pues, el concepto propuesto de apoyo psicopedagógico para la categoría de individuos estudiada abarca el uso de plataformas y recursos educativos en línea específicos, prácticas de estimulación, materiales multimedia, tecnologías de aprendizaje individualizado adaptativo, métodos de corrección orientados a la resolución de problemas y la garantía de la composición de la retroalimentación, y puede mejorar significativamente las habilidades comunicativas, el comportamiento social y el nivel general de aprendizaje.

**Palabras clave:** desarrollo disarmónico, personalidad, apoyo psicológico y pedagógico, psicopatía, trastornos conductuales y emocionales.

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## Introduction

According to the requirements of national legislation, every child, including those with a disharmonious personality composition, has an unassailable right to accessible education, which should provide them with the knowledge, skills, and abilities that will contribute to their successful realisation and acquisition of social status in later life.

The practical implementation of this goal is primarily related to the content of educational and correctional work within the framework of psycho-pedagogical support, which is positioned as one of the primary means of personal development and the formation of their basic level of learning.

In corrective pedagogy, the basic level of learning is defined as a system of knowledge, skills, and abilities, the acquisition of which ensures the correction of psychophysical disorders and psychophysical development and their readiness for social adaptation. Psycho-pedagogical support for children with a disharmonious personality composition, as a primary condition for correcting their development, is currently considered a determining factor in forming a child's readiness for social adaptation.

Ensuring effective adaptability in society's dynamic conditions is the most crucial goal of corrective and educational activities within the pedagogical process. The deterioration of adaptive behaviour is the primary significant determinant in modern definitions of disharmonious personality composition.

### Study aims

This study aims to highlight the peculiarities of psychological and pedagogical support and correctional and developmental work with people with disharmonious personalities.

### Research objectives

1. To study the state of the psychological and pedagogical support system for people with disharmonious personalities.
2. To implement a pedagogical experiment that combined the stating, formative and control stages.
3. To propose elements of optimising educational and correctional work technology.
4. To experimentally test the effectiveness of the proposed technology.

## Literature review

Scientists whose scientific pursuits are focused on modern diagnostic methodologies and studies of trends and best practices in psycho-pedagogical support and correctional-developmental work with individuals with

disharmonious personality composition lay the scientific and methodological foundation of the researched issues.

Researchers such as Chebotarova et al<sup>1</sup> and Illiashenko<sup>2</sup> believe that the problem of correctional activities concerning children with disharmonious personality composition requires a comprehensive approach. As Krotenko and Khomych<sup>3</sup> add, this involves mobilising significant reserve capabilities of the individual.

Researchers Kompanets<sup>4</sup> and Kobylchenko & Omelchenko<sup>5</sup> present general provisions that are significantly important for understanding the conditions of the correctional-pedagogical process, which positively affect the development of children with disharmonious personality composition. Sklianska<sup>6</sup> and Chepka<sup>7</sup> note that the compensatory-corrective orientation of support is the essence of all educational work with children with disharmonious personality composition, focusing on developing compensatory processes and educational-cognitive activity.

As evidenced by the research results of Olefir<sup>8</sup> and Povirena & Pavliuk<sup>9</sup>, educational and corrective influence on the development of children with a disharmonious personality composition is most effective when focused on the formation of logical thinking and the causal justification of their practical activities. The main requirements of the corrective-educational orientation of psycho-pedagogical support for individuals with a disharmonious personality composition, according to researchers Kalinina et al<sup>10</sup>, Ilchuk<sup>11</sup>, and Matveieva<sup>12</sup>, include the slowness of the learning process, visibility, individual and differentiated approach, and comprehensive intellectualisation of practical activities.

Dokiichuk<sup>13</sup> argues that psycho-pedagogical support should systematically encompass intelligence's content, activity, and personal components. According to the author, the corrective goals of the educational process include forming the operational and procedural components of intellectual activity and correcting an individual's parameters.

According to Vasytsova and Leontieva<sup>14</sup>, educational corrective work within the framework of psycho-pedagogical support in educational institutions could be based on intellectualisation and verbalisation, considering individual characteristics. The regularity considered by researchers Khvorova et al<sup>15</sup> and Kazachiner<sup>16</sup> has unique requirements for the educational and corrective process content, which must consider the child's developmental characteristics, thereby maximally contributing to their personal development.

By analysing the views of various authors, a more comprehensive understanding of the diverse approaches to psycho-pedagogical support and corrective-developmental work with individuals with a

disharmonious personality composition can be obtained. However, despite the significance of the scientific and practical achievements of researchers in this field, there is a pressing need to develop a stable trend of positive dynamics in the effectiveness of corrective-developmental work with individuals with a disharmonious personality composition.

## Applied methods

Several methods were used in the course of the study, including

- questionnaires and surveys to assess the quality of educational and correctional work and to check the status of people with disharmonious personality;
- analysis of the effectiveness of technology elements;
- a pedagogical experiment conducted with secondary education students during one academic semester, the control group consisted of 31 students, the experimental group of 33;
- an experimental study that involved the implementation of a control experiment to evaluate the effectiveness of the proposed elements of psychological and pedagogical support using the Student's criterion.

At the initial stage of the experiment, the condition of individuals with a disharmonious personality composition was assessed. Responses were analysed according to criteria on 0-2 points, based on which basic, intermediate, and high levels were determined (Appendix). It was established that the levels of the existing corrective-educational influence of psycho-pedagogical support in the experimental and control groups are comparable and require effective correction. Three levels were identified: high (learning coefficient from 1 to 0.7), intermediate (learning coefficient from 0.69 to 0.40), and initial (learning coefficient from 0.39 to 0.0).

To identify the initial level of effectiveness of the psycho-pedagogical support in the experimental and control groups, the learning coefficient was applied, which is determined by formula (1):

$$KH1 = A1/N1 (1),$$

where KH1 is the learning coefficient, A1 is the qualitative indicator of learning outcomes, and N1 is the maximum possible score for the quality preparation result.

Information and communication, gaming, interactive, project-based, and art-pedagogical learning technologies were proposed to optimise psycho-pedagogical support for individuals with disharmonious personality compositions.

In particular, among the gaming technologies, subject-based, plot-based, role-playing, business, simulation, and dramatisation games were applied, which promote the development of cognitive abilities and active interaction

skills. Special attention was given to correction tables and informational game fields with varying numbers of cells (9 to 25) filled with subject pictures. The thematic range of correction tables can be pretty broad. It hardly changes across different age groups, with only the content expanding and the connections between thematic elements diversifying. The pictures are selected based on the theme of the correctional educational session.

Information and communication technologies were used in multimedia presentations and slide shows, which contributed to expanding cognitive activity, communication skills, and the formation of social activity.

Interactive technologies, such as situational modelling and collective-group learning, contribute to applying acquired skills in various spheres. Pair work, small group work, and techniques like "aquarium", "carousel", and "circle of ideas" were used.

Quest technologies, in the form of group quests, involve uniting children into groups to complete a specific task. In this quest, special attention should be paid to distributing roles, developing collaboration skills, listening to others' opinions, and expressing oneself. These activities stimulated the participants' cognitive, speech, and intellectual processes.

Art technologies, including modelling, drawing, and decorative-applied arts, in art therapy helped to correct the psycho-emotional sphere, behaviour, and personality as a whole.

The proposed technology's effectiveness was established by comparing the performance levels of the corrective-educational influence of psycho-pedagogical support between the experimental and control groups (using the Student's t-test).

## Research results

Comprehensive differential diagnostics ensure the effectiveness of psycho-pedagogical support for the education of children with a disharmonious personality composition. When developing an individualised educational and corrective plan for a child with a disharmonious personality composition, it is necessary to maximise their typological and individual capabilities and needs. A qualitative result of psycho-pedagogical support for children in this category is their development in educational and social directions.

Autism spectrum disorder within the concept of disharmonious personality traits primarily represents a nervous system disorder characterised mainly by difficulties in social communication and impaired executive functioning. Executive functions are multidimensional cognitive abilities necessary for complex behaviour<sup>17</sup>.

The analysis of the specific characteristics of individuals with a disharmonious personality composition forms a practical basis for the development of an individualised program of educational and corrective work, which requires the cooperation and coordination of specialists, the implementation of differentiated correctional and psychological support programs, ensuring the prerequisites for maximum social adaptation.

The effectiveness of psycho-pedagogical support depends on the peculiarities of psychophysical development<sup>18</sup>. The correctional pedagogical process of educational work with children with a disharmonious personality composition should be comprehensive and cover language abilities, cognitive activity, and behavioural responses.

A pedagogical experiment was conducted as part of the research process. Sixty-four secondary school students participated in the experiment. The control group (with the traditional psycho-pedagogical support program) consisted of 31 individuals, while the experimental group (with the proposed elements of the psycho-pedagogical support technology) consisted of 33 individuals. The experiment lasted for the 2023-2024 academic semester and included diagnostic, formative, and summarising stages (Table I).

Table II presents the average values of the learning coefficient in the experimental and control groups.

The initial stage of the experiment showed that the levels of corrective-educational influence of psycho-pedagogical support in the experimental and control groups are comparable and require effective correction. Three levels were identified: high (learning coefficient from 1 to 0.7), intermediate (learning coefficient from 0.69 to 0.40), and initial (learning coefficient from 0.39 to 0.0) (Table III).

Implementing modern technologies, methods, and psycho-pedagogical support for individuals with a disharmonious personality composition implies multi-aspect and variability. Information and communication, gaming, interactive, project-based, and art-pedagogical technologies are appropriate for teaching children with a disharmonious personality composition<sup>19</sup>. At the same time, it is necessary to consider related risks that require preventive measures. Specifically, the results of scientists<sup>20</sup> show that the connection between internet addiction and social isolation is positive and significant. However, the link between internet addiction and psychological well-being is both harmful and significant. Thus, internet addiction affects social isolation differently and poses a threat to people's mental well-being.

Table I: Experiment structure.

Stage	Features
Diagnostic	Identification of the existing level of psychological and pedagogical support
Formative	Implementation of optimising elements of educational and correctional work
Summarising	Determining the performance dynamics

Table II: Learning Coefficient Values for the Experimental and Control Groups of Children with Disharmonious Personality.

Group	Features of the student sample	Learning rate
Experimental group	Sufficient level of correctional and educational impact of psychological and pedagogical support	0,67
Control group	Sufficient level of correctional and educational impact of psychological and pedagogical support	0,63

Source: compiled by the author

Table III: Structure of the Initial Learning Level of the Control and Experimental Groups.

Group	High-level, persons	Average level, persons	Basic level, persons	Total
Experimental group	5	12	16	33
Control group	4	13	14	31

Source: compiled by the author

Table IV: Indicators of the Effectiveness of Correctional and Educational Influence of Psychological and Pedagogical Support of the Experimental and Control Groups (by Student's t-test).

No.	Samples		Deviation from the average value		Deviation squares	
	B.1	B.2	B.1	B.2	B.1	B.2
1	61.3	81.5	-0.35	0.42	0.17	1.63
2	61.8	81.2	0.15	0.12	0.14	0.23
3	60.4	77.5	-1.25	-3.58	1.74	11.69
4	61.2	79.8	-0.45	-1.28	0.17	3.68
5	63.7	83.7	2.05	2.62	2.82	4.75
6	61.5	82.8	-0.15	1.72	0.006	1.90
Amounts:	369.9	486.5			5.04	23.88
Average:	61.65	81.08				

Source: compiled by the author

In particular, gaming technologies promote the development of cognitive abilities and active interaction skills. Information and communication technologies contribute to expanding cognitive activity, communication skills, and the formation of social activity. Interactive technologies help implement acquired skills and abilities in various fields. Quest technologies make the educational and corrective process unusual, vivid, and interesting, promoting the activation of the participant's cognitive, speech, and intellectual processes. Art technologies help correct the psycho-emotional sphere, behaviour, and personality.

After the completion of the experiment, noticeable changes were found in the studied subgroups of students. In particular, in the experimental group, the indicators of the basic level of learning increased by 17%, while in the control group, they increased by 22.7%. At the same time, the indicators of the intermediate level in the experimental groups increased by 20.9% and in the control groups by 19.1%. As for the high level, the indicator in the experimental groups increased by 21.8%, while in the control groups, it increased by 15%. The results of comparing the effectiveness levels of the corrective-educational influence of psycho-pedagogical support between the experimental and control groups (using the Student's t-test) are shown in **table IV**. The calculation result for the Student's t-test is 19.5. Since the empirical value  $t$  (19.5) is within the significance zone, it can be stated that the proposed technology is effective.

The control phase of the experiment allowed for assessing the effectiveness of the proposed elements of the corrective-educational influence of psycho-pedagogical support, indicating the feasibility of further research in the outlined direction.

Thus, the application of the diverse potential of corrective-developmental technologies within the framework of psycho-pedagogical support for individuals with a disharmonious personality composition, based on the consideration of students' psychophysical capabilities, will contribute to intensifying and improving the quality of the educational process and preparing students for social adaptation.

## Discussion

According to modern researchers Yunusalieva<sup>21</sup> and Miciak & Fletcher<sup>22</sup>, the main principles of support should prioritise the interests of the supported individual, continuity of support, and a comprehensive approach. According to Davis-Kean et al<sup>23</sup>, psycho-pedagogical support should include a comprehensive implementation of assistance to children with a disharmonious personality composition. The main task of psycho-pedagogical support for a child with a disharmonious personality composition, according to Paulus et al<sup>24</sup>, is to conduct

corrective and developmental activities using modern technologies – interactive, communicative, etc.

Studying the psychological determinants of isolation as a dysfunction of personality, L. Silvan et al<sup>25</sup> found that behaviour related to helping others and strategies that allow for more constructive use of time, such as actively overcoming problems, seeking psychosocial support, and embracing acceptance and personal growth, have a positive effect. Additionally, researchers<sup>26</sup> demonstrated the destructive impact of increased workload and pressure, which leads to discomfort and malaise in physiological, behavioural, social-cognitive, intellectual-labour, and psycho-emotional spheres.

As evidenced by the scientific developments of Steinbrenner et al<sup>27</sup>, it is essential to involve all participants in the educational process and corrective-psychological activities in optimising the processes of personal development, communication, learning, social adaptation, and revealing individual potential. The authors Syriopoulou-Delli and Gkiolnta<sup>28</sup> argue that every child, especially a child with a disharmonious personality composition, needs maximum contact with the surrounding world. Continuing, researchers Rahmatullah<sup>29</sup>, DeMatthews et al<sup>30</sup> have identified that psycho-pedagogical support should be implemented according to a specific algorithmic sequence, which includes:

- forming readiness for integration into a peer group;
- social and psychological adaptation of children with a disharmonious composition;
- ensuring a subject-spatial developmental environment according to individual characteristics;
- developing an individual educational-corrective process;
- developing prospective planning of personal development;
- monitoring the dynamics of psychosocial development.

## Conclusion

Psycho-pedagogical support for individuals with a disharmonious personality composition aims to ensure children's educational and corrective work development and enhance their adaptive capabilities, effectively contributing to their further successful social integration.

The proposed concept of psycho-pedagogical support for the studied category of individuals includes a range of tools, including targeted online platforms and educational resources, stimulation practices, multimedia materials, the implementation of adaptive individualised learning technologies, the introduction of problem-oriented correction methods, and the provision of feedback.

After implementing the proposed elements into the educational process, it was found at the control stage of the pedagogical experiment that the basic level



indicators increased by 17% in the experimental group and by 22.7% in the control group. At the same time, the indicators of the intermediate level in the experimental groups increased by 20.9% and in the control groups by 19.1%. As for the high level, the indicator in the experimental groups increased by 21.8%, while in the control groups, it increased by 15%. The calculation of the effectiveness indicators of the educational technology for children with a disharmonious personality composition in the experimental and control groups was carried out using the Student's t-test. This study's empirical value of  $t$  (19.5) is within the significance zone, indicating that the proposed technology is effective.

With an effective corrective-developmental process of psycho-pedagogical support, it is possible to improve

the mastery of communication skills and social behaviour abilities in individuals with a disharmonious personality composition, which is an indicator and result of overall mental development. The proposed innovative adaptive learning technologies for children with a disharmonious personality composition require further scientific development.

### Conflict of interest

The authors affirm that they have no conflicts of interest to disclose.

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## Appendix

### Questionnaire method

The purpose is to identify the level of quality of educational and correctional work and to check the condition of persons with disharmonious personalities

1. What elements of the environment provide you with food, drink and air?
2. What words do you most often say when you meet others when you say thank you or goodbye?
3. What do you know about your home country?
4. How can you help a lost boy in the street?
5. Where do you use maths during the day?
6. What qualities do you love about your parents, friends and teachers?

### Questionnaire processing key

Students' answers are analysed according to the following criteria:

- 2 points - answered the question correctly, gave three or more examples;
- 1 point - answered the question clearly, gave 1 - 2 examples;
- 0 points - the answer is inaccurate or incorrect.

Levels of effectiveness of educational technology for children with disharmonious composition

- High - 10 - 12 points
- Medium - 7 - 9 points
- Low - 6 points or less