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CONTINUOUS DEVELOPMENT OF SCHOOL CURRICULUM: CONCEPT, MODELS, EXPERIENCES

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The development of school curriculum is a complex problem that involves different perspectives of approach: psychological, pedagogical, didactic, managerial, etc. This article attempts to define and characterize the notion of „*curricular development*” from a modern and postmodern perspective. The development of school curriculum is presented in two senses: *the conception of new school curriculum/discipline and the optimization, modernization, and updating of the school curriculum in function*. At the same time, a model of school curriculum development focused on five steps is proposed: curriculum research/conceptualization; curriculum design; evaluation of the curriculum project; curriculum validation; curriculum implementation/institutionalization. The substantiation of a curricular development model also involves an analysis of the problem in different countries, as sources for identifying theoretical and praxiological benchmarks for carrying out this process.

Keywords: *school curriculum, curricular development, curricular optimization, curricular updating, curricular modernization, curricular research, curricular design, optimal curriculum.*

DEZVOLTAREA CONTINUĂ A PROGRAMEI ȘCOLARE: CONCEPT, MODELE, EXPERIENȚE

Dezvoltarea curriculumului școlar este o problemă complexă care implică diferite perspective de abordare: psihologică, pedagogică, didactică, managerială etc. În articolul dat se încearcă definirea și caracterizarea noțiunii de „*dezvoltare curriculară*” dintr-o perspectivă modernă și postmodernă. Dezvoltarea curriculumului școlar se prezintă în două sensuri: *conceperea de noi programe/discipline școlare și optimizarea, modernizarea și actualizarea curriculumului școlar în funcțiune*. Totodată, se propune un model de dezvoltare a curriculumului școlar axat pe cinci etape: cercetarea/conceptualizarea curriculară; proiectarea curriculară; evaluarea proiectului curricular; validarea curriculară; implementarea/instituționalizarea curriculară. Fundamentarea unui model de dezvoltare curriculară presupune și o analiză a problemei din diferite țări, ca surse de identificare a unor repere teoretice și praxiologice de realizare a acestui proces.

Cuvinte-cheie: *curriculum școlar, dezvoltare curriculară, optimizare curriculară, reactualizare curriculară, modernizare curriculară, cercetare curriculară, proiectare curriculară, curriculum optim.*

Introduction

In recent decades, the spectacular changes in society have become subjects of debate, analysis and predictions. Against the backdrop of globalization, a veritable „explosion” of technologies, information, values, alternatives, etc. is identified. In fact, this state of affairs is characterized as a postmodern one.

Postmodern education focuses on the interconnection of psychocentric and sociocentric paradigms, which led to the emergence of a new paradigm – the curriculum – having as a priority the purposes of education designed according to the psychological, pedagogical, but also societal requirements towards education.

Transformations at the level of educational curriculum aim at redimensioning the informative and formative functions of education, developing „prospective” curricular products, valorizing the interdisciplinarity/transdisciplinarity; expanding optional subjects, unifying information and communication technologies, training a new generation of teaching staff, promoting partnership relations between educational agents, stimulating active, interactive learning, self-learning [2, p. 5].

In this context, the development of school curriculum appears as a priority problem, the solution of which requires the creation/substantiation of a systemic vision of this process.

School Curriculum Development: Context and Perspectives of Approach

The term „optimal” (from Latin *optimus* – the best) can be defined as the „most appropriate model” or as the „most appropriate variant” of activity regarding the achievement of the conditions and objectives provided in the context of specific criteria/indicators.

The optimization criterion/indicator is a parameter based on which the comparative assessment of possible decisions and the results of respective activity is carried out.

The problem of *optimization* in education, including the curriculum, is not new. „Optimization” throughout its history has been treated as a principle, as a method/methodology, as a strategy for obtaining better results.

In recent decades, „optimization” has been treated as an approach/theory focused on educational laws and principles, on the conscious and scientific choice of decisions and activity models in the educational framework.

A well-known approach to optimizing the educational process belongs to I. K. Babanski: „Optimization is not a specific method or procedure, but a theory on the construction of learning process, within which a system of didactic principles, the content of education, the forms and methods of training, the real possibilities of students are treated and based on a complex analysis conscious and scientifically substantiated decisions are made” [4, p. 18].

In this context, I. K. Babanski substantiates:

1. *the principle of optimizing* the educational process, as part of the respective theory, focusing on a set of laws: the independence of objectives, contents from the learning possibilities of students; the interdependence and connection between the tempo and efficiency of learning; the efficiency of learning is determined by the motivation for the educational act; the efficiency of learning is determined by the optimal combination of didactic methods and forms of organizing training;

2. *the criteria and methods for achieving optimization*: the performance criterion achieved by each student in the given context and in the given period in relation to their real level of knowledge; the criterion of achieving the time norms established for teachers and students with reference to achieving learning objectives; the criterion of adequate application of efforts for the efficient implementation of training process.

In fact, the optimization of training provides for the unity of optimization of teaching (teacher activity) and the optimization of learning (student activity), based on the following *methods*: systemic and contextual design of learning activities; permanent modernization of learning content and tasks, identifying the main aspects; establishing rational methods and means of training regarding the achievement of designed objectives; differential and individualized approach to the training process; creating the respective conditions for ensuring effective learning; identifying activities regarding time saving and optimal establishment of the teaching-learning tempo; analyzing the results of training in relation to the criteria for optimizing training.

Therefore, I. K. Babanski proposes a unitary (complex) approach to optimizing the training process, which assumes: the optimization procedure includes all components of the training process; focusing on the entire set of didactic principles; the consistency of achieving objectives, knowledge of students’ possibilities and the potential of learning activities, the specificity of learning contents and forms in the process of establishing/identifying teaching methods, diversifying training means, etc.

A modern approach to optimizing the educational curriculum can be found in the work of I. Negreț-Dobridor *General Theory of Educational Curriculum* [3]. Negreț-Dobridor tries to develop S. Dewey’s ideas by referring to the notions of „*curriculum development*” and „*curriculum improvement*”, which, in the author’s view, are almost synonymous, but are nevertheless „relatively distinct” phenomena [3, p. 190].

Curriculum development refers, first of all, to the design of an absolutely new curriculum.

The case of the Republic of Moldova: in the 1980s, after gaining independence, the need to change the curricular paradigm arose, respectively, the need to develop new curricula.

Curriculum optimization refers, first of all, to improvement – to doing better what is already going well. In fact, the idea of curriculum optimization rises to the rank of a pedagogical principle (J. A. Comenius, I. K. Babanski).

It should be noted that the expression „curriculum development” can have other meanings: the emergence of new approaches within the framework of curriculum theory; the emergence of new elements/components in the curriculum structure; the emergence of new curricular products; the emergence of new educational strategies, etc.

As a rule, in educational practice the terms „curriculum optimization”, „curriculum modernization”, „curriculum development”, „curriculum improvement” are used as synonyms.

I. Negreț-Dobridor does the same thing in his work [3], substantiating the pentaphasic model of modern curriculum optimization: the notions „curriculum development” and “curriculum optimization” are considered as synonyms from the perspective of change management.

Therefore, in his convergent vision on the optimization of the modern curriculum, the author distinguishes two fundamentally independent aspects: the *deontological* aspect, the *technical* aspect.

The *first deontological* aspect refers to the expected and unexpected effects following the implementation of theoretical and applied steps in the optimization of educational curriculum.

The *second technical* aspect involves a specific technology focused on the systemic, praxiological, methodological approach and on educational design norms.

- I. Negreț-Dobridor proposes a pentaphasic model of the optimization/development of modern curriculum:
1. *Curriculum research*: diagnosis of the current state, curriculum analysis, forecasting of development trends.
 2. *Curriculum designing*: reference concepts – mandatory component of the curriculum, principles and tools of curriculum design.
 3. *Evaluation of curriculum project* through expertise and critical analysis, as well as experimentally.
 4. *Validation of the curriculum* by official authorities (*for example*: by the Ministry of Education).
 5. *Implementation of the curriculum* carried out by specialists within the framework of curriculum/change management [3].

A more general approach to curriculum development belongs to Sorin Cristea, who analyzes models of reconceptualization (development) of the curriculum through construction, reconstruction and deconstruction. The author correlates these three models with the educational paradigms: premodern, modern and postmodern. In fact, from the perspective of postmodernity, the emphasis is on continuous curricular reconstruction in relation to the changes that permanently take place in society.

If the approach to education through deconstruction generated the emergence of new branches/domains in the sciences of education and, first of all, of the general theory of the curriculum, then the approach to education through reconstruction considers the permanent reconstitution of the whole: education, training and the curricular design of education and training [1, p. 137].

The curriculum paradigm from the perspective of reconstruction considers the optimal realization of the relationships between the psychocentric and sociocentric aspects; educator and educated; objectives-contents-methodology-evaluation; teaching-learning-evaluation.

Therefore:

1. The „phenomenon” of optimization in education is approached at the theoretical level (in the view of I. K. Babanski).
2. The „phenomenon” of optimization is viewed as a pedagogical principle (I. Negreț-Dobridor, I. K. Babanski).
3. The term „optimization” is not synonymous with the term „development”, but in educational practice they are very often used with the same meaning.
4. In the view of some authors, „curriculum development” involves the development/design of new curricula, and „optimization” involves the continuous improvement of existing curricula.

Conceptualization of Educational Curriculum Optimization/Development

The complex foundation of educational curriculum optimization/development focuses on:

1. *General curriculum theory*, which has as its specific object of study the curricular design of education and training in an open pedagogical context at the level of education/learning system, education system and process, training process and situations.

2. *General education theory*, which has as its object of study: education in the broad social sense and education in the narrow pedagogical sense, the functions of education, the general goals of education, the basic structure of education, the sides of education. The general theory of education is viewed in the context of curriculum paradigm.

3. *General training theory*, which has as its object of study the training activity as a subsystem of educational activity. The basic categories of the general theory of education are: curriculum, didactic principles, forms of optimizing education, objectives/purposes, contents, methodology/technology/strategy/methods, evaluation; teaching-learning-evaluation, teaching aids, didactic communication.

4. *General pedagogical research theory* with reference to curriculum research. The use of research methodology will provide the interpretative and explanatory basis necessary for understanding the perspectives of curriculum development/optimization, but also for designing new conceptual models of the educational curriculum.

5. *General personality theory*: personality structure, laws of personality formation and development, individual and age-related particularities, internal and external particularities of personality development.

In the context of these theories, at least five directions of curriculum optimization/development are identified:

1. Designing an optimal educational curriculum from the point of view of the formation/development of the student's personality.

2. Optimal design of educational goals and their reflection in the curriculum framework and more efficient implementation of the educational act in concrete contexts.

3. Optimal organization and implementation of the training process in relation to the designed goals.

4. Optimizing training in relation to the individual characteristics of students, their level of development, performance, motives, interests, etc.

5. Researching problems in the curriculum framework in order to: (a) redesign the educational curriculum from the perspective of development/optimization; (b) make the training/teaching-learning-evaluation process more efficient.

In our view, the concepts of „optimization” and „development” are part of the set of factors that ensure the quality of the curriculum at the product level and at the process level, namely: research, design, implementation, monitoring, management. Each of these factors/dimensions fulfills specific functions in concrete contexts.

Curriculum design presents a complex activity that has its specific methodology and strategy and which aims to ensure the interdependence and interconnection between: curriculum design - objectives/competences - contents - methodology - evaluation. Curriculum design involves: developing the general concept of the curriculum; designing curricular products: curriculum, subject curricula, textbooks, methodological guides, long-term teaching projects; designing the training process (focused on educational units).

As a rule, design activity is necessary when designing an absolutely new curriculum. In the case of the Republic of Moldova, the design of an absolutely new curriculum is related to the national curriculum reform, started in the 1995s, financed by the World Bank and the Government of the Republic of Moldova. The need for a new curriculum was motivated by the change in the educational paradigm. The need to design a new curriculum also appears in other contexts/conditions: the introduction of new subjects in the curriculum; the integration of two or more school subjects; the emergence of new subjects at the school's decision; the change in the concept of teaching-learning of a subject (change in the curricular paradigm).

In other cases, we can talk about curriculum redesigning.

Educational curriculum development is a concept and an activity that involves: developing curriculum theory through new approaches, concepts, etc.; developing the content and structural framework by introducing new curriculum elements/components; creating new curriculum products/documents; developing new educational technologies, etc.

Curriculum development is a continuous process and aims to relate the curriculum to permanent changes and trends in curriculum development at national and international levels. Curriculum development focuses on: the results of respective scientific research; experiences in implementing school curricula; technological transfer, etc.

Educational curriculum optimization is a principle and an activity that involves “improving”, “correcting something that is no longer working well or is no longer good, or making better what is already working well” [3, p. 190-191].

In fact, optimization means doing something better, with minimal effort and tools, in a shorter time, achieving quality, efficiency with optimal means. With reference to the curriculum, the principle of optimization is applied in the following contexts:

- *In the case of designing/redesigning the educational curriculum* with the aim of: obtaining optimal curricular products from the point of view of organizing/implementing the educational process.

In this case, the curriculum can be designed or redesigned in relation to the initial approach, but the connections between the curricular components must be better established, the training objectives must be formulated more adequately, etc. Optimization in this case does not necessarily also imply its development. It is also necessary to mention the opposite phenomenon: curriculum development does not always ensure its optimization. For example, curriculum development from the perspective of focusing on competences does not automatically ensure that this curriculum is also an optimal document from the point of view of quality. However, as a rule, curriculum optimization, in this context, is also synchronized with its development.

- *In the case of training process* by: redefining objectives, reorganizing content, choosing teaching strategies and methods, individualizing and differentiating training; monitoring time, creating conditions, diversifying forms of organizing training, etc.

The efficient implementation of optimization principle at the process level depends on: the quality of textbooks and methodological guides; the proficiency/professionalism of the teaching staff; the level of motivation and development of students; the quality of conditions within which the educational process is carried out, etc.

As an example, we bring a way to choose the optimal lesson. This way involves a series of interconnected actions of the teaching staff: *operational and holistic design of a lesson* correlated with the design focused on the learning unit, long-term design, curriculum by subjects, but also in relation to the possibilities of the school textbook; *concretization of objectives and teaching tasks/activities* in relation to the real possibilities of students and classroom conditions; *identification of the main thing in organizing the contents*; *choosing the optimal logic* in studying the subject; *choosing the optimal structure of lesson*; *choosing the optimal learning strategies* in relation to the objectives of lesson, the potential of class, own pedagogical proficiency, etc.; *rational choice of forms of organizing training*; *rational choice of the tempo and time* for carrying out learning activities; *creating optimal conditions for learning*; *achieving effective communication*; *identifying the correspondence of real learning outcomes* with the students' capabilities and the objectives set, as well as with the time allocated for the respective activities.

In educational theory and practice, we can also encounter such notions as „rationalization”, „modernization”, „improvement” of the curriculum, which should not be confused with the notions of „development”, „optimization”.

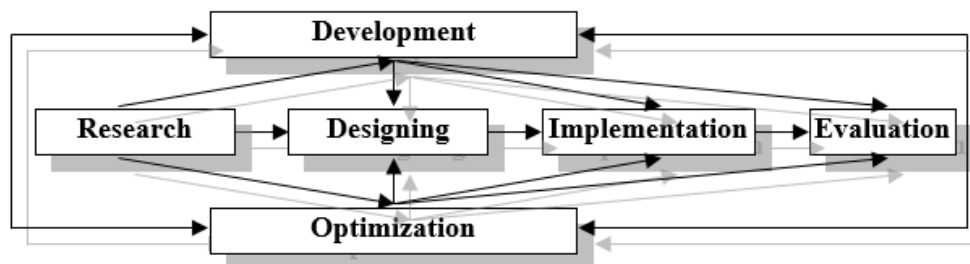
Rationalization, as a rule, refers to improving the structure or an element of the structure, to improving the organization of an activity. With reference to the curriculum, this term is less applicable.

Modernization means redesigning the curriculum in accordance with current requirements. So, modernization refers more to improving the educational process by implementing new methods, information technologies, etc. In the Republic of Moldova, this term has been widely used in the framework of the renovation of the third generation curriculum. The current curriculum by subjects is often called the modernized curriculum.

Curriculum improvement includes elements of rationalization and modernization and, as a rule, involves improving parts of the whole. In practice, this term does not apply with reference to the curriculum; moreover, its manifestation does not have clear measurement indicators.

Curriculum updating refers to its adjustment to current requirements. Curriculum updating is a less successful concept, because from the start it considers the existing curriculum as outdated, which contradicts its real value; it may only be about some less functional elements/aspects.

Therefore, the concept of curriculum optimization is part of a broader approach – the one aimed at ensuring the quality of education. This concept can be presented graphically as follows:

Fig. 1. Development/Optimization in Curricular Context.

Therefore, the optimal curriculum at the product level is determined by: curriculum experts in relation to existing/established criteria; teachers in the implementation process; student results reported to curricular objectives.

The optimal curriculum at the process level is determined by: inspectors/monitors in the field; teachers (through self-evaluation); student results reported to curricular objectives.

Which curriculum at the *product* level can be called optimal?

- The one that ensures the efficient organization of the educational process at the system level and at the process level.

- The one that is positively appreciated by experts, teachers in relation to quality criteria.

- The one that ensures the formation/development of the student's personality in relation to his/her own potential.

Which curriculum at the *process* level can be called optimal?

- The one that through its structure, logic and content ensures the achievement of curricular objectives.

- The one that through active/interactive teaching strategies ensures the achievement of curricular objectives.

- The one within which the objectives are achieved in the context of the foreseen time.

The optimal curriculum in process terms does not generally mean the best, but the best/the most efficient: (a) for the context and concrete conditions and the possibilities of the teaching staff; (b) at the concrete stage and in accordance with the level of preparation of the students, etc.

From this it follows that the learning results of one student (a group of students) may be optimal, and those of another student (group of students) may not be optimal. In other words, for each student his/her own optimal result must be established.

Therefore, the system of ways to achieve the optimization/development of the curriculum follows/is deduced from the theories, principles and laws of curriculum design and the implementation of educational process.

It should be noted that there is no single optimization/development variant, but a wide variety of variants. The problem lies in choosing the most appropriate variant for the given context. The theoretical foundation for developing the methodology for optimal choice of variants is the systemic approach.

Optimal conditions – „optimal” curriculum. Without creating optimal conditions, it is impossible to design and develop the educational curriculum.

The optimal design/redesign of the written curriculum (of curriculum products) requires compliance with the following conditions:

1. The existence of clear curriculum policies.
2. The existence of structures for implementing curriculum management at the national and local levels.
3. The existence of groups of curriculum designers and their continuous training.
4. The motivating curriculum designers through various forms.
5. The existence/substantiation of a clear methodology and strategy for the designing/redesigning, optimization and development of the educational curriculum.

The realization of principle of curriculum optimization at the process level focuses on compliance with the following conditions:

1. Material conditions and didactic insurance: the existence of offices, laboratories, technical means, teaching materials, etc.

2. Conditions for ensuring the health of students: compliance with hygiene standards, medical insurance, etc.

3. Conditions for ensuring the moral-psychological and aesthetic climate: effective communication, teachers' tact, acceptance of different opinions, stimulation and motivation of students, promotion of values and aesthetic orientations, etc.

A special condition concerns the professionalism, proficiency and attitude of teachers towards the education of students [2, p.77-85].

International Experiences in Developing School Curricula

In all the countries consulted, the following are taken into account in confirming curriculum development: *fundamental principles/theoretical landmarks; curriculum components; teaching strategies; the role of teacher; context and adaptability; outcome and impact.*

Fundamental Principles as Development Object

In **Finland**, the emphasis is on integrated learning. The Finnish curriculum focuses on the development of essential competences, which are defined as the ability to apply knowledge and skills in diverse and real-world contexts. Content units are often integrated into modules, which combine several disciplines, so that students can establish connections between different areas of knowledge and apply knowledge in projected situations.

In **Estonia**, curriculum development places significant emphasis on digitalization and personalized learning in response to the individual needs of students. The national curriculum includes the use of information and communication technologies as an integral part of the educational process, preparing students for a constantly changing digital world. Personalized learning focuses on building the curriculum framework and adapting the educational process to meet the individual needs and interests of each student.

In **Denmark**, curriculum development is characterized by a holistic and interdisciplinary approach, which aims to provide students with a more holistic and connected education. The Danish curriculum promotes the integration of different disciplines and subjects to create a cohesive educational experience. Instead of studying subjects in isolation, students work on projects that combine concepts and skills from multiple fields, facilitating a deeper and more applicable understanding of knowledge. Interdisciplinary learning encourages students to apply the knowledge and skills acquired in one discipline to solve problems and explore topics in a broader context. This develops critical thinking and the ability to make connections between concepts from different fields.

In **the Netherlands**, school curriculum development is characterized by an emphasis on flexibility and personalization, with the aim of adapting learning to the individual needs and interests of students. This model reflects the country's commitment to providing an adaptable and student-centered education. Here is a detailed description of the approaches used:

- The Dutch curriculum is designed to be flexible, giving schools and teachers the autonomy to adapt lessons and educational activities to the needs and interests of students. This flexibility allows for the integration of relevant and current themes and topics that may vary depending on the local context and student preferences.

- Personalizing learning focuses on adapting the educational experience to suit the learning styles, pace, and individual interests of students. This involves adjusting teaching materials, teaching methodologies, and assessment strategies to support the progress and success of each student.

In **Japan**, school curriculum development includes an emphasis on interdisciplinary collaboration, reflecting an integrated approach that aims to prepare students to solve complex problems and make connections between different fields of knowledge. This approach promotes deeper and more relevant learning that can better respond to the challenges of an ever-changing society. Here is a detailed description of the approaches and practices used in Japan to promote interdisciplinary collaboration:

- Japan promotes the integration of disciplines to provide students with a holistic understanding of the subjects they study. The interdisciplinary approach encourages students to make connections between different fields of knowledge and to apply concepts in a variety of contexts.

- Interdisciplinary collaboration is often based on problem-based approaches, in which students work to solve complex problems that involve multiple disciplines. This helps develop problem-solving and critical thinking skills.

In *Denmark*, project-based learning and problem-solving are an essential aspect of school curriculum development. This educational model promotes active and engaging learning that encourages students to apply knowledge in a practical and relevant way. Here is a detailed explanation of how Denmark implements these approaches in the educational framework:

- Project-Based Learning (PBL) is an educational model in which students work on complex and interdisciplinary projects that involve exploring real and relevant problems. This model allows students to develop creative solutions and apply knowledge from different fields to address specific challenges.

- The educational approach in Denmark focuses on problem-solving, in which students are encouraged to identify, analyze and solve problems in a critical and innovative way. This involves developing critical thinking skills, collaboration and creativity.

Curricular Components: Development Guidelines

Table 1. Curricular Competences in Development.

No. Crt.	Country	Characteristics and Guidelines
1.	<i>Finland</i>	The curriculum allows flexibility in lesson planning and implementation, giving teachers the autonomy to tailor learning to students' needs and interests. The curriculum defines learning objectives and key competences to be developed, such as critical thinking, collaboration, problem-solving, and communication skills. Teaching methods focus on active learning, involving students in hands-on activities and projects that promote critical thinking and problem-solving. Assessment focuses on continuous feedback and competences development, not just summative grading. Formative assessment is used to guide the learning process and help students improve their skills.
2.	<i>Estonia</i>	The Estonian curriculum is designed to incorporate essential digital competences, such as programming, advanced software use, and cybersecurity. This ensures that students not only use technology, but also understand the principles behind it. There is a wide range of digital educational resources available, including online learning platforms, educational applications and digital libraries. These resources are used to support both teaching and independent learning. Teaching methods are often technology-based, including the use of online learning platforms, educational applications and collaborative digital tools. These methods facilitate more interactive and dynamic learning. Assessment is often adaptive, using technologies that allow for personalized testing and feedback. This helps to identify strengths and areas for improvement, thus adapting to the individual progress and needs of students.
3.	<i>Denmark</i>	The Danish curriculum often focuses on themes and projects that include multiple disciplines. For example, a project on climate change may integrate natural sciences, geography, mathematics and language, allowing students to explore the topic from different perspectives and apply a variety of knowledge.

		<p>The curriculum is designed to be flexible, allowing for adaptation to students' needs and interests. Teachers have the freedom to plan and implement lessons that integrate different subjects, depending on the educational context and the specific goals of the students.</p> <p>Teaching methods in Denmark often include project-based learning, which allows students to approach complex problems and collaborate to develop solutions. This type of learning encourages creative exploration and the application of knowledge in a practical and relevant way.</p> <p>Assessment is often holistic and based on observation, continuous feedback and evaluation of the learning process, not just on the final results. This allows for a more complete understanding of students' progress and development in the context of an interdisciplinary approach.</p>
4.	<i>Netherlands</i>	<p>The Dutch curriculum allows for personalization through the inclusion of elective learning options and optional modules, which allow students to choose courses and activities that align with their personal interests and future plans.</p> <p>The use of technology is a key aspect of personalizing learning. Online learning platforms, digital educational resources, and customized apps are used to adapt materials and activities to the individual progress and needs of students.</p> <p>Teaching methods include differentiated learning, which involves adapting lessons and activities to respond to students' diverse learning styles and proficiency levels. Teachers use a variety of strategies to ensure that all students have access to quality learning and can progress at their own pace.</p> <p>Assessment is often continuous and formative, providing regular feedback to students and adjusting to reflect individual progress and needs. Formative assessment allows for early identification of areas that need improvement and provides opportunities to adjust learning strategies.</p>
5.	<i>Japan</i>	<p>The Japanese curriculum includes activities and projects that integrate knowledge from various disciplines. For example, a project on the environment may include science, mathematics, geography, and social studies, allowing students to approach the problem from multiple perspectives.</p> <p>Interdisciplinary projects and assignments are an essential part of the curriculum. They allow students to explore complex topics and develop creative solutions that require the application of knowledge from different fields.</p> <p>Project-based learning is a commonly used method that involves working in teams to complete tasks that require the application of knowledge from multiple disciplines. Students are encouraged to collaborate and contribute their individual expertise to address complex problems.</p> <p>Assessment in the context of interdisciplinary collaboration is often integrated and reflects students' contributions to projects and activities that involve multiple fields. This may include group assessments, self-assessments, and peer assessments, which provide a complete picture of individual and collective skills and contributions.</p>

Role of Teacher in Developing School Curriculum

Teachers in the countries listed are prepared to effectively apply the provisions and guidelines of the educational curriculum and are open to continuous training, innovation and change.

Context and Applicability

As a rule, school curricula in the respective countries are flexible and can be adapted to local contexts and the specific needs of students and the community.

Table 2. Outcome and Impact as Factors of Curriculum Development.

No. Crt.	Country	Characteristics and Guidelines
1.	<i>Finland</i>	<p>The competency-based approach helps students develop skills essential for success in their professional and personal lives, such as critical thinking, teamwork and adaptability. In <i>conclusion</i>, Finland's competency-based approach offers an education model that emphasizes the development of practical and relevant skills, promoting integrated and adaptable learning that responds to students' needs in a holistic and personalized way.</p>
2.	<i>Estonia</i>	<p>Estonian students are well-prepared for a digital world thanks to advanced technology and IT skills. This gives them a competitive advantage in their future careers and prepares them for the challenges of a technology-based economy.</p> <p>Personalized learning allows students to progress at their own pace and focus on the areas that interest them most. This contributes to a more satisfying and effective educational experience.</p> <p>In <i>conclusion</i>, Estonia has developed an educational model that leverages technology to support personalized learning and prepare students for an increasingly digital world. This model effectively integrates digital education into the national curriculum and uses advanced technologies to support the development of students' essential competences.</p>
3.	<i>Denmark</i>	<p>The integrated approach helps students understand and apply knowledge in a more cohesive and relevant way, making connections between concepts and real-life situations. Interdisciplinary learning develops important transversal competences, such as collaboration skills, critical thinking, and problem-solving, which are essential for success in a variety of contexts and careers.</p> <p>In <i>conclusion</i>, Denmark adopts an integrated and interdisciplinary curricular approach that promotes holistic and connected learning, supporting students in developing a deep and applicable understanding of knowledge. This educational model facilitates collaboration across disciplines and encourages exploration of the complexity of the world from multiple perspectives.</p>
4.	<i>Netherlands</i>	<p>Personalizing learning helps students to be more motivated and engaged, as they feel more connected to the educational material and more involved in their learning process. Students benefit from learning that is tailored to their needs and interests, which can lead to improved academic performance and the development of skills essential for future success.</p> <p>In <i>conclusion</i>, the Dutch educational model promotes flexibility and personalization in the school curriculum, providing students with opportunities to tailor their educational experiences to their individual needs and interests. This approach supports the development of more relevant and engaging learning, contributing to students' academic and personal success.</p>
5.	<i>Japan</i>	<p>Interdisciplinary collaboration helps develop problem-solving skills by exposing students to complex problems that require the application of knowledge from different fields.</p> <p>Students learn to collaborate and communicate effectively within a team, developing skills essential for professional and personal success.</p> <p>In <i>conclusion</i>, Japan adopts a curriculum approach that promotes interdisciplinary collaboration, integrating diverse fields of knowledge to provide students with more complex and relevant learning. This educational model supports the development of essential skills for problem solving and collaboration in an interconnected world.</p>

General Conclusions***With reference to the conceptual framework:***

- Curriculum optimization/development is part of a broader approach – the design and implementation of the educational curriculum, performing certain specific functions.
- Curriculum optimization/development can be viewed as a theory, as a principle and as a way of ensuring the quality of curricular documents, but also of the educational process.
- The notions of „optimization”, „development”, „modernization”, „design/redesign”, „conception” are not synonymous; each of them has its own meaning and specific functions.
- Curriculum optimization/development is a determining condition in ensuring the quality of the educational curriculum. At the same time, the efficiency of the optimization/development process is determined, in turn, by adequate conditions.
- Curriculum optimization/development is a continuous process determined by the needs and trends of the evolution of education internationally and nationally.

With reference to international experiences:

- Experiences in monitoring and developing school curricula vary significantly between countries, but the most effective practices share a number of essential features. European education systems offer a variety of effective approaches to developing school curricula, each adapted to the specific context of each country. Common factors in these approaches include flexibility, the use of data and technology, community involvement and a focus on competences development – the key factor contributing to the success of these education systems. By implementing these good practices, education can become more relevant, adaptable and student-oriented.
- Models of school curriculum development are essential for ensuring the quality and relevance of education. Although they vary significantly between countries, certain common features contribute to the success of education systems.

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MONITORING SCHOOL CURRICULUM IN DIFFERENT COUNTRIES: A COMPARATIVE STUDY

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In a constantly changing world, school curricula play a central role in preparing students for life's challenges. In Europe, monitoring and continuous development of school curricula is a priority for improving the quality of education, including through the effective formation of students' competences. Curriculum monitoring and development is an essential process for ensuring the relevance of education. This article examines the most effective methods of monitoring the school curriculum in different countries: Finland, Estonia, Germany, France, Denmark, Singapore, the United States of America, the Republic of Moldova. The examination of problem of monitoring the school curriculum focuses on several dominant aspects: theoretical foundations of school curriculum monitoring (theories and conceptual approaches), practices, experiences and methods of carrying out the process of monitoring the school curriculum; the impact and challenges of curricular monitoring. Some directions of curriculum development are also stipulated as reflections of school curriculum monitoring.

Keywords: *integrated approach, quality in education, school curriculum, curriculum development, curriculum evaluation, curriculum monitoring methods.*

MONITORIZAREA PROGRAMELOR ȘCOLARE ÎN DIFERITE ȚĂRI: STUDIU COMPARATIV

Într-o lume în continuă schimbare, curriculumul școlar are un rol central în pregătirea elevilor pentru provocările vieții. În Europa, monitorizarea și dezvoltarea continuă a curriculumului școlar reprezintă o prioritate pentru îmbunătățirea calității educației, inclusiv, prin formarea eficientă a competențelor elevilor. Monitorizarea și dezvoltarea curriculară reprezintă un proces esențial pentru asigurarea relevanței educației. În acest articol se examinează cele mai eficiente metode de monitorizare a curriculumului școlar în diferite țări: Finlanda, Estonia, Germania, Franța, Danemarca, Singapore, Statele Unite ale Americii, Republica Moldova. Examinarea problemei de monitorizare a curriculumului școlar se axează pe câteva aspecte dominante: fundamente teoretice ale monitorizării curriculumului școlar (teorii și abordări conceptuale), practici, experiențe și metode de realizare a procesului de monitorizare a curriculumului școlar; impactul și provocările monitorizării curriculare. Sunt stipulate și unele direcții de dezvoltare curriculară ca reflecții ale monitorizării curriculumului școlar.

Cuvinte-cheie: *abordare integrată, calitate în educație, curriculum școlar, dezvoltare curriculară, evaluarea curriculumului, metode de monitorizare a curriculumului.*

Introduction

The school curriculum is a fundamental tool in the formation and development of cognitive, social, affective and psychomotor competences, a tool on the basis of which the entire educational process is organized. Over time, its adaptation to the needs of learners and the challenges of contemporary society has become a necessity. European countries approach the issue of developing and monitoring the school curriculum in different ways, integrated into different cultural and socio-economic contexts. Despite the diversity of approaches, there are a number of common factors that influence the efficiency of these processes: the conceptualization of curricular monitoring, the selection and use of educational data, the involvement of different factors, adaptability and the emphasis on the development of general and specific competences.

School Curriculum Monitoring: Concept and General Characteristics

School curriculum monitoring is an important stage regarding the continuous and cyclical development of the written curriculum, the taught-learned-assessed curriculum.

Curriculum monitoring aims to collect information/evidence to describe and formulate concepts about the value and quality of the curricula in function.

School curriculum monitoring involves 1) evaluating curricular products (curriculum, subject curriculum/syllabus, textbook, methodological guide, etc.) before they are implemented and 2) evaluating the teaching-learning-assessment process organized on the basis of these documents.

School curriculum monitoring in function is a process evaluation, which aims to control and improve the quality of curriculum application at the level of educational practice, which identifies barriers, errors or difficulties in applying the written curriculum and as a result, creating the premises for continuous and cyclical development of the school curriculum.

Monitoring the school curriculum in function involves the following aspects [12, p. 42]:

- the correspondence between the written curriculum and the taught/implemented curriculum;
- the extent to which the internal logic of the teaching-learning-assessment process is respected;
- the extent to which the provisions of designed curriculum are valorized on what and how to teach, how to organize learning and assessment;
- the identification of causes that generate barriers/difficulties in the application of written curriculum, as well as ways to correct/improve problematic situations, but also to prevent these situations in the future, providing necessary information to national curriculum designers, but also to decision-makers;
- the identification of impact of the written and taught curriculum on school results; impact assessment assesses whether the level of competence monitoring is in line with school objectives (by education levels, by school years).

In this context, we consider it appropriate to examine different approaches to school curriculum monitoring in different countries, as a source for establishing a school curriculum monitoring system in the Republic of Moldova.

Monitoring School Curriculum in Different Countries: A Comparative Framework

The analysis of specialized literature from different countries on the issue of monitoring the school curriculum allowed us to highlight several approaches both theoretically and praxiologically. It is obvious that all countries (subjects of this study) in their own approaches to monitoring the school curriculum emphasize the establishment and valorization of the theoretical foundations of this process.

Of interest are the approaches to monitoring the school curriculum in **Finland**, which is internationally recognized for its educational performance. As researchers C. Dweck, P. Black and D. Wiliam state, a dominant factor of success is the monitoring of school curriculum, focused on research and continuous feedback. Research-based monitoring is based on the principles of educational research and the use of empirical estimates to guide decisions regarding the continuous development of the school curriculum.

The Finnish concept of monitoring the school curriculum, however, focuses on two dominant theories: *the Formative Assessment Theory and the Self-Determination Theory*.

Formative assessment is essential in the Finnish educational model. According to the works of Black and Wiliam (1998), formative assessment is defined as a continuous process that takes place throughout the entire learning cycle, with the aim of adjusting teaching and learning to meet the needs of students. In Finland, this approach is extended by the direct involvement of teachers in the process of evaluating and adapting curricula based on the results of periodic assessments. Research shows that formative assessment contributes significantly to improving academic performance, as students receive personalized feedback that allows them to adjust their own learning strategies [1].

Within the Finnish educational system, a central role is played by the “self-determination theory”, developed by Deci and Ryan (2000). This emphasizes the importance of autonomy, competence and relatedness in motivating and engaging students in the learning process. In Finland, curricula and assessments are designed to give students high autonomy in the learning process, and feedback is used to support the development of individual competences, promoting high intrinsic motivation [8].

Another concept of school curriculum monitoring is promoted by **Estonia**, based on technology and data. Technology and data-driven monitoring is based on three main pillars: continuous data collection and

analysis, the use of algorithms to personalize learning, and the automation of assessment and feedback processes. These approaches are based on theories from digital education and big data analysis, which allow for more accurate assessment and dynamic adjustment of curricula.

Adaptive learning is an educational approach in which digital technologies are used to adjust educational materials and teaching methods according to the individual needs of students. This theory is supported by the work of Bloom (1984), who emphasizes the importance of adjusting learning methods to allow each student to progress at his or her own pace. In Estonia, digital systems use machine learning algorithms to collect and analyze data on student performance, adjusting curricula and teaching methods to provide a personalized educational experience [2].

Another important theoretical foundation is the digital feedback theory, which suggests that providing immediate and personalized feedback can have a significant impact on the learning process. According to research by Hattie and Timperley (2007), immediate feedback allows students to quickly identify mistakes and adjust their learning strategies, which leads to constant improvement in performance. In Estonia, digital educational platforms allow for continuous monitoring of students' progress and provide real-time feedback, contributing to more efficient and faster learning [13].

Big data analysis in education refers to the use of large data sets collected from various sources to evaluate and optimize educational processes. This data includes information about academic performance, student behavior, and the level of engagement in educational activities. Theoretically, big data analysis allows for more detailed and accurate monitoring of student performance and curriculum effectiveness. Siemens and Long (2011) were among the first to highlight the potential of big data analysis in education, noting that it can revolutionize the way educational decisions are made and how study programs are structured.

An original concept of school curriculum monitoring is promoted in **Germany** – the active participation of educational actors. The active participation of educational actors is based on several educational theories, which emphasize the importance of involving all stakeholders in the educational process. These theories include the collaborative learning, the social capital theory, and the ecological model of education.

The collaborative learning theory, developed by Vygotsky et al. (1978) argues that learning is a social process and collaboration between different people can significantly improve educational outcomes. In Germany, educational actors such as teachers, parents and students are actively involved in the design and evaluation of curricula through consultations, meetings and discussions, which leads to an educational process that is better adapted to local and individual needs [16].

The theory of social capital, formulated by Bourdieu (1986), emphasizes the importance of social networks and the resources they provide in the context of education. In Germany, the active involvement of parents and the community in school life is considered a form of social capital that can improve students' academic performance. Parental participation in school councils or extracurricular activities is essential for strengthening the link between school and community and supporting students' educational development [4].

The ecological model of education, proposed by Bronfenbrenner (1979), emphasizes the interaction between the different factors in the educational environment – from the family and school, to the community and educational policies. The active participation of educational actors in Germany is an example of the application of this model, since the involvement of all stakeholders at local, regional and national levels allows the adaptation of curricula to the specific needs of each region and community, contributing to the development of a more equitable and efficient education [5].

While in Germany the emphasis in the process of monitoring the school curriculum is on the active participation of educational actors, in **France** the emphasis is on the national and international assessments PISA (Program for International Student Assessment) and PIRLS (Progress in International Reading Literacy Study). School curriculum monitoring is always based on different ecological theories and models. Among these, *psychometric* theories and *ecological models of assessment* are the most commonly used to understand the impact of assessments on the education system.

Psychometric theory focuses on the measurement and interpretation of students' cognitive performance through standardized tests. In France, national and international assessments, such as the PISA and PIRLS tests, use advanced psychometric techniques to assess students' competences in areas such as reading,

mathematics and science. *The Rasch Model* and other statistical models are often used to ensure the reliability and validity of test results, contributing to a correct assessment of student competences and monitoring educational progress (Bond & Fox, 2015) [3].

The ecological model of assessment, inspired by Bronfenbrenner (1979), emphasizes the context in which students learn, including the influences of the social, family and school environment. In France, national and international assessments are not limited to measuring cognitive competences, but also analyze factors that influence learning, such as socio-economic status, family environment and school resources. This holistic approach allows for a more comprehensive understanding of educational performance and ways to improve equity and access to education [5].

A scientific approach to monitoring school curriculum is being proposed and implemented in **Singapore**, focusing on using data to relevantly update the educational curriculum.

Singapore is recognized globally for the outstanding performance of its students in international assessments such as PISA and TIMSS (Trends in International Mathematics and Science Study). This success is the result of an integrated education strategy that relies on the accurate use of data to make continuous adjustments to the education system. Data collected through formative and summative assessments, as well as feedback from teachers and students, are used to adjust curricula, teaching methods, and teacher professional development.

The use of data in education is based on several theoretical frameworks, including *the data-driven learning theory, the educational prediction models, and adaptive feedback theory*. These theories provide a deep understanding of how data can be used to improve learning and educational performance.

Data-driven learning theory proposes that data collected systematically from the educational process can be used to optimize individual and group learning. In this framework, teachers and administrators use data to identify students' strengths and weaknesses and to adapt teaching methods to the needs of each student. In Singapore, this theory is applied through *a continuous cycle of assessment, feedback and adjustment*, which allows for rapid and accurate intervention when students are struggling.

Another important theoretical framework is the use of *educational prediction models*. These models use data collected from past assessments and school observations to predict future student performance. In Singapore, predictive models are used to predict student outcomes based on factors such as family background, class attendance, and involvement in extracurricular activities. These models allow for preventive interventions and targeting of resources to students at risk of underperformance.

Adaptive feedback theory focuses on the use of feedback to continuously adjust the teaching and learning process. In Singapore, feedback provided by teachers and formative assessments play a crucial role in guiding curricular and methodological adjustments. Feedback is not only descriptive, but also directional, providing specific solutions to improve student performance. This type of feedback is used both at the individual and systemic levels, contributing to improving the quality of the entire education system [11].

The model from **Canada** is largely similar to the German one – the active participation in curriculum monitoring of educational actors, primarily teachers and the community. The involvement of teachers and the community in monitoring the school curriculum is based on several theoretical frameworks and educational models that emphasize the importance of collaboration and partnerships in improving educational outcomes. These include *the educational collaboration theory, the social capital theory, and the parental involvement theory*.

The educational collaboration theory emphasizes the importance of collaboration between different educational actors, including teachers, parents, students, and communities. This theory suggests that the active involvement of all stakeholders in the educational process leads to better outcomes for students. Studies have shown that collaboration between teachers and parents can improve students' academic performance and contribute to a more positive and supportive learning environment (Epstein, 2001) [10].

The social capital theory develops the idea that relationships and support networks within the community contribute to students' educational success. According to this theory, community and parent involvement in education creates „social capital” that supports student development. In Canada, engaged communities and collaboration between different stakeholders contribute to a more supportive and integrated educational environment (Coleman, 1988) [7].

The parental involvement theory emphasizes the importance of parental participation in their children's

education. According to this theory, parents who are actively involved in their children's education contribute to improving academic performance and student behavior. In Canada, parents are considered essential partners in education, and their collaboration with schools is encouraged through various programs and initiatives (Hornby & Lafaele, 2011) [14].

The United States of America in designing and implementing the school curriculum monitoring process focuses on the following theories: *the comparative evaluation theory*, *the benchmarking theory*, and *the continuous improvement theory*.

The comparative evaluation theory emphasizes the importance of comparing educational performance across countries and education systems to identify best practices and understand variability in educational outcomes. This theory is based on the idea that comparative evaluation can provide valuable insights into the effectiveness of education systems and can contribute to the development of strategies for their improvement. International assessments such as PISA and TIMSS are examples of the application of this theory (OECD, 2019) [15].

The benchmarking theory refers to the process of comparing the performance of an education system with international best practices and standards. This process involves detailed analysis of performance and identification of differences between practices and outcomes, with the aim of adopting the most effective strategies for improvement. Benchmarking allows the identification of strengths and weaknesses of the educational system and contributes to the establishment of objectives and standards of excellence (Camp, 1989) [6].

The continuous improvement theory proposes that regular evaluation and feedback are essential for the continuous improvement of the quality of education. According to this theory, international evaluation and benchmarking are tools that facilitate the identification and implementation of changes necessary for the improvement of educational system. In the United States, these practices are integrated into the processes of educational reform to ensure a constant and adaptable development of the system (Deming, 1986) [9].

With reference to **the Republic of Moldova**, it is necessary to state that the monitoring of the school curriculum is mainly limited to national assessments (final exams according to the levels of education – primary, secondary, high school) and international assessments (PISA). At the same time, curriculum assessments are organized at the national level during the periods of curricular reforms, which take place in the Republic of Moldova, as a rule, once every 8-10 years.

In this context, it is worth mentioning that the basis of curricular monitoring are the following theories: *the student-centered education theory*, *the competence training-centered theory*, *active learning theory*, etc. We can note that in the Republic of Moldova, at the current stage, efforts are being made to substantiate a concept of continuous and cyclical monitoring of the school curriculum.

Generalization of the theoretical framework of school curriculum monitoring in different countries is presented in Table 1.

Table 1. Theoretical Framework of School Curriculum Monitoring in Different Countries.

No. Crt.	Country	Theory
1.	<i>Finland</i>	<ul style="list-style-type: none"> • <i>Formative Assessment Theory</i> • <i>Self-Determination Theory</i>
2.	<i>Estonia</i>	<ul style="list-style-type: none"> • <i>Adaptive Learning Theory</i> • <i>Immediate Digital Feedback Theory</i> • <i>Big Data Analysis</i>
3.	<i>Germany</i>	<ul style="list-style-type: none"> • <i>Collaborative Learning Theory</i> • <i>Social Capital Theory</i> • <i>Ecological Theory of Education</i>
4.	<i>France</i>	<ul style="list-style-type: none"> • <i>Psychometric Theory</i> • <i>Ecological Model</i>
5.	<i>Singapore</i>	<ul style="list-style-type: none"> • <i>Data-Driven Learning Theory</i> • <i>Educational Prediction Theory</i> • <i>Adaptive Feedback Theory</i>

6.	<i>Canada</i>	<ul style="list-style-type: none"> • <i>Educational Collaboration Theory</i> • <i>Social Capital Theory</i> • <i>Parental Involvement Theory</i>
7.	<i>United States of America</i>	<ul style="list-style-type: none"> • <i>Comparative Evaluation Theory</i> • <i>Benchmarking Theory</i> • <i>Continuous Improvement Theory</i>
8.	<i>Republic of Moldova</i>	<ul style="list-style-type: none"> • <i>Student-Centered Education Theory</i> • <i>Competence Training-Centered Theory</i> • <i>Active Learning Theory</i>

Monitoring School Curriculum in Different Countries: Methodological Framework

In all the countries consulted, monitoring the written curriculum, the taught-learned-assessed curriculum is seen as an essential tool in ensuring the continuous development of the school curriculum and, respectively, the quality of education.

In this regard, in *Finland* the emphasis is on the use of research and continuous feedback on curriculum development; in *Estonia* the emphasis is on the application of technologies and databases (digital educational platforms, digital monitoring and automated feedback); in *Singapore* the monitoring is carried out in a real way, focusing on data analysis and personalized interventions; in *Germany* and *Canada* the curricular monitoring includes models of collaboration between teachers and the community, between teachers and students, between teachers and curriculum designers, etc. The development of educational curriculum in *the United States of America* focuses mainly on data from national and international assessments, as well as benchmarking.

Generalized and specific characteristics of educational curriculum monitoring in different countries are presented in Table 2.

Table 2. School Curriculum Monitoring in Different Countries: Generalized Characteristics.

No. Crt.	Country	Characteristics. Findings. Conclusions.
1.	<i>Finland</i>	Research-based monitoring and continuous feedback are the pillars of successful education in Finland. This innovative approach improves learning through personalization, the use of empirical evidence, and the development of students' self-assessment skills. By implementing these practices, Finland has demonstrated that education can be flexible, adaptive, and efficient, ensuring the holistic development of students.
2.	<i>Estonia</i>	Technology- and data-based monitoring is one of the major innovations in the Estonian education system. This approach allows for continuous and personalized assessment of student performance, while improving curricula and teaching methods. Although there are challenges related to data privacy and teacher training, the benefits of this method – such as increasing academic performance and reducing educational inequalities – are significant.
3.	<i>Germany</i>	Active participation of educational actors is a central element of the German education system, contributing to improving the quality of education, increasing motivation and engagement, and reducing educational inequalities. Educational studies and theories show that the involvement of teachers, parents, students and the community in the development and implementation of curricula is essential for creating an educational system adapted to the needs of all stakeholders. This participatory model can serve as an example for other countries that want to improve the efficiency and equity of their educational system.

4.	France	National and international assessments play a crucial role in the French educational system, providing valuable data for monitoring and improving the quality of education. These assessments, based on psychometric and ecological theories, allow the measurement of students' cognitive competences and the analysis of contextual factors that influence educational performance. However, assessments must be used with caution to avoid transforming the educational process into a simple quantitative measurement, thus neglecting the qualitative dimensions of learning. International assessments, such as PISA, provide France with a comparative picture of its educational performance and have contributed to the adoption of important reforms. However, the educational inequalities reflected in these assessments highlight the need for more equitable and inclusive education policies.
5.	Singapore	The use of data for precise adjustments is one of the main driving forces behind the success of Singapore's education system. By systematically collecting, analyzing, and using data, Singapore has been able to create an adaptive education system that is able to meet the diverse needs of its students. This data-driven approach has not only improved academic performance, but has also ensured greater equity and efficiency in education, setting an example for other countries.
6.	Canada	Teacher and community engagement is essential to the success of Canada's education system. Through active collaboration between schools, parents, and the community, Canada has created an educational environment in which all stakeholders contribute to improving student performance and developing an equitable and efficient education system. Collaborative models, parental involvement, and continuing professional development are key components of this integrative approach, which serves as an example for other countries in developing educational practices based on collaboration and community engagement.
7.	United States of America	United States of America International assessment and benchmarking are essential tools for improving the United States education system. By using these practices, the United States can compare educational performance with that of other countries, identify best practices, and develop strategies for educational reforms based on data and evidence. The positive impact of these practices on student achievement, educational policies, and ongoing reform underscores the importance of integrating international assessment and benchmarking into the process of improving education.

General Conclusions:

Concepts and models of monitoring the school curriculum vary significantly between countries, but the most relevant approaches and practices share a number of essential characteristics. European education systems offer a variety of effective approaches and methodologies for monitoring the school curriculum, adapted to the specific context of each country. Common factors in these approaches are flexibility, the use of benchmarks and technologies, and a focus on developing competences. By implementing these good practices, the school curriculum can become more relevant, more adaptable and more student-oriented.

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SCHOOL CURRICULUM MONITORING: SOCIOLOGICAL RESEARCH ASPECTS

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Monitoring is an important tool in managerial activity, the results of which contribute to improving the implementation and achieving the expected results of intervention. The school curriculum as an educational policy document needs to be continuously monitored and evaluated, so that it meets the needs of labor market, but also of the key actors of the educational process.

In this context, the article focuses on the sociological research aspects of school curriculum monitoring. The author presents certain concepts regarding monitoring and the advantages of monitoring the school curriculum, emphasizing the relevance for students, teachers, school managers and policy makers. At the same time, the research methodology applied in the New Zealand study (2008-2009) is presented. Based on the principles of monitoring, the author presents a vision of the sociological research matrix of school curriculum monitoring.

Keywords: *monitoring, school curriculum, research methods applied in monitoring.*

MONITORIZAREA CURRICULUMULUI ȘCOLAR: ASPECTE ALE CERCETĂRII SOCIOLOGICE

Monitorizarea reprezintă un instrument important în activitatea managerială, rezultatele căreia contribuie la îmbunătățirea implementării și atingerea rezultatelor scontate ale intervenției. Curriculumul școlar în calitate de document de politică educațională necesită a fi continuu monitorizat și evaluat, astfel încât acesta să răspundă nevoilor pieței muncii, dar și a actorilor-cheie ai procesului educațional.

În acest context, articolul se concentrează pe aspectele cercetării sociologice ale monitorizării curriculumului școlar. Autorul prezintă câteva concepte privind monitorizarea și avantajele monitorizării curriculum-ului școlar, subliniind relevanța pentru elevi, profesori, manageri școli și factori de decizie politică. Totodată, este prezentată metodologia de cercetare aplicată în studiul Noua Zeelandă (2008-2009). Pe baza principiilor monitorizării, autorul prezintă o viziune asupra matricei de cercetare sociologică a monitorizării curriculumului școlar.

Cuvinte-cheie: *monitorizare, programa școlară, metode de cercetare aplicate în monitorizare.*

Introduction

The process of developing and implementing public policies could be influenced by the results of monitoring and evaluation exercises, allowing the identification of gaps and the establishment of measures to improve either the public policy document or the implementation process. School curriculum essentially represents a component part of an educational policy document, which guides the teaching staff in achieving educational objectives. In this context, the application of school curriculum monitoring tools is a necessity and an important stage in the continuous development of curriculum [1, p. 42].

Research Methods

The study was conducted by applying the documentary method, being subjected to analysis the following issues:

- the provisions of normative framework in the field of education, to highlight the regulated aspects regarding the monitoring of school curriculum;
- the national and international bibliographic resources regarding sociological research of the curriculum monitoring process;
- the good practices at the international level.

Results and Discussions

Monitoring is a management tool, the purpose of which is to contribute to the improvement and performance of any interventions and to obtain expected results, the application of which allows for informed decision-making, ensures the transparency of intervention and decision-making processes, increases the responsibility of those who implement policies or projects or provide various services [2, p. 11].

The concept of monitoring presents a series of particularities that can be seen from the following definitions:

- the systematic collection of data on specified indicators, in order to provide management and the main stakeholders of an ongoing development intervention, indications on the degree of progress and achievement of objectives and progress in the use of allocated funds (OECD-DAC, 2002);
- the permanent activity of determining the progress of an activity in relation to the planned results, i.e. whether the activities are carried out according to the developed plan (2006) [3, p. 11];
- the continuous process by which stakeholders obtain regular feedback on the progress made in achieving their goals and objectives (UNDP, 2009);
- the systematic and continuous collection, analysis and use of information for the purpose of management and decision-making, with the aim of achieving the efficient performance and effectiveness of an operation (European Commission).

The main defining elements, from a sociological perspective of monitoring, refer to: (1) systematic collection of data, (2) determining the evolution of a phenomenon/process, (3) support in decision-making. Thus, monitoring is a continuous process of informing the leader of an activity and the stakeholders with reference to the results achieved in relation to the planned ones. The information given is achieved through data collected in a certain way, based on specific indicators that being systematically analyzed allow the determination of real performance. In this sense, monitoring is carried out continuously during the activity, which involves routine observation and recording of activities carried out in accordance with pre-established indicators, with the purpose of introducing corrections, streamlining the use of resources, achieving planned objectives, mitigating negative consequences and identifying opportunities to ensure sustainability. In other words, monitoring is associated with an „early warning system”, in case an activity is not carried out according to the established plan.

Under these conditions, monitoring must be a component part of the educational process, including the development and implementation of the school curriculum. Curriculum monitoring is a process of collecting information to evaluate the effectiveness of the curriculum and to ensure that the programs are well-intentioned, implemented and achieve the objectives [4, p. 24]. Curriculum monitoring provides evidence on the level of achievement of educational objectives, in order to facilitate future decisions. In this context, it is important to develop appropriate strategies for monitoring the implementation of the school curriculum, having a role in supporting and motivating teaching staff.

In Musango K.K.'s view, curriculum monitoring involves a number of advantages, including [5, p. 98-99]:

- *providing real-time feedback*, making it possible to identify progress achieved in curriculum implementation. By combining curriculum monitoring and evaluation, it is possible to establish its efficiency and the way it responds to students' needs, leading to the introduction of changes in cases where poor efficiency is attested. By carefully monitoring curriculum implementation, school managers can identify whether the expected learning goals and objectives are sufficiently achieved by students. Thus, it is possible to establish at an early stage the gaps between the designed curriculum and the one practically applied by teachers;
- *individualized adaptation of support*, monitoring helping to adjust strategies so that the curriculum helps to meet the needs of students depending on the level of study and class, which could be influenced also due to learning abilities and differences;
- *equitable allocation of resources*, by addressing inequalities, which in education refers to differential access to educational services, including quality services. In this way, through monitoring, those inequalities are identified and subsequently addressed through the curriculum. At the same time, through monitoring and evaluation, its impact on student learning outcomes and the need to continue allocating resources for educational programs that lead to positive results are established;

- *verification of the structure and design of curriculum*, through monitoring providing information on its structure and relevance. As a result of monitoring, the design of curriculum is improved by identifying defective aspects. At the same time, monitoring will help identify the practicality of curriculum, which signifies its ability to integrate aspects of real life;

- *identification of areas for improvement*, in a practical way, monitoring and evaluating the curriculum can contribute to identifying weaknesses and the need for improvement, leading to targeted interventions to establish directed improvements. The result will contribute to the efficiency of education system, which will empower participants in the educational act and contribute to positive change in society;

- *ensuring the sustainability of curriculum*, by allocating the necessary resources to ensure the smooth running of the educational process, for example the necessary infrastructure, human capital and learning resources. In this case, political decision-makers or school managers will be interested in identifying and recruiting qualified human resources and financial resources necessary to cover the need for teaching materials. At the same time, through monitoring, information can be obtained regarding the correspondence of professional qualifications of teachers with the discipline taught, including the identification of needs for continuous training of teachers and their development, ultimately adjusting their educational strategies. By providing support through training and guidance to teachers, better school results will be achieved.

The curriculum monitoring exercise is part of curriculum management, this process being carried out by the management of educational institution – the school – through various mechanisms and through certain committees. Thus, curriculum monitoring, from a sociological perspective, is a participatory process, which would involve the relevant actors in the educational process: the school, the students and the family. In this context, sociological research and theory will guide the development and revision of curriculum, ensuring that it reflects diverse perspectives and addresses the problems effectively. In this context, curriculum monitoring will contribute to the integration of stakeholders' views, essential in all phases of curriculum development. For example, a curriculum could be externally evaluated, finding that it does not satisfy all the needs of students. However, outside of participatory monitoring, it will not be possible to adjust this curriculum to the needs of students.

By integrating the participatory approach in the monitoring and evaluation of curriculum, there is a responsibility of all stakeholders for the changes proposed to achieve the objectives. In this case, the sociological research will focus on how students, parents and teachers were involved in the process of designing, evaluating and monitoring the curriculum, how their opinions were integrated into the curriculum and their impact.

It should be noted that curriculum monitoring ensures a clear and precise communication of the situation, providing relevant information on the impact, progress, performance, implementation challenges and areas for improvement of curriculum, providing the opportunity for stakeholders to know the current situation and take the necessary measures for continuous improvement. Monitoring can be carried out both internally – by a specialized committee at the institution level, and externally – by independent evaluators, from outside the educational institution. It is important that at least the internal evaluation is carried out at the institutional level.

A study analyzed within the research refers to „*Monitoring and Evaluating Curriculum Implementation. Final Report on Evaluation of Curriculum Implementation in New Zealand 2008-2009*” [6]. The applied research methodology was developed based on two research questions: (1) What progress has been made in the first two years of implementation of the New Zealand Curriculum? And (2) What factors explain the degree of progress in implementing the New Zealand Curriculum? The applied methodological approach consisted of collecting data through four online and paper-based opinion surveys, on stratified samples of approximately 5000 teachers from over 400 schools. The study was conducted in 2 waves: August-November 2008 and October-November 2009. The quantitative data were complemented by 26 focus group sessions with the participation of 247 people (from different types of schools and with various roles – school managers, teachers, principals). In 2008, online interviews and focus groups were conducted with 58 curriculum experts, identified with the support of the New Zealand Ministry of Education, and the results helped the research team to clarify key areas for research.

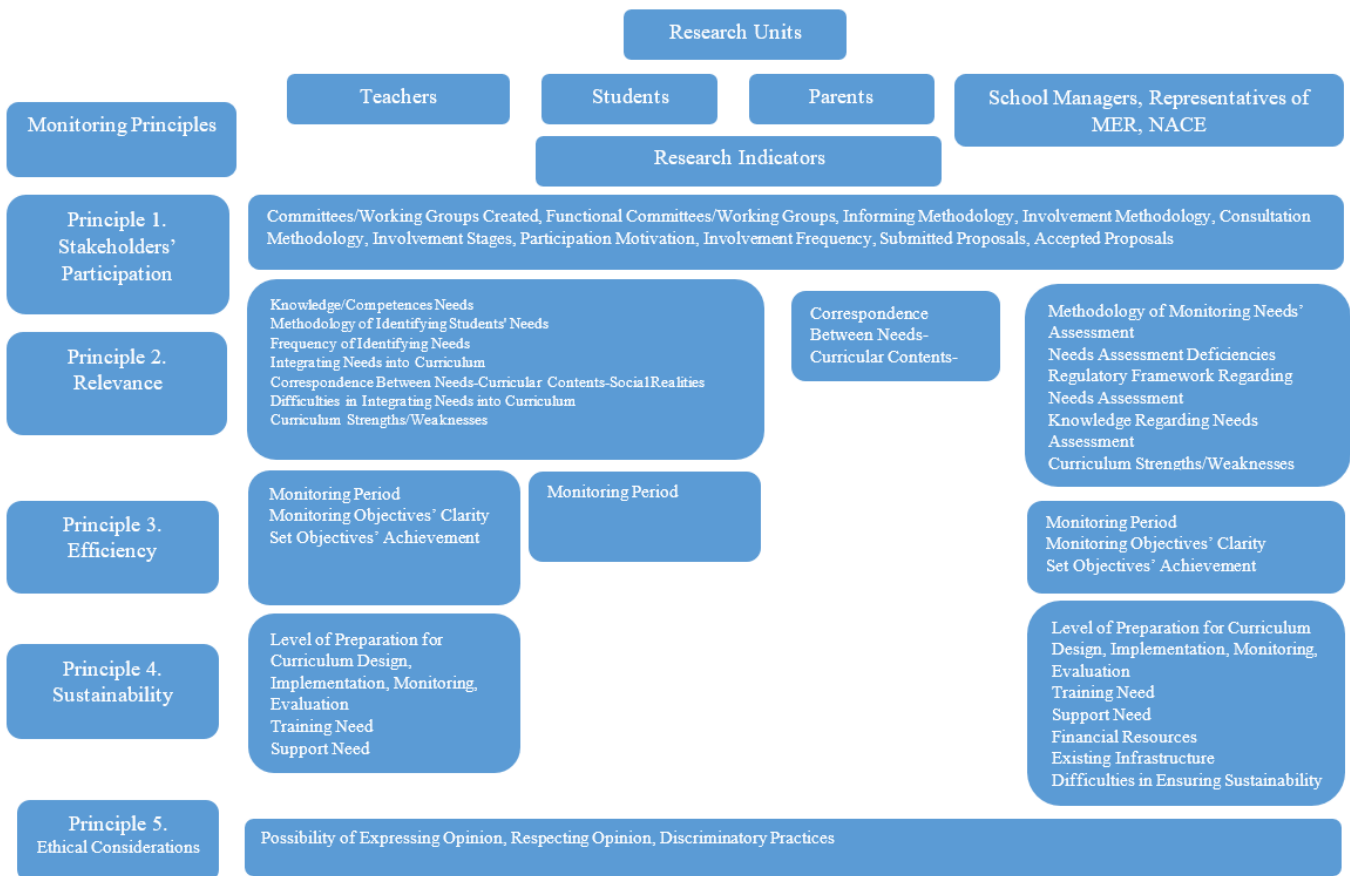
The research framework comprised four elements: support encounters, receptivity, understanding and practice, referred to as the SERUP model. Each element was associated with a set of research indicators, including:

- *support activities* - the extent to which teachers have received different types of support (including from people in and outside their schools, printed publications and online materials) and the perception of value and quality of this support;
- *receptivity* - the extent to which teachers appreciate the curriculum, their confidence in implementing it in their own school context and the degree to which they perceive implementation as feasible;
- *understanding* - the extent to which teachers understand the key elements of new curriculum;
- *practice* - teaching practices in response to the new curriculum and the extent to which they reflect the intentions of new curriculum [6, p. 12-13].

It should be noted that this study was conducted without analyzing the opinions of school activities’ beneficiaries – students and their parents, focusing rather on teachers and managers.

Starting from the principles of monitoring, which are important for ensuring that school programs are effectively implemented and achieve the projected results, sociological research on school curriculum monitoring should focus on the aspects presented in Figure 1. Sociological research could include a mixed research methodology, by applying *the documentary analysis method*, being subject to analysis of guides, normative acts, reports of authorities/schools regarding the integration of curriculum monitoring, *the survey method* among teachers and students, *the focus group method*, with the participation of teachers, parents, student councils, *the individual interview method*, with representatives of the relevant ministry, the National Agency for Curriculum and Evaluation, and curriculum experts.

Figure 1. Matrix of Sociological Research on School Curriculum Monitoring.



Conclusions

The analysis carried out shows that monitoring curriculum is not reflected in the national regulatory

framework, especially in the Education Code [7], but elements of monitoring can be found regarding the monitoring of educational institutions, which could also include the type of monitoring targeted by the research. The Ministry of Education and Research approved by order no. 1511/2023 *the Methodology for Monitoring the Implementation of Curriculum in School Discipline „Education for Society”*, which aims to contextualize the particularities of didactic approach to the discipline and the conditions for applying the Reference Framework for Competences for Democratic Culture in the school environment [8, p. 3]. The methodology is based on a series of principles, including validity, reliability, respect for human dignity, equity, transparency and applicability. The methodology establishes the aspects of internal and external monitoring, with an emphasis on the responsibilities of teaching staff, the administration of educational institution, and the persons responsible for monitoring. A series of tools are also provided, such as an observation sheet (4 sheets) and a questionnaire addressed to students.

Monitoring as a distinct stage in the implementation process of new school curriculum, launched by the Ministry of Education and Research in 2024 [9] is not found, but it is mentioned that the new school curriculum as a student-centered one, which will include „activities to monitor individual progress and student well-being” [9, p. 5]. The implementation of new school curriculum needs to be monitored and evaluated during implementation, in order to identify gaps in implementation and to draw new interventions to ensure that it is applied uniformly and contributes to the formation of key competences set.

By applying sociological research methodology, complementary to pedagogical research, relevant data will be obtained for policymakers and curriculum developers to ensure that the needs and experiences of students, teachers, parents, and school managers are reflected and relevant for future decision-making.

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MONITORING OF EVALUATED SCHOOL CURRICULUM – CONCEPT AND PARTICULARITIES

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The article focuses on the monitoring of school curricula with an emphasis on evaluating student learning outcomes. It underscores the importance of integrating evaluation as a continuous and systematic process within teaching and learning activities. The main goal of monitoring is to ensure that the curriculum is applied effectively in educational practice, identifying barriers and areas for improvement. The article outlines key indicators of effective evaluation, including the frequency of formative and summative assessments, timely feedback, student progress, and the alignment of evaluation methods with learning objectives. The importance of both internal and external monitoring is highlighted, with internal monitoring offering immediate feedback for continuous adjustment, while external monitoring ensures overall quality control. The paper also stresses the need for a balance between assessment for results and for process, emphasizing that an effective evaluation system motivates students and improves both teaching strategies and learning outcomes.

Keywords: *curriculum, monitoring, written curriculum, implemented curriculum, evaluation of learning outcomes.*

MONITORIZAREA CURRICULUMULUI ȘCOLAR EVALUAT – CONCEPT ȘI PARTICULARITĂȚI

Articolul se concentrează pe monitorizarea curriculumului școlar, punând accent pe evaluarea rezultatelor învățării elevilor. Subliniază importanța integrării evaluării ca un proces continuu și sistematic în cadrul activităților de predare și învățare. Scopul principal al monitorizării este de a asigura aplicarea eficientă a curriculumului în practica educațională, identificând barierele și domeniile care necesită îmbunătățiri. Articolul prezintă indicatorii cheie ai unei evaluări eficiente, inclusiv frecvența evaluărilor formative și sumative, feedbackul oferit la timp, progresul elevilor și corelarea metodelor de evaluare cu obiectivele de învățare. Este evidențiată importanța atât a monitorizării interne, care oferă feedback imediat pentru ajustări continue, cât și a monitorizării externe, care asigură controlul general al calității. De asemenea, articolul subliniază necesitatea unui echilibru între evaluarea rezultatelor și evaluarea procesului, subliniind că un sistem eficient de evaluare motivează elevii și îmbunătățește atât strategiile de predare, cât și rezultatele învățării.

Cuvinte cheie: *curriculum, monitorizare, curriculum scris, curriculum implementat, evaluarea rezultatelor învățării.*

Introduction

In the integrated educational process of teaching, learning, and evaluation, the evaluation component holds a significant position both psychologically, professionally, and socially. In this context, monitoring of evaluation becomes a critical process to ensure that assessments are relevant and aligned with the curricular objectives. Continuous monitoring aids in ensuring coherence and fairness in student evaluations, thereby supporting a high-quality educational system.

Through the processes of monitoring and evaluation, educational institutions can track curriculum progress, measure student outcomes, and identify areas of improvement. Jacob et al. assert that one of the primary functions of monitoring is identifying how effectively the curriculum meets students' needs and making necessary adjustments where required [8, p. 19]. Various countries have adopted efficient strategies to monitor the evaluated curriculum. For instance, Finland has implemented a well-monitored educational system that provides regular feedback to teachers, focusing on self-evaluation and peer collaboration among teachers, ensuring flexibility while maintaining assessment equity. In Singapore, monitoring includes a combination of standardized testing and continuous evaluations periodically overseen by educational authorities.

The primary task of monitoring is to provide stakeholders with timely information for effective control over the evaluation process, ultimately ensuring the continuous and cyclical development of the school curriculum. During this process, it is crucial to define the characteristics and indicators of efficient evaluation.

An effective assessment process is one that allows for the objective measurement of student achievement and progress, providing valuable information to improve both learning and teaching [3]. According to specialized literature, effective evaluation must be valid, reliable, fair, motivating, and offer useful feedback for all students.

Relevance of Assessment in Monitoring the Written and Taught Curriculum

Monitoring the assessment of student learning outcomes involves creating and operating a viable monitoring system that can contribute, through specific actions, to increasing the efficiency of the educational process. Such a system serves to collect, analyze, and interpret data on student performance, offering essential information for improving teaching and learning, as well as adapting the curriculum to the students' needs. By monitoring, it is possible to assess the current state of the educational system, identifying strengths and weaknesses in the teaching-learning-evaluation process. Evaluation is a core component of the educational process, alongside teaching and learning.

Thus, evaluation monitoring functions as a preventive mechanism, helping to coordinate educational activities efficiently through specific procedures. Additionally, monitoring the assessment of learning outcomes requires a systematic, continuous, and cyclic process that consistently tracks the evolution and progress of students.

This does not imply occasional evaluation but an integrated process at every stage of learning, ensuring continuous improvement in educational practices. For assessment systems to enhance learning — and not just measure it — students need to be at the center of the assessment framework. To become lifelong learners, they must be able to assess their own progress, make adjustments to their understanding, and take control of their learning [9, p. 220].

In the context of educational reform, the assessment of the formation and development of school competencies is based on the following fundamental principles:

1. Assessment focuses on positive reinforcement - The evaluation identifies and stimulates students' successes, not their failures. It does not punish.
2. Assessment is a continuous process - It is an essential dimension of the educational process and an effective practice within the school and national education system. This concept includes the triad of modern education: teaching-learning-assessment. Consequently, modern teaching activities are designed as simultaneous teaching-learning-assessment processes.
3. Assessment encourages learning and competency development - this principle emphasizes the stimulating nature of evaluation. It should not inhibit or demotivate participants in the educational process, but rather encourage and stimulate them in achieving the projected objectives.
4. Assessment aligns with educational objectives - it focuses on comparing students' preparedness with the specific objectives of each educational domain and the operational objectives of each educational activity. It is entirely inadmissible (from a psycho-pedagogical and professional ethics perspective) to have discrepancies between the taught curriculum and the evaluated one. The requirements for assessment tasks must be identical to the teaching objectives announced in advance.
5. Assessment is based on state educational standards - these standards are oriented toward competency formation (what the student will know, what they will be able to do, and how they will develop) by the end of the educational process.
6. Assessment uses various forms, methods, and procedures - both traditional and modern approaches are applied in evaluating school performance.
7. Assessment is a regulatory process - it determines the quality of educational activities.
8. Assessment guides students towards self-assessment - it encourages students to conduct accurate self-assessments and continually improve their performance, aiming for a quality and successful life.

The concept of monitoring the evaluated curriculum

The concept of curriculum monitoring refers to the „collection of information/evidence to describe and formulate ideas about the value and quality of curricula in use” [10]. Since curriculum monitoring represents a „process evaluation”, the monitoring of learning outcomes/curriculum evaluation aims to improve the quality of the evaluation process by identifying barriers, errors, or difficulties in applying the written and implemented curriculum.

The monitoring of the evaluated curriculum will focus on determining the correlation between the written and implemented curriculum, considering the following:

- The extent to which the evaluation process is integrated into the teaching and learning process;
- The extent to which the evaluation process and methods (at the beginning, during, and at the end of the educational process) are ensured;
- The extent to which the projected curriculum’s provisions on learning outcomes evaluation are utilized;
- The diagnosis of barriers and difficulties that may arise during evaluations;
- The quality of feedback provided to students to improve learning outcomes;
- The extent to which students are involved in the process of evaluating their learning achievements;
- The identification of the impact of learning outcomes evaluation on students’ motivation and engagement.

At both theoretical and practical levels, a distinction is made between internal and external monitoring, each having specific roles and functions in ensuring educational quality. An integrated approach to curriculum monitoring, which includes both internal monitoring – through continuous evaluation and feedback provided within the school – and external monitoring – through evaluations outside the school – is essential for ensuring the coherence and quality of the educational process. Internal monitoring allows for rapid and continuous intervention in the educational process, providing immediate feedback and constant adjustments based on the needs and progress of students. Internal monitoring is carried out by educational actors within the institution, such as teachers, focusing on the continuous analysis of students’ results and immediate adjustment of teaching practices. The main advantage of internal monitoring is its flexibility and adaptability based on the obtained results. M. Scriven highlights that internal monitoring has a formative nature, directly contributing to improving teaching and learning through constant feedback provided to teachers regarding the evaluation process [13].

External monitoring plays a crucial role in ensuring educational quality at the macro level, achieved in this context through the relationship between external monitors and teachers, based on mutual communication and collaboration. External monitors act as partners for teachers, helping them identify problems or gaps in the teaching and evaluation process.

Bidirectional monitoring provides valuable data and feedback on the effectiveness of teaching strategies and student achievements. J. Hattie emphasizes that feedback provided through evaluation and monitoring is one of the most important factors influencing learning success [6].

Internal monitoring promotes a continuous feedback system, in which both teachers and students receive information about learning progress and outcomes. This feedback is essential for the cycle of curriculum improvement, allowing teachers to adjust their teaching process, while students improve their learning and performance. In this cyclical process, internal monitoring acts as a feedback loop, providing useful information for timely and appropriate adjustments and adaptations. The information gathered in the monitoring process can represent both quantitative and qualitative criteria and indicators, recommended over the course of a semester or academic year.

The need for monitoring indicators stems from the need to reduce the contradiction between the potential subjectivity generated by teachers’ self-monitoring of the evaluated curriculum and the assessment of the functionality of the evaluated curriculum according to the written curriculum’s evaluation framework. Thus, the evaluation of the conceptual and methodological framework of the curriculum includes the alignment between the written curriculum and the evaluated one, based on pre-established indicators.

Monitoring indicators for the evaluated curriculum

The indicators aimed at ensuring effective and motivational assessment focus on creating an assessment process that promotes student progress, aligns with curricular objectives, and provides constructive and timely feedback. These indicators include the frequency and diversity of assessments, the proportion of students meeting learning objectives, the percentage of timely feedback, and the level of motivation generated by the assessment, emphasizing non-stressful elements and focusing on both process and results.

The establishment of monitoring indicators for assessing learning outcomes is based on an exhaustive analysis of the specialized literature, which explores both the determining factors of the evaluation process and the validated best practices for its effectiveness. This analysis aims to identify the factors influencing the quality of evaluation, such as the validity, reliability, and relevance of evaluation instruments and feedback on student progress.

According to research on evaluating student learning outcomes, several essential indicators help monitor the efficiency and quality of the assessment process:

- Ensuring types of assessment: initial, formative, and summative assessments;
- The proportion of formative assessment in the educational process [1; 2];
- The feedback provided during the assessment process [9; 12];
- Identification of student progress [11; 14];
- The diversity of measurement tools and assessment methods [4];
- Correlation of assessment methods with learning objectives [5];
- Stimulating student motivation through the assessment process [7];
- Involving students in the assessment of learning achievements (peer and self-evaluation).

According to research, the diversified use of assessment types - initial, formative, and summative - is essential for effectively monitoring student progress. P. Black and D. Wiliam argue that formative assessment directly impacts student performance by offering continuous feedback and allowing for teaching adjustments [1]. Initial assessments establish students' starting levels, providing a baseline for measuring progress, while summative assessments measure the achievement of educational objectives at the end of a learning unit. Brookhart (2010) adds that formative assessment, when used correctly, provides opportunities for timely pedagogical interventions, helping students adjust their learning strategies. However, challenges arise in the continuous integration of formative assessments, as teachers often face time and resource constraints that can affect the consistent application of these evaluations.

Formative assessment plays a crucial role in improving student learning by providing immediate feedback and valuable information for adjusting teaching. P. Black and D. Wiliam emphasize that this form of assessment allows identifying students' difficulties before they become major obstacles in learning [1]. S. M. Brookhart argues that the weight of formative assessment should be significant in relation to summative evaluation to ensure a balanced educational process focused on the continuous development of competencies [2].

However, in practice, the weight of formative assessment is often reduced due to the pressures of assessing final results. Harlen warns that in many cases, summative evaluation tends to dominate the teaching process, which can undermine the positive impact of formative assessment [5].

J. Hattie emphasizes in his work that an effective evaluation must provide clear and immediate feedback that significantly impacts student progress. In his book *Visible Learning*, Hattie shows that feedback is one of the most powerful factors influencing student learning, with an effect size of $d=0.73$, indicating a major impact on school progress. Moreover, J. Hattie stresses that effective assessment is not just about measuring outcomes but also about providing valuable information to help students understand where they are in the learning process and how they can improve their performance. Feedback should be specific, focus on the task completed, and highlight student progress, not just grades or scores. However, a major challenge in monitoring this indicator is ensuring individualized and consistent feedback, especially in large classes or institutions with limited resources. In such contexts, teachers face difficulties in providing detailed feedback to each student, which may reduce the efficiency of the assessment process.

J. Hattie also argues that effective evaluation should be an integral part of the teaching process and in-

involve constant reflection from both teachers and students to guide the next steps in learning and provide the motivation needed for future progress.

The diversified use of measurement tools and assessment methods is essential for evaluating the entire range of student competencies. Another key indicator is correlating assessment methods with the educational objectives established in the curriculum. Harlen argues that assessment must be aligned with learning objectives to accurately measure student progress and provide relevant information about the achievement of competencies [5].

Assessment should be a process that stimulates student motivation, not just a means of measuring performance. J. Hattie and H. Timperley stress that non-stressful assessments, focusing on constructive feedback and personal development, contribute to increased student motivation and active engagement in the learning process [7]. However, an evaluation that completely eliminates stress can undermine the necessary challenge to stimulate student development. Student motivation is often influenced by the level of challenge they feel during evaluations. Therefore, assessments must be balanced, offering both support and challenge to stimulate progress.

In addition, the active involvement of students in the assessment process through self- assessment and peer assessment is an essential indicator of assessment efficiency. These practices allow students to take responsibility for their own learning process, become more aware of their competencies, and develop meta-cognitive skills. Wiliam emphasizes that self- assessment and peer assessment help students develop critical reflection skills on their progress, enhancing their autonomy in the educational process [14].

In line with qualitative indicators, monitoring learning outcomes can also be achieved through quantitative indicators. Quantitative indicators in evaluation monitoring are numerical measurements that allow an accurate assessment of the learning process and student progress. These provide concrete and measurable information about the efficiency of evaluations and their impact on learning. Thus, the following aspects of the efficiency of learning outcomes assessment can be monitored:

- The frequency of formative assessments;
- The frequency of summative assessments;
- The average time to provide feedback after assessment;
- The percentage of students who show progress, improving their results from one assessment to another;
- The percentage of tasks and assignments completed by students by the set deadline;
- The percentage of students passing summative evaluations at the class level;
- The number of different assessment methods used (written tests, oral assessments, practical projects);
- The percentage of students actively participating in self- assessment and peer assessment processes.

Monitoring these quantitative indicators provides a clear picture of the assessment process's efficiency and allows for quick and effective adjustments to improve learning. Assessing learning outcomes should not only be a process of measuring final performance but also a tool for guiding and stimulating student progress. The use of well-defined indicators helps create a balanced learning environment in which every student has the opportunity to reach their maximum potential.

Conclusions

The monitoring of student learning outcomes is more than a simple mechanism for controlling school performance. It becomes a dynamic tool that can stimulate authentic learning and continuous progress for both students and teachers. The importance of this process lies in its ability to provide timely and useful feedback, identify weaknesses and barriers within the educational process, and make real-time adjustments to teaching and assessment methods.

A well-constructed monitoring system, based on quantitative and qualitative indicators, provides concrete and measurable data that can guide educational interventions and strategies. This process becomes a catalyst for quality education, aligned with the needs and potential of every student.

Beyond the evaluative aspect, effective monitoring supports the development of a culture of reflection and continuous improvement, where feedback is not just an outcome of evaluation but also an active resource for the evolution of the entire educational process. Thus, efficient evaluation monitoring becomes an

essential process for the cyclical and flexible development of the curriculum, contributing to the constant adaptation of education to contemporary realities and challenges.

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THE FINDINGS OF TIME MANAGEMENT IN LEARNING IN STUDENTS ACCORDING TO SCHOOL DISCIPLINE

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Time management is a fundamental factor in optimizing the educational process, significantly impacting students' academic performance and personal development. The efficiency of time utilization varies considerably depending on the subject studied, with practical disciplines requiring rigorous time organization, while theoretical subjects allow for greater flexibility in the approach to learning activities. The challenges faced by students in managing their time affect their ability to complete tasks optimally. Therefore, the implementation of quantitative and qualitative indicators for assessing time management becomes essential in optimizing the school curriculum, facilitating the development of effective strategies that support students in adopting healthy study practices and achieving high academic performance.

Keywords: *time management, school curriculum, curricular area, quantitative and qualitative indicators, time management methodology.*

CONSTATĂRILE MANAGEMENTULUI TIMPULUI ÎN ÎNVĂȚARE LA ELEVI ÎN FUNCȚIE DE DISCIPLINA ȘCOLARĂ

Managementul timpului este un factor fundamental în optimizarea procesului educațional, având un impact semnificativ asupra performanțelor academice și dezvoltării personale a elevilor. Eficiența utilizării timpului variază considerabil în funcție de disciplina studiată, disciplinele practice necesitând o organizare riguroasă a timpului, în timp ce disciplinele teoretice permit o flexibilitate mai mare în abordarea activităților de învățare. Provocările întâmpinate de elevi în gestionarea timpului, afectează capacitatea acestora de a-și finaliza sarcinile într-un mod optim. Prin urmare, implementarea unor indicatori cantitativi și calitativi pentru evaluarea managementului timpului devine esențială în optimizarea curriculumului școlar, facilitând dezvoltarea unor strategii eficiente care să susțină elevii în adoptarea unor practici de studiu sănătoase și în obținerea unor performanțe academice înalte.

Cuvinte-cheie: *managementul timpului, curriculumul școlar, arie curriculară, indicatori cantitativi și calitativi, metodologia managementului timpului.*

Introduction

In the educational process, time management proves to be an essential element for optimizing students' learning. The efficiency of time utilization varies significantly depending on the school subject, highlighting multiple aspects related to the organization of activities, prioritization of tasks, and resource management.

A fundamental aspect observed in recent studies is that disciplines requiring a practical approach, such as experimental sciences, impose a rigorous structuring of time on students to maximize their understanding of concepts. In these cases, the time dedicated to experiments and direct observations is crucial for information assimilation.

In contrast, theoretical subjects, such as history or literature, may benefit from a more flexible approach to time management. Students can allocate more time resources for extensive readings or for debates on complex themes. However, the risk of procrastination becomes more acute in these cases, necessitating specific time management strategies, such as setting self-imposed deadlines.

Another important aspect is the differentiation in learning styles. Students who prefer visualizing information, for example, may require more time to create diagrams or charts, while those who retain information better through auditory means may benefit from audio resources. These preferences affect how each discipline can be studied and, implicitly, time management.

Furthermore, findings suggest that the involvement of parents and teachers in the time management process significantly helps students organize their studies. Effective collaboration between family and school can create a conducive environment for establishing efficient learning routines.

Time management occupies a central place in students' educational journeys and has a significant impact on academic performance as well as personal development. Efficient time management enables students to regulate their activities, prioritize tasks, and maintain a balance between study and relaxation. In a context where distractions are increasingly frequent and accessible, the ability to plan and use time optimally becomes essential.

The importance of time management extends beyond the academic dimension, having essential repercussions on personal development. These skills are fundamental for cultivating discipline, responsibility, and decision-making abilities.

Additionally, optimal time management contributes to reducing stress levels, thereby supporting the mental and emotional well-being of young people. In conclusion, students who enhance their time management skills become not only better-prepared learners but also individuals capable of facing life's challenges with serenity and confidence.

Challenges faced by students from the perspective of time management in homework preparation

Time management is essential during the preparation of homework. However, students face a series of significant challenges that can affect the efficiency of the learning process and, consequently, academic performance.

One of the main challenges is managing multitasking, as students often have to juggle multiple subjects, each with its own requirements and deadlines. This can lead to difficulties in maintaining adequate focus on study tasks.

In addition, students are confronted with external distractions such as social media, video games, and various extracurricular activities. These distractions can interfere with the normal flow of study, making it harder for them to use their time effectively, contributing to the perception of insufficient time to complete all tasks.

Another problematic aspect is inefficient time planning. Many students fail to allocate their time appropriately among various subjects or to prioritize assignments that require more attention. This inability to organize tasks effectively leads to stagnation in progress and limits learning capacity [3].

Time management in the learning process is essential for the effective conduct of educational activities, directly influencing academic performance and personal development. This practice varies depending on curricular areas, each having specific requirements and methods of approaching time. In this regard, a series of suggestions from the perspective of time management in the learning process for students based on curricular area are recommended:

- for subjects requiring theoretical study, which integrate into *the Language and Communication curricular area*, students must manage their time to read, analyze, and retain information. It is important for them to structure their study schedule to allocate sufficient time for reading and reviewing materials, as well as for deepening concepts through discussions and reflections.

- in the case of *Mathematics and Science*, time management becomes crucial for problem-solving. Students need to practice regularly, solve exercises, and organize their time between theory and application. It is beneficial to establish a study schedule that includes practice sessions with breaks to avoid fatigue and maintain motivation.

- additionally, for experimental science subjects, time management allows for the efficient organization of experiments and laboratory projects. Students need to plan each stage, from preparing materials to analyzing results, to maximize learning effects.

- in the curricular *areas of Arts, Technologies, and Sports*, time management helps students divide their time between study, practice, and creativity. Establishing a schedule for rehearsals or project work sessions contributes to skill development and the cultivation of creativity.

Thus, time management based on curricular areas is an essential skill for students, helping them not only

in the learning process but also in developing healthy habits for the future. This will be useful throughout their education and in their personal and professional lives, contributing to a balanced management of time in various contexts [2].

Time management proves to be an essential condition for ensuring the quality of learning, requiring a rational use of time, both institutional and optional, as noted in the institution's curriculum plan. Time is a fundamental resource in education. The socio-educational transformations in Moldova, the implementation of the curriculum in the context of an era characterized by change and the accelerated pace of information and communication technologies in the processes of knowledge, teaching, learning, and assessment, as well as the current dynamics of life, contribute to a new interpretation of time and, implicitly, of time management. Its efficiency directly influences personal self-realization and the institution's performance in the educational field.

In this context, time management plays a significant role in curricular management through the following aspects:

- Identifying solutions for rationalizing the management of learning time within learning activities.
- Ensuring the compatibility of the duration of the academic calendar.
- Optimizing the management of learning time, leisure, and rest.
- Structuring optional learning time.
- Factors that determine the dimensions of optional time.
- Reasons justifying the necessity of optional time within the entirety of the learning process [1, p. 61].

Time management in education represents an essential dimension that influences not only the quality of the learning process but also the efficiency of implementing the school curriculum. In this context, quantitative and qualitative indicators become fundamental tools for evaluating and monitoring how time is utilized within the school curriculum.

These indicators can reflect not only the temporal resources allocated to each subject but also how they are distributed in relation to educational objectives. Analyzing these indicators allows for identifying potential dysfunctions and improvement opportunities, contributing to more effective management of time allocated for learning. From this perspective, addressing quantitative and qualitative indicators becomes crucial in optimizing the school curriculum, facilitating a conducive environment for achieving superior academic performance and harmonious personal development for students.

These indicators can reflect not only the time resources allocated to each subject but also how these resources are distributed in relation to educational objectives. For example, a quantitative indicator such as the number of hours dedicated to a subject can highlight whether students receive enough time to deepen their understanding of essential concepts. On the other hand, qualitative indicators can provide insights into students' perceptions regarding the relevance and effectiveness of those hours, which can influence their motivation and engagement in the learning process.

Analyzing these indicators allows for the identification of potential dysfunctions and opportunities for improvement. For instance, if a significant number of students are not completing homework on time, this may indicate an issue with the distribution of time allocated or the complexity of the tasks. Identifying these aspects is crucial for interventions that support both teachers and students in the educational process.

By contributing to more efficient management of the time allocated for learning, analyzing these indicators can lead to adjustments in the curriculum, such as redistributing hours or modifying content to better meet students' needs. From this perspective, the approach of using quantitative and qualitative indicators becomes essential in optimizing the school curriculum. This not only facilitates an environment conducive to achieving higher academic performance but also contributes to the harmonious personal development of students, helping them develop the skills necessary to face future challenges.

Thus, integrating these indicators into the evaluation and adjustment process of the school curriculum is essential for creating a balanced and effective educational experience.

Table 1. Quantitative and qualitative indicators for monitoring the school curriculum from the perspective of time management.

Quantitative indicators	
<i>Indicators:</i>	<i>Descriptors:</i>
1. Time allocated for educational activities	1.1. Number of hours dedicated to each subject. 1.2. Percentage of actual time used for study compared to total available time.
2. Number of assignments and tasks	2.1. Average number of assignments received per week. 2.2. Proportion of assignments completed on time versus those that are late.
3. Utilization of educational resources	3.1. Average time spent accessing teaching materials and online resources.
4. Periodic assessments	4.1. Number of assessments and tests administered over a given period. 4.2. Percentage of students who meet evaluation standards in relation to the time allocated for preparation.
5. Participation in extracurricular activities	5.1. Number of scheduled extracurricular activities and student participation in them.
Qualitative indicators	
1. Students' perception of time management	1.1. Students' feedback on the effectiveness of time management within the curriculum. 1.2. Assessment of stress levels and satisfaction related to the study schedule.
2. Consistency of planning	2.1. The quality and clarity of educational plans, including time allocations for various activities.
3. Students' organizational skills	3.1. The level of usage of time management tools (planners, digital applications). 3.2. Assessment of the prioritization strategies adopted by students.
4. Balance between study and leisure time	4.1. The quality of relaxation activities and leisure time used by students to maintain a healthy balance.
5. Efficiency of the learning process	4.2. The quality of educational content and how it is adapted to meet students' needs in time management.

The methodology for applying quantitative and qualitative indicators to monitor the school curriculum from the perspective of time management consists of several essential stages, each playing a fundamental role in evaluating and optimizing the educational process.

1. *Developing a questionnaire*: creating a questionnaire aimed at measuring time management within the context of the school curriculum, based on qualitative and quantitative indicators, is crucial for obtaining a comprehensive assessment of the educational process's efficiency.

2. *Data collection*: this stage is essential and involves using various tools, such as questionnaires, direct observations of the teaching process, and periodic assessments of academic performance. A systematic approach to data collection ensures a solid foundation for subsequent analysis.

3. *Statistical analysis*: quantitative indicators will undergo statistical analysis to identify relevant trends and correlations. Qualitative indicators will be analyzed using coding methods, allowing for a deeper understanding of the curriculum's effectiveness and time management.

4. *Evaluation of curriculum efficiency*: based on the analysis results, an evaluation of the curriculum's effectiveness and time management strategies will be conducted, identifying areas needing improvement.

For instance, if certain subjects require more time for mastery, adjustments can be made to the school schedule.

5. *Implementation of proposed changes*: the next stage involves implementing proposed changes, which may include adjusting the timetable, revising teaching materials, or adopting new pedagogical methods that optimize time usage.

The methodology for applying quantitative and qualitative indicators to monitor the school curriculum from the perspective of time management envisions a continuous monitoring system, allowing for periodic evaluations of curriculum efficiency and time management, benefiting from constant feedback from teachers, students, and parents.

By implementing this methodology, educational institutions can effectively monitor the school curriculum, thereby optimizing the educational process and time usage. This approach will not only support students' academic performance but also contribute to the development of essential time management skills for their long-term success.

Conclusions

In conclusion, time management in students' learning is influenced by the nature of school subjects, the individual needs of students, and collaboration with educational stakeholders. A personalized approach and awareness of the specificities of each subject can lead to increased efficiency in the educational process.

The challenges that students face in time management, especially in the context of preparing homework, are varied and complex. A conscious approach, along with appropriate organizational strategies, can transform these difficulties into opportunities for learning and personal development.

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MONITORING THE COMPUTER SCIENCE CURRICULUM IN HIGH SCHOOLS: ADAPTATION AND EFFICIENCY IN THE CONTEMPORARY EDUCATIONAL CONTEXT

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Monitoring the computer science curriculum involves a continuous process of assessment, adaptation, and improvement, ensuring that the content delivered to students is not only up-to-date but also meets the demands of the modern technological world. This process includes evaluating the implementation of new technologies, teaching methodologies, and assessment tools, while also considering how these innovations impact student learning outcomes.

Through effective monitoring, it is possible to identify areas of improvement and gaps in the curriculum that need addressing, while also recognizing the strengths of existing educational practices. Feedback from educators, students, and stakeholders is crucial in shaping a curriculum that is both efficient and responsive to the demands of the digital age.

The monitoring of the computer science curriculum at the secondary school level is essential for adapting to the needs of modern education. This continuous process ensures that students are equipped with the necessary skills to succeed in a digitalized world and that educators are supported in creating dynamic, relevant, and effective learning environments.

Keywords: *education, monitoring, teaching, technology, informatics.*

MONITORIZAREA CURRICULUMULUI DE INFORMATICĂ ÎN LICEE: ADAPTARE ȘI EFICIENȚĂ ÎN CONTEXTUL EDUCAȚIONAL CONTEMPORAN

Monitorizarea curriculum-ului de informatică implică un proces continuu de evaluare, adaptare și îmbunătățire, asigurându-se că conținutul livrat studenților nu este doar actualizat, ci și satisface cerințele lumii tehnologice moderne. Acest proces include evaluarea implementării noilor tehnologii, metodologii de predare și instrumente de evaluare, luând în considerare și modul în care aceste inovații afectează rezultatele învățării elevilor.

Printr-o monitorizare eficientă, este posibil să se identifice domeniile de îmbunătățire și lacunele din curriculum care trebuie abordate, recunoscând în același timp punctele forte ale practicilor educaționale existente. Feedback-ul din partea educatorilor, studenților și părinților interesate este esențial în formarea unui curriculum care este atât eficient, cât și receptiv la cerințele erei digitale.

Monitorizarea curriculum-ului de informatică la nivelul gimnaziului este esențială pentru adaptarea la nevoile învățământului modern. Acest proces continuu asigură că studenții sunt echipați cu abilitățile necesare pentru a reuși într-o lume digitalizată și că educatorii sunt sprijiniți în crearea unor medii de învățare dinamice, relevante și eficiente.

Cuvinte-cheie: *educație, monitorizare, predare, tehnologie, informatică.*

Introduction

Education is in a state of continuous transformation, a process amplified by rapid technological advancement and the social and economic changes that shape societal needs. In this context, the analysis and monitoring of the computer science curriculum become essential to ensure the relevance and effectiveness of the educational process. The management of educational innovations in the field of computer science involves identifying, implementing, and managing necessary changes to address new challenges in education and to enhance students' preparation for the demands of a digital society.

Monitoring the computer science curriculum is essential for evaluating the impact of new methods and

technologies in computer science education, playing a significant role in improving the quality of education, institutional performance, and students' preparedness to adapt to the new realities of the labor market. Through effective management of innovations, educational institutions can ensure high-quality education and respond swiftly to technological and pedagogical changes.

In this context, the management of educational innovations in computer science does not only mean the implementation of new technologies or changes in teaching methods, but also the continuous evaluation of their impact on the educational process and the assurance of the sustainability of these changes. Evaluating the computer science curriculum allows for its continuous adjustment to ensure alignment with technological developments and students' needs.

For the educational system of the Republic of Moldova, the analysis and monitoring of the computer science curriculum are increasingly important in light of the challenges faced by schools, such as adapting to emerging technologies and integrating them into the educational process. Implementing effective strategies for managing innovations is crucial for promoting the continuous development of education, with the computer science curriculum playing a central role in this transformation.

As Drucker (1985) emphasized, innovations in education involve the adoption of new approaches and technologies that meet the current needs of students. In this regard, computer science teachers are the key actors in implementing these innovations, bearing the responsibility of integrating modern technologies into their lessons and adapting these tools to students' specific needs [1]. Therefore, curriculum monitoring is a crucial tool to evaluate how effectively these technologies are being used and to identify any gaps or areas that require improvement.

Furthermore, managing educational innovations within computer science involves creating a favorable environment for the development and implementation of innovative ideas. This environment can be supported through an organizational culture that encourages change and through the active involvement of all stakeholders in the school community – teachers, students, and parents – in the process of curriculum development and evaluation. Continuous monitoring of the implementation of these innovations allows for adjustments based on feedback from students and teachers, thereby contributing to the improvement of the learning process.

Innovations in computer science education are not limited to the technologies used but also extend to teaching methodologies, student assessment, and the organization of educational activities. For instance, new learning methodologies, such as project-based or collaborative learning, can be effectively integrated into the computer science curriculum to stimulate critical thinking and problem-solving skills. In this regard, monitoring and analyzing the curriculum help identify best teaching practices and assess their effectiveness.

Another important aspect of the analysis of the computer science curriculum is the creation of a more inclusive and equitable educational environment. By managing educational innovations, educational institutions can ensure that all students, regardless of their social background or abilities, have access to quality education. Curriculum monitoring thus helps identify and correct inequities or barriers in access to educational resources, ensuring that each student benefits from personalized learning.

Adopting an effective management of innovations in computer science education can contribute to the creation of excellent educational institutions that better meet students' needs and enhance their performance. Constant evaluation of the curriculum allows for the adjustment of educational strategies and the development of innovative solutions that improve the learning experience. Collaboration between teachers, students, and parents is essential for the success of this management, and curriculum monitoring becomes a key tool in the implementation and evaluation of changes.

Aspects of monitoring the computer science curriculum

In a world characterized by rapid technological advancement and swift changes in the labor market, monitoring the computer science curriculum becomes an essential priority to ensure relevant and high-quality education. This process involves not only the periodic updating of content and teaching methods but also the continuous evaluation of their effectiveness. Thus, educational institutions can adapt their programs to

the demands and challenges of a digitized society, preparing students for future professional requirements.

1. The importance of monitoring the computer science curriculum. The computer science curriculum must address complex and dynamic needs, including both fundamental technical skills and socio-emotional abilities, such as critical thinking and creativity. Monitoring this curriculum does not only involve implementing new technologies and teaching methods but also continuously assessing their impact on students' outcomes. An effective computer science curriculum must prepare students not only for exams but also to become active citizens, capable of adapting to the continuous changes in technology and society.

2. Integration of Emerging Technologies. A key aspect of monitoring the computer science curriculum is the integration of emerging technologies, such as e-learning platforms, the use of mobile devices, and online collaboration tools. These technologies provide new learning opportunities, flexibility, and accessibility, transforming how students interact with information and teachers. By monitoring the effectiveness of these technologies in the educational process, institutions can adjust the curriculum to maximize their positive impact on learning and develop students' digital skills.

3. Adapting content to societal changes. Given the rapid pace of technological and cultural changes, the computer science curriculum must be flexible and adaptable. Vladimir Guțu, an educational expert, emphasizes that schools must evolve alongside society to maintain the relevance and currency of the teaching content. This requires periodic review of the curriculum and the adoption of modern teaching-learning methods that stimulate students' interest and prepare them for success in an ever-changing world.

4. Involvement of the educational community. Monitoring the computer science curriculum involves active collaboration between teachers, students, parents, and other stakeholders in the educational community. Research has shown that involving these stakeholders can enhance the efficiency of implementing educational innovations and help identify specific challenges and needs within each community. Continuous feedback from this community is a valuable tool for adjusting and optimizing the curriculum.

5. Teaching efficiency and quality of education. A central component of monitoring the curriculum is promoting teaching efficiency and ensuring the quality of education. By adopting innovative and interactive methodologies, teachers can improve the knowledge assimilation process and stimulate the development of students' critical and creative skills. Constant monitoring of how these methodologies affect students' performance is essential to ensure quality education tailored to contemporary needs.

6. Evaluating the impact of educational innovations. Continuous evaluation of the impact of educational innovations on learning is a fundamental aspect of monitoring the curriculum. By analyzing students' performance, feedback from teachers, and case studies, valuable data can be obtained on the effectiveness of new teaching strategies and integrated technologies. These evaluations allow for adjustments to be made to the methodologies, ensuring they remain relevant and effective in developing students' competencies.

7. Preparing students for the future. A well-monitored computer science curriculum aims to prepare students for the current and future demands of the labor market and society. In an era of rapid change, digital skills and adaptability become essential abilities. By adapting the curriculum to new realities and monitoring its impact, educational institutions can contribute to the development of active citizens who are prepared to face the challenges of a digitized world.

Characterization of the specifics of the computer science curriculum in secondary education

The curriculum for the computer science subject in secondary education (grades VII-IX) in the Republic of Moldova is regulated by the Framework plan for primary, secondary, and high school education (academic year 2019-2020) and the disciplinary curriculum for computer science, approved by the Ministry of Education, Culture, and Research. This foundational document specifies the essential competencies that students need to develop, the mandatory content to be studied, and methodological suggestions for effective teaching. Structured by school year, the curriculum provides a unified framework for planning teaching activities for this subject.

The Framework Plan sets the number of mandatory hours for computer science in secondary education as follows:

- Grade 7: 1 hour per week (35 hours/year);
- Grade 8: 1 hour per week (35 hours/year);
- Grade 9: 1 hour per week (35 hours/year).

For secondary education, the curriculum focuses on four main components:

1. Representation of Information: This component aims to develop competencies related to the encoding and decoding of information in various encoding systems (e.g., binary, hexadecimal, ASCII), the representation of information in different forms (text, images, sound, video), the use of positional numeral systems, and performing conversions between these systems.

Pupils are expected to understand fundamental concepts such as bits and bytes, encode and decode simple messages, and recognize file formats, associating them with the type of information represented.

In Grade 7, for instance, students learn about binary and hexadecimal numeral systems, perform conversions with the decimal system, and use the ASCII code to encode simple messages.

2. Information Processing: Students are encouraged to develop algorithmic thinking and basic programming skills by learning to analyze problems, decompose complex tasks into simple steps, represent algorithmic solutions using diagrams or pseudocode, and implement them in visual programming environments [2].

In Grade 7, students familiarize themselves with introductory programming concepts, such as control structures (conditional and repetitive instructions), variables, and basic data types, representing algorithms through simple programs and pseudocode. They also acquire practical programming skills in visual environments such as Scratch.

In Grade 8, programming skills are deepened, with students being introduced to concepts like subprograms (functions and procedures), structured data types (strings, lists/arrays), and reading/writing data to text files. Recommended programming environments include Python and Pascal.

3. Communication of Information: This component focuses on developing competencies related to the use of electronic communication services and applications (such as email and instant messaging), creating and publishing web content, as well as adhering to online security and ethical standards [2].

Students are trained to use electronic communication tools effectively and responsibly, create and publish simple web content (static web pages), and understand the risks associated with the online environment, adopting ethical and secure behavior.

In Grade 7, students study introductory concepts about the internet and web services, learn how to use email and instant messaging, and how to search for and select relevant information online.

In Grade 8, their competencies are extended to include creating and publishing simple web pages using HTML, adhering to security standards (such as strong passwords and personal data protection), and online ethics (including respect for copyright).

4. Interdisciplinary integration of information technologies: This component focuses on developing the competencies necessary for the integrated use of ICT tools in learning activities across various fields, promoting responsible and efficient use of technologies for research, communication, collaboration, and learning [2].

Students are encouraged to understand the importance of information technologies in different fields and use them appropriately in their learning activities. They will acquire skills in using ICT for research, information processing, communication, and collaboration in interdisciplinary contexts.

In Grade 7, students learn to use ICT for simple interdisciplinary projects, collaborate online for task completion, and respect copyright when using digital resources.

In Grade 8, the competencies for ICT integration are deepened through more complex interdisciplinary projects, involving a variety of ICT tools for research, information processing, communication, and collaboration.

Specific competencies in the informatics curriculum for middle school

The curriculum focuses on developing basic digital competencies essential for the active integration of students into modern information society. Thus, according to the Informatics Curriculum, the goals of studying informatics at the middle school level are presented as follows:

1. *Development of digital competencies necessary for active integration of students into the information society:*

- Responsible and effective use of information and communication technologies (ICT) in various life and activity contexts;
- Development of logical and algorithmic thinking through describing, analyzing, and solving problems using computers;
- Solving practical problems from various fields using computers and software applications;
- Creation of simple digital products (documents, presentations, web pages, etc.) for communication and dissemination of information;
- Effective communication and collaboration in virtual environments, respecting security and ethical standards.

2. *Development of analysis, synthesis, generalization, and transfer skills of knowledge and competencies acquired in informatics in various life and activity contexts, including learning other school subjects.*

3. *Development of a positive, responsible, and critical attitude toward information and communication technologies, awareness of their impact on personal, social, and professional life.*

4. *Cultivation of interest and motivation for the study and application of knowledge in the field of informatics for lifelong learning, in accordance with the requirements of the information society.*

5. *Development of key transdisciplinary competencies:*

- Learning competencies (organizing one's own learning, problem-solving, critical thinking, etc.);
- Communication competencies in romanian and foreign languages;
- Competencies in using ICT;
- Collaboration and teamwork competencies.

6. *Preparation of students for continuing studies in the field of information and communication technologies at the next educational levels (high school, higher education), as well as for integration into the labor market as competent users of information and communication technologies (ICT).*

These objectives include both the development of specific digital competencies and the formation of transversal skills, as well as logical and critical thinking, which are essential for the active integration of students into the informational society. Additionally, the curriculum aims to stimulate students' interest and motivation for continuing their studies in the field of ICT.

A detailed analysis of the specific competencies outlined in the IT curriculum for grades VII-IX provides a clear understanding of their progression throughout the middle school cycle, in accordance with the taxonomy presented in the curriculum. The curriculum is structured so that competencies develop gradually as students progress through middle school, ensuring a constant progression from basic levels to advanced competencies.

Competencies in grade VII: understanding and application. In grade VII, the focus is on medium-level competencies in the taxonomy, centered on understanding and application. Students begin to explore coding systems and develop their skills in encoding and decoding information in specific formats such as binary, hexadecimal, or ASCII. These activities aim to provide them with a deeper understanding of how information is processed digitally.

Additionally, students begin to describe and represent basic algorithms using flowcharts, simple programs, or pseudocode, which allows them to structure their logical thinking and understand the essential principles of algorithms. Thus, at this level, students acquire essential skills for developing a solid foundation in computer science.

Competencies in grade VIII: analysis and creation. In grade VIII, the curriculum expands its objectives to include more advanced competency levels, such as analysis and creation. Students begin implementing algorithms in programming languages such as Pascal and applying previous knowledge to more complex problems. They are also encouraged to analyze and compare different programming solutions, evaluating them in terms of efficiency, complexity, and scalability.

Through these activities, students gain essential analytical competencies and begin to develop critical thinking, which is necessary for solving computer science problems and evaluating technical solutions.

Thus, at this stage, the curriculum encourages students to be innovative and to develop their problem-solving skills efficiently.

Competencies in grade IX: evaluation and creation. At the grade IX level, the competencies outlined in the curriculum reach the highest levels of the taxonomy, focusing on evaluation and actual creation. Students begin working with more complex data structures, such as non-linear structures, and applying advanced processing algorithms. These activities require a high level of synthesis and analysis, preparing students for a deep understanding of computer science.

Students also develop software applications using programming languages and are encouraged to evaluate and optimize the performance of these applications, which allows them to acquire advanced critical evaluation skills. This component of the curriculum helps students refine both their programming skills and the critical thinking necessary for developing efficient and sustainable solutions in the current technological context.

This coherent and progressive structure, aligned with the taxonomy of specific computer science competencies, ensures thorough preparation for students. By systematically addressing competencies from understanding and application to analysis and creation, the curriculum contributes to the development of essential digital skills. Students learn to analyze and create innovative solutions -competencies that are increasingly necessary in a technology-oriented society.

Analysis of textbooks and teaching aids for computer science at the middle school level

Textbooks and teaching aids are essential resources for the development of computer science competencies at the middle school level, providing concrete support for implementing curricular objectives and developing specific skills. These resources facilitate the progressive understanding of computer science concepts and practices, directly impacting the development of algorithmic thinking and digital competencies. In the following, we will analyze the computer science textbooks for grades VII-IX, published by Editura Știința in 2020, examining the structure, content, and activities included in each textbook.

The *computer science textbook for grade VII* guides students in taking their first steps in studying computer science, providing them with a solid foundation in algorithms and programming languages. Starting with fundamental concepts such as algorithms and their representation methods, the textbook helps students develop algorithmic thinking through practical examples inspired by everyday life, such as sorting numbers or organizing a shopping list. These activities bridge the gap between theory and real-world applications, making the information more accessible and relevant to students.

The textbook places a special emphasis on problem-solving through simple algorithms, initially using pseudocode, a language accessible to beginners. A common example is creating an algorithm to calculate the arithmetic mean of three numbers, an exercise that develops both logical thinking and the ability to structure data. Such activities contribute to the development of analysis and problem-solving skills, which are essential in the field of computer science.

As they progress, students begin to familiarize themselves with the Pascal programming language, known for its ease of use for beginners. The textbook includes clear examples that cover basic structures such as variable declarations and mathematical operations. As students advance, the exercises become more complex and involve implementing algorithms in Pascal. From a simple program that displays “Hello, World!” to a program that checks the parity of a number, students gradually develop their programming skills and enhance their logical thinking.

The *eighth-grade computer science textbook* continues the development of previously acquired skills, providing a deeper understanding of data structures and algorithms. Students expand their knowledge by working with lists and matrices, learning to apply sorting and searching algorithms, which are essential for data management. For example, the textbook includes an exercise on the bubble sort algorithm, which helps students understand how to order data and how to evaluate the efficiency of an algorithmic solution.

The eighth-grade computer science textbook continues the development of previously acquired skills, providing a deeper understanding of data structures and algorithms. Students expand their knowledge by working with lists and matrices, learning to apply sorting and searching algorithms, which are essential for

data management. For example, the textbook includes an exercise on the bubble sort algorithm, which helps students understand how to order data and how to evaluate the efficiency of an algorithmic solution.

Another important aspect is the in-depth exploration of advanced control structures, such as „for” and „while” loops. The textbook offers practical exercises, such as a program to calculate the factorial of a number using a “while” loop. This exercise reinforces knowledge about repetitive structures and allows students to explore the application of algorithms in more complex ways, contributing to a deeper understanding of how to automate repetitive tasks in programming.

The textbook also introduces the concept of functions, which are essential in any modern programming language. Students are encouraged to create their own functions to tackle more complex problems, thus developing their ability to decompose a problem into subproblems. For example, one exercise may ask them to write a function that returns the sum of even numbers in a list, stimulating their analytical thinking and ability to organize code. These activities offer valuable hands-on experience, preparing students for the advanced challenges of programming.

Therefore, the eighth-grade computer science textbook provides a crucial transition from basic concepts to more advanced approaches, consolidating and expanding students’ knowledge in algorithms, data structures, and programming. Through varied and challenging activities, the textbook not only develops logical thinking and analytical skills but also prepares students to confidently tackle complex problems.

The *ninth-grade computer science textbook* deepens students’ knowledge, focusing on programming and data management. Structured into four units, the textbook reinforces previous concepts and introduces new advanced topics. One of the units, dedicated to data structures and fundamental algorithms, includes concepts such as stacks, queues, and linked lists, explained through practical analogies, such as a stack of plates to illustrate how a stack works. This approach helps make abstract concepts more accessible, preparing students to implement them in code.

The programming content in Pascal offers progressive exercises leading to the development of a comprehensive project. One example is creating a “Car” class, with attributes like “make,” “model,” and “year of manufacture,” teaching students to create methods that simulate functions of the car, such as starting and stopping the engine. These activities develop their technical skills while also stimulating creativity by applying principles in varied contexts. Additionally, the textbook introduces the concept of code reuse, which is essential in modern programming.

The unit on databases and SQL is presented through a practical case study, such as managing an online store. Students learn to create tables, insert data, and formulate simple queries, with an example being a database for managing a library with tables for books and authors. These activities help students understand not only the storage and retrieval of data but also how to use it efficiently.

In conclusion, the computer science textbooks for grades VII, VIII, and IX are designed to support students’ progress in developing computer skills through a gradual approach, from introductory concepts to advanced topics such as data structures and object-oriented programming. However, it is concerning that these textbooks do not fully cover all the units included in the computer science curriculum, leaving room for further exploration.

In the Republic of Moldova, supplementary teaching materials complement these textbooks, providing additional resources to support both teachers and students in deepening and expanding their knowledge.

Teaching aids are essential tools that help consolidate and deepen the knowledge acquired during computer science lessons. In the Republic of Moldova, alongside official textbooks, teachers and students have access to a variety of supplementary materials that enhance the learning experience by offering additional examples, practical exercises, and group projects. These materials are used to complement the formal learning process, either in the form of problem collections or through interactive digital resources.

A notable example is the problem collections, which are useful for consolidating algorithmic skills. For instance, a collection might include problems ranging from simple sorting and searching algorithms to more advanced exercises, such as data management in a real-world context. These activities allow students to experiment with various problem-solving strategies and test the efficiency of solutions in a controlled environment.

Worksheets are another useful type of supplementary material, often available in digital format, containing exercises that stimulate students' creativity and critical thinking. For example, an exercise might ask students to develop an algorithm for organizing a school agenda using lists and dictionaries. This type of activity encourages students to apply their knowledge in diverse contexts, fostering flexible and innovative thinking.

Additionally, many schools in the Republic of Moldova use educational digital platforms that complement textbooks, providing students with access to interactive resources such as programming simulators and online tests. One example is the E-School platform, which allows students to test their knowledge and follow additional learning modules. Through these digital resources, students can practice their programming skills interactively, receiving immediate feedback.

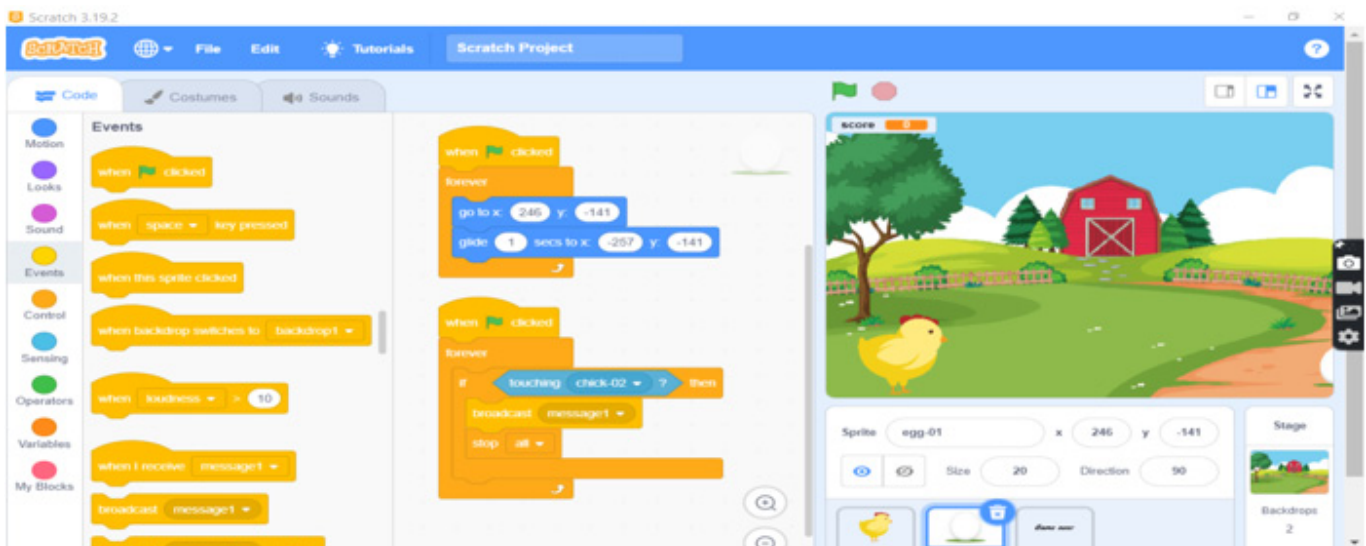
Teaching aids are also extremely helpful for preparing for exams and computer science olympiads. Specialized guides provide complex problems and detailed solutions, helping students develop their algorithmic thinking and familiarize themselves with the types of problems encountered in competitions. For example, students may be challenged to develop an algorithm for optimizing transport routes, a theme commonly found in programming contests.

For teachers, methodological guides provide support through examples of lesson plans, suggestions for integrating technology into the classroom, and strategies for personalizing instruction. For example, such a guide may recommend collaborative projects where students work together to develop a simple application, an effective method for stimulating collaborative learning and developing social skills.

With the advancement of digital technologies, various educational software and interactive applications have been developed that allow the simulation of computer science processes and concepts. These tools become valuable teaching aids in the learning process, as they enable students to apply theoretical concepts in a practical manner and develop technical skills. However, to maximize their effectiveness, it is essential that the software be supported by clear user guides and well-structured educational activities.

A significant example is „Scratch,” a visual programming environment that allows students to create games, animations, and interactive stories. It is an ideal platform for developing algorithmic thinking and programming skills, being easy to use even for beginners. One of the defining features of „Scratch” is its visual interface, where colored code blocks represent different commands and programming structures. Through simple „drag and drop” of code blocks into the workspace, students can create programs without the need to write text-based code. This approach is beneficial for beginners because it eliminates the complexity of syntax and allows greater focus on the logic and structure of the program.

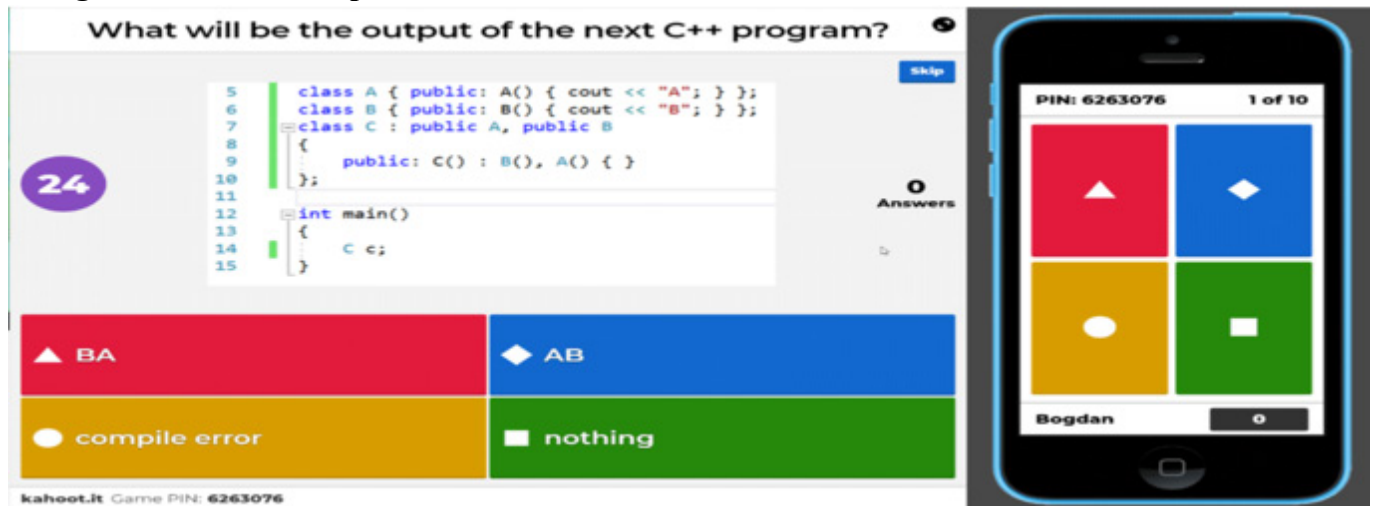
Figure 1. Scratch programming environment.



Source: [3].

Another very popular software is „Kahoot”, an educational platform widely used in schools in the Republic of Moldova, which makes learning more interactive and engaging. It allows teachers to create tests, quizzes, and games, which students can solve in real time using mobile devices or computers in the classroom. Based on the principle of gamification, the platform incorporates game elements such as points, leaderboards, and rewards into educational activities. These features stimulate friendly competition and encourage students to actively participate in lessons, as illustrated in figure 2.

Figure 2. Educational platform Kahoot.



Source: [4].

One of the main benefits of the „Kahoot” platform is its ease of use for both teachers and students. Teachers can quickly create customized quizzes on topics such as algorithms, data structures, or programming languages using an intuitive editor. Additionally, they have access to a wide range of quizzes already created by teachers worldwide, providing valuable and immediately available educational resources.

In computer science lessons, „Kahoot” is often used to assess students’ knowledge in an interactive and motivating way. For example, after learning a topic about algorithms, a teacher can create a „Kahoot” quiz with multiple-choice questions, images, or videos related to sorting or searching algorithms. Students answer the questions using their mobile devices, and the results are displayed in real-time on a screen, along with a leaderboard. This form of assessment not only measures students’ knowledge but also motivates them to improve their performance through competition with their peers.

Therefore, educational resources for computer science in secondary schools in the Republic of Moldova are diverse, including exercise books, methodological guides, educational software, online platforms, and problem collections. However, it is necessary to promote and disseminate these resources more widely, and the development of interactive digital materials and virtual simulations specific to this field would significantly contribute to improving the educational process.

Challenges in implementing the computer science curriculum at the secondary school level

The current computer science curriculum for secondary schools in the Republic of Moldova represents a significant initiative to align education with the requirements of a digitalized society. Structured around specific competencies, it facilitates a practical and applied approach to essential subjects, including current topics such as programming, robotics, and cyber security. Additionally, the curriculum emphasizes practical activities and projects aimed at developing students’ computational thinking and digital competencies.

However, the effective implementation of the curriculum faces a number of challenges.

First, the insufficient technological infrastructure in many schools limits the ability to conduct practical activities. The lack of appropriate equipment—such as computers, educational robots, and specialized software—hinders the interactive conduct of lessons.

Second, the limited number of hours allocated to the subject, especially in grades VII and VIII, constrains the comprehensive coverage of the competencies included in the curriculum, which can lead to superficial treatment of essential topics.

Another challenge is the unequal preparation of teachers for teaching computer science. While there are well-trained educators, others may face difficulties in using modern technologies or interactive teaching methods. Therefore, continuous professional development is necessary to update their digital and methodological competencies, alongside the periodic revision of curricular content to keep pace with rapid technological advancements and the needs of a knowledge-based economy.

School textbooks also need improvements. Some do not include enough practical activities and exercises to support the development of the skills outlined in the curriculum, which is why it is recommended to develop supplementary teaching materials, such as educational software and interactive online resources.

To fully harness the potential of the informatics curriculum, an integrated approach is needed: *revising the allocation of hours, properly equipping schools, continuous teacher training, and disseminating interactive digital resources*. Only through sustained collaboration between authorities, teachers, parents, and the community can the development of the digital skills necessary for students in today's society be ensured. Investment in digital education is a strategic priority, preparing students to meet future challenges and actively contribute to the progress of a knowledge-based and innovative society.

General conclusions

In conclusion, the analysis and monitoring of the computer science curriculum are essential for maintaining an effective and up-to-date education in the face of emerging technological challenges. Educational innovation management involves continuous adaptation to the needs of students and society by integrating best practices and modern technologies into the educational process. This is a dynamic approach to continuous improvement, contributing to the formation of students as responsible citizens, prepared for the future.

Monitoring the computer science curriculum is a complex but fundamental process for ensuring relevant education. The integration of emerging technologies, adjustment of content, involvement of the educational community, and impact assessment are key elements in developing a flexible curriculum aligned with the needs of contemporary society. Through careful monitoring and continuous adaptation of the curriculum, schools can provide students with fundamental training, facilitating their success in a digitalized and dynamic society. Although significant progress has been made in structuring and developing the curriculum, there are still significant challenges that may hinder its complete and effective implementation.

The main challenges identified include insufficient technological infrastructure, limited hours allocated to the subject, uneven teacher preparation, and the lack of comprehensive and interactive educational resources. These obstacles require integrated solutions, such as revising the allocation of computer science hours, investing in equipment and technologies, continuous teacher training, and the development of supplementary educational resources.

Furthermore, collaboration between authorities, teachers, parents, and the community is essential to create an appropriate educational environment and ensure quality digital education. Investments in digital education not only improve students' preparation for the future but also contribute to the progress of a knowledge-based and innovative economy. Thus, through a strategic and sustainable approach, the necessary skills can be developed to ensure that young people are prepared for the challenges and opportunities of an increasingly technologized world.

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EDUCATION – QUALITY OF LIFE RELATIONSHIP: SOCIOLOGICAL APPROACH

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Education in the context of contemporary society has essential functions in acquiring knowledge, the formation of competences needed to prepare young people for professional activity, etc. The correlation between the education system and other elements of the social system is based on a combination of interdisciplinary dimensions from the fields of sociology, pedagogy, economics, psychology, all of which are focused on ensuring quality of life for every citizen. In this regard, the paper „Education – Quality of Life Relationship: Sociological Approach” addresses the issue of theorizing and monitoring education as an important constituent of life quality. The idea that quality attests to the development of education as a competitive and responsive social system is advanced. The role of education system within the social system is revealed and sociological tools of evaluation of the educational system in the context of research on the quality of life dimension are analyzed.

Keywords: *education system, education, quality of life, monitoring tools, indicators, competences, survey, survey, research.*

RELAȚIA ÎNVĂȚĂMÂNT - CALITATEA VIEȚII: ABORDARE SOCIOLOGICĂ

Învățământul în contextul societății contemporane are funcții esențiale în achiziția de cunoștințe, formarea de competențe necesare pentru pregătirea tinerilor pentru activitatea profesională etc. Corelația dintre sistemul de învățământ și alte elemente ale sistemului social se bazează pe o combinație de dimensiuni interdisciplinare din domeniile de sociologie, pedagogie, economie, psihologie, toate acestea fiind concentrate pe asigurarea calității vieții pentru fiecare cetățean. În acest context, articolul „Relația învățământ - calitatea vieții: abordare sociologică” abordează aspecte privind modalitățile de teoretizare și monitorizare a învățământului în calitate de constituent important al calității vieții. Este promovată ideea potrivit căreia calitatea atestă dezvoltarea învățământului ca sistem social competitiv și capabil de a răspunde exigențelor. Este relevat rolul sistemului de învățământ în cadrul sistemului social, analizate instrumentele sociologice de evaluare a sistemului educațional în contextul cercetărilor pe dimensiunea calității vieții.

Cuvinte-cheie: *sistem de învățământ, educație, calitatea vieții, instrumente de monitorizare, indicatori, competențe, sondaj, cercetare.*

Introduction

In contemporary society, education has developed in terms of its delivery methods and the area of coverage of the population, fulfilling multiple functions regarding the acquisition of knowledge, the formation of competences, the preparation of young people for professional development, etc. Both researchers and representatives of the academic environment, as well as exponents of various occupational and political spheres frequently promote opinions regarding the value of education system, based on the premise that *education improves the quality of people's lives*. However, the quality of education system constitutes a basic indicator of the development of society, and, consequently, of the quality of life.

In this context, *education - an important constituent of the quality of life* - expresses its capacity to exercise its basic mission in the context of a constantly changing society. Namely, quality attests to the development of education as a competitive social system capable of forming graduates prepared for integration into social life and to meet demands.

In what follows, we will highlight the role of education system within the social system and analyze the tools for evaluating the education system in the context of research on the quality of life dimension.

Material and Method

The article was carried out by applying the documentation method, being subjected to analysis the publications of researchers who have theoretical and applied contributions in the field of sociology of education, quality of life, as well as good practices at national and international level in monitoring education - as a component of quality of life.

Results and Discussions

The education system represents a social system, which functions according to the principles of a social structure, being guided by social variables and reflecting the evolution of society, or, its products influence it directly and indirectly. The relationship between the social system and the education system is one of interdependence, this being ensured by the very purposes of education, which are established at the level of global social environment. This relationship determines the approach of elements of the social system as a set of entities with characteristics irreducible to those of the component parts, which can be combined and implemented through institutionalized mechanisms. These dynamic relationships express correlations of the type of functional relationships, which can be *of contradiction* - in the situation where a gap appears between the systems, which denotes a mismatch of the education system to the requirements of society, or *of reproduction* - in the situation where the education system positions itself as a promordial one and ensures the evolution of social system.

The capacity of social system to produce responses related to the requirements of contemporary society constitutes, finally, a characteristic of the unity of social system, which allows a relatively independent functioning in relation to other systems. Respectively, the social system represents a set of subsystems, each having certain internal structures with various levels of organization and coordination, as well as a coherent set of social institutions, among which we highlight the educational institutions. Among the researchers who theorized the concept of social system from a sociological perspective, we can mention V. PARETO (*who explicitly formulated the concept and developed it within a theory of society, according to which the component elements of society are mutually dependent and form the social system*) and T. PARSONS, who in his fundamental work „Social System”, published in 1951, promoted the structural-functionalist perspective. This perspective falls within the positivist tradition in sociology and approaches society as being composed, on the one hand, of various **interdependent structures** (*regular, observable patterns of behavior or organized social arrangements, which persist over time*), which tend towards equilibrium, and, on the other hand - **functions** (*ways in which different requirements of a society are satisfied*), which they serve [1, p. 78-81].

We will make brief references to established authors whose contributions complement and provide an argued vision of the role of education system in the context of social system. Researchers R. BOUDON, P. BOURDIEU, etc. promoted the concept according to which the principles of organizing the education system are determined by the mechanisms of development of the social system [2, p. 19], also referring to equality of opportunity. At the same time, E. DURKHEIM analyzes education as an objective social fact, which determines individual behavior in the socialization process and is approached from a triple perspective with reference to: **the education systems specific to each country and era** (1), **the types of education and their explanation** (2), **and the pedagogical institutions and their functioning** (3) [3, p. 76]. Supporting the idea that education fulfills, above all, a social function, E. DURKHEIM clarifies at the beginning of Chapter III entitled „Pedagogy and Sociology” of the work „Education and Sociology” the importance of sociology for the analysis of education system, mentioning that the purpose of education is to configure the social being: „... education, far from having as its sole or main object the individual and his/her interests, is above all the means by which society ceaselessly renews the conditions of its own existence ... Their totality forms the social being. To form this being in each of us, this is the purpose of education” [4, p. 67-68].

The research methodology specific to the sociology of education is determined by the desire that education is an objective social fact, and in this context the „*rules of sociological method*” can be utilized. The sociological method based on „sociological rules”, also applicable to research in the field of education sciences, imposes some requirements with reference to **independence** (1), **objectivity as a characteristic of education approached as a social fact** (2), **specificity of any social fact** (3), **and openness to research models that exist only at the level of some sciences, such as sociology** (4) [5, p. 183-189].

The connection between the education system and other elements of the social system is based on a combination of sociological, pedagogical, economic, psychological dimensions, etc., all of which are focused on ensuring the quality of life for each citizen. At the same time, the concept of quality of life is loaded with a rich axiological baggage and is subject to major influences of the social system. **What are the most appropriate ways to analyze the situation of main components of quality of life: health, environment, education, social services, family, lifestyles?** Whatever the reference point is, all research on the subject refers to the relationship between actual conditions (*living conditions*) and people's perceptions (*evaluation criteria*).

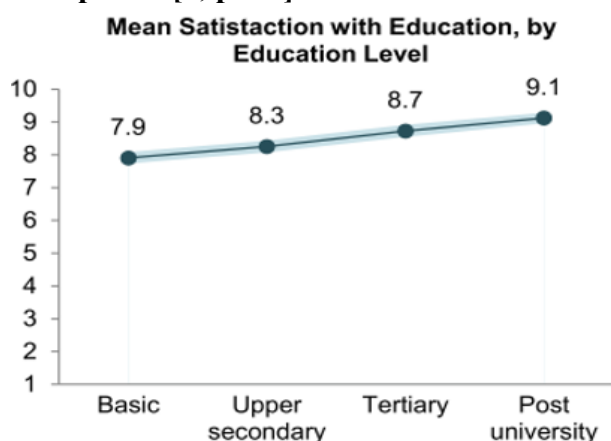
It should be noted that monitoring the education system in the context of research on the quality of life reveals the identification of measurements developed by regional and international organizations, institutions and associations with concerns regarding this chapter. In this sense, the perspective of approaching the quality of life at the European level developed by T. FAHEY and other researchers [6, p.24-36], which is based on certain principles, is instructive:

- adopting a general vision of life and overcoming the exclusive emphasis only on the standard of living, or, *the quality of life is ensured by the totality of those conditions that offer the person the possibility of harmonious development, of achieving a full life;*
- approaching the concept of quality in terms of opportunities and chances of achievement for individuals, including in the context of education system;
- monitoring the quality of life through objective/subjective, absolute/relative indicators;
- researching the attitudinal component, etc.

It is worth noting that these principles have underpinned **the most comprehensive European Quality of Life Survey (EQLS)**, which represents **a multi-dimensional quality of life monitoring tool, including in the education field**. Since its launch in 2003, the EQLS has become a valuable set of indicators that complement traditional indicators on economic growth and living standards, including more aspects of progress and, therefore, can be integrated into the decision-making process and can be taken up in the public debate at European and national levels [7]. The European Union agency carries out these surveys, collecting data from European Union member countries every five years, presenting the information in a comparative logic in thematic reports on certain dimensions of quality of life.

Inspired by this methodology, in 2023 the IMAS company carried out **the survey „Quality of Life in the Republic of Moldova”** within the framework of the „Data for Impact” (D4I) project, funded by USAID. The research sample consisted of 2027 people over the age of 18 from 149 localities. The research results on the educational dimension are of interest. Accordingly, respondents rated their satisfaction with various areas of life, including education, on a 10-point scale, where 1 is „least satisfied” and 10 - „most satisfied”. On average, the analyzed areas obtained an average score of 7.7 points, indicating a satisfaction level of 8.3 for education. It is worth noting that the level of satisfaction increases with access to a higher education level (*see Figure 1*).

Fig. 2. Level of Satisfaction with Education System in Relation to Level of Education Completed [8, p. 24].



Different concerns for education in the context of quality of life are also found at the level of the European Union, including through research by **the EUROSTAT Statistical Institute**. Accordingly, EUROSTAT promotes a series of quality of life indicators, proposing to measure progress on nine dimensions, which vary from living conditions - towards a global perspective on the quality of life: *material conditions of living standards, employment, health, education, leisure time, economic security, respect for basic rights, natural environment, global perspective on quality of life*.

The CALVERT-HENDERSON quality of life indicators represent another mechanism created in the USA, through which an attempt was made to redefine

the general quality of life using a systemic approach. A group of researchers and practitioners from various fields have systematized 12 indicators, which provide the possibility of monitoring the progress and well-being of the nation in the following aspects: *education, employment, energy resources, environment, health, human rights, income, infrastructure, national security, public safety, recreation and housing conditions*. These indicators also identify interferences with other areas, which provides a systemic overview of the social system.

It is also worth mentioning *the Human Development Index*, used for international and regional comparisons, assessing achievements in three areas of human development: longevity (*through life expectancy*), educational level (*through a combination of the literacy rate of adult population with the rate of enrollment in primary, secondary and tertiary education*) and standard of living or level of living (*based on gross domestic product per capita in US dollars at purchasing power parity*). Although the HDI cannot be considered as a tool that fully corresponds to the objectives of measuring the quality of life, the indicator nevertheless fulfills an important function, measuring the relative distance that separates each country in the world from the objectives considered to be priorities not only at present, but also in the future, in terms of a long and healthy life, access to various forms of schooling and, last but not least, a level of income that ensures a decent standard of living. At the same time, the relevance of areas estimated in the HDI should be emphasized, one of which (*educational level*) is of particular importance, and national strategic documents also promote the idea that *the quality of education determines, to a large extent, the quality of life and creates opportunities for the full realization of people's competences*. In the Human Development Report for 2023-2024 with the headline „*Breaking Deadlock: Redefining Cooperation in Polarized World*”, developed by UNDP, the Republic of Moldova ranked 86th out of 193 countries, with an HDI value of 0.763 [9, p. 275].

In a more concrete context, *the place of education in the context of quality of life studies also targets a series of specific indicators*, with reference to the degree of coverage, promotion, general level of education, etc. We will highlight the most relevant of these:

- access to various educational levels;
- schooling rate (*apparent schooling rate, specific schooling rate, transition rate*);
- internal efficiency of the education system (*promotion rate, school dropout rate, efficiency coefficient applied to a cohort*);
- share of education expenditure in GDP;
- quality of educational services;
- indicators relating to educational spaces;
- indicators relating to pedagogical equipment and learning resources, etc.

Conclusions

The topic of education in quality of life studies has an interdisciplinary character, and, in addition to sociologists, psychologists, economists, pedagogues, doctors, demographers, anthropologists and other researchers and practitioners are interested in this research. But whatever the approach, sociological research on this topic proves to be of particular significance for a better knowledge of society, and for the shaping of social policies oriented towards people and expected by them. The particularities of analysis of the education system in the context of quality of life studies offer the opportunity to explore education from a systemic and multilateral perspective.

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PARTICULARITIES OF MONITORING THE TAUGHT-LEARNED CURRICULUM IN THE PHYSICAL EDUCATION DISCIPLINE

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The article „Particularities of monitoring the taught-learned curriculum in the physical education discipline” provides a detailed analysis of the essential aspects of the curriculum monitoring process in the physical education discipline in general education, highlighting both its importance and the complexity it implies. The monitoring process must not only ensure the effective implementation of the current curriculum, but must also provide valuable information about its strengths and gaps, contributing to a continuous evolution of educational content and methods. In this regard, we emphasize that by addressing the specific particularities of the teaching-learning-evaluation process of the physical education lesson in the process of monitoring the disciplinary curriculum, it will ensure correctness and consistency essential in the development of the next generation of curriculum, which will ensure quality education and respond to all current challenges regarding school discipline.

Keywords: *physical education, monitoring, written curriculum, taught curriculum.*

PARTICULARITĂȚILE MONITORIZĂRII CURRICULULUI PREDAT- ÎNVĂȚAT LA DISCIPLINA EDUCAȚIE FIZICĂ

Articolul „Particularitățile monitorizării curriculumului predat-învățat la disciplina educație fizică” oferă o analiză detaliată asupra aspectelor esențiale ale procesului de monitorizare a curriculumului la disciplina educație fizică din învățământul general, evidențiind atât importanța sa, cât și complexitatea pe care o implică. Procesul de monitorizare nu trebuie doar să asigure implementarea eficientă a curriculumului actual, ci trebuie să ofere și informații valoroase despre punctele forte și lacunele acestuia, contribuind la o evoluție continuă a conținuturilor și metodelor educaționale. În acest sens, subliniem faptul că prin abordarea particularităților specifice ale procesului de predare-învățare-evaluare al lecției de educație fizică în procesul de monitorizarea a curriculumului disciplinar va asigura corectitudine și consecvență esențială în dezvoltarea următoarei generații de curriculum, care să asigure o educație de calitate și să răspundă tuturor provocărilor actuale față de disciplina școlară.

Cuvinte-cheie: *educație fizică, monitorizare, curriculumul scris, curriculumul predat.*

Introduction

The curriculum, in the context of educational policies, „represents the dominant dimension of educational policies, and in this sense, the National Curriculum represents a system of curricular policies; a system of conceptual approaches; a system of documents and curricular products; a system of process [1, p. 11].

The action of developing the school curriculum, according to the theory, is periodic, is carried out once every 6-8 years and represents „a managerial activity of evaluation-analysis-appreciation-measurement of the quality of curricular products, by relating them to a set of criteria and indicators in order to use the data obtained for the elaboration of the conceptual landmarks for the modernization of the school curriculum” [2].

Achirii I. supports the idea that „the evaluation of the quality of the school curriculum and of the designed curricular products is a mandatory technical action that aims to assess the value and merit of curricular documents as pedagogical models in order to improve them” [citation 3, p. 38].

In the opinion of several authors, Bucun N., Pogolșa, L., Guțu V., Bolboceanu A. and others [4, p.64], „the evaluation of the school curriculum designed as a technical product means the evaluation of the quality of the process prescribed by the respective normative document and considers the realization of an appreciation-measurement approach of the quality of the disciplinary curriculum designed as a pedagogical model” at the same time they emphasize that by evaluating the curriculum of the school discipline „the extent to which the curriculum is assessed specify when, what, how much and how it is learned, the quality

of the description in normative terms of the educational vision on learning and the projective quality of the forecast, the educational effects that learning in each school subject will have in an education cycle". They also propose criteria for the evaluation of the disciplinary curriculum in general education and describe the indicators for establishing the quality of the curriculum [4, p. 65-66], as follows:

- Criterion I. Scientific and structural rigor of the curriculum;
- Criterion II. Relevance of the framework and reference objectives;
- Criterion III. Relevance and timeliness of the contents;
- Criterion IV. Orientation of the training process;
- Criterion V. Coherence and completeness of the curriculum.

From the perspective of curriculum modernization, the above-mentioned authors suggest that the evaluation should be carried out with emphasis on establishing the level of: child-centeredness of the curriculum; respect for the principles of inclusive, child-friendly schooling; coherence of curricular components; interdisciplinary, multidisciplinary, transdisciplinary integration; attitudinal and motivational of teachers and students; complexity of learning activities; student activism; skills development, etc. [4, p. 66]

The authors Guțu Vladimir, Țurcanu Carolina and Șevciuc Maia [1, p. 11-12] consider that with the development of the disciplinary curriculum it is necessary „the development of curricular policies that is conditioned by the systemic approach of the educational curriculum” through which it is necessary to «clearly establish the connections and interconnections between the curricular elements” at the same time the resizing will be achieved „based on the interconnection of different curricular concepts and different theories of learning”, Curricular products „must be designed/redesigned in accordance with the function and specificity of each document and in a logical sequence” and the content of the educational process „will be approached from the perspective of the system of study disciplines and the system of knowledge, experiences, processes”. The same authors support the idea that the monitoring of the school curriculum itself involves the following important aspects such as [1, p. 42]:

- correspondence between the written curriculum and the taught/implemented curriculum;
- the extent to which the internal logic of the teaching-learning-assessment process is respected;
- the extent to which the provisions of the designed curriculum are capitalized on what should and how should be taught, how learning and assessment should be organized; identifying the causes that generate barriers/difficulties in the application of the written curriculum, as well as the ways to correct/improve problematic situations, but also to prevent these situations in the future, providing necessary information to national curriculum designers, but also to decision makers;
- identifying the impact of the written and taught curriculum on school outcomes.

The impact assessment assesses whether the level of competence monitoring is in line with school objectives (by education levels, by years of education).

From the above, we consider that the monitoring of the school curriculum in the discipline of physical education should be approached as a complex and logical pedagogical (curricular) research, which will highlight vulnerable aspects of the educational process of the discipline, which will allow the formulation of conclusions and recommendations for the continuous and cyclical development of the curriculum.

Curriculum in the discipline of Physical Education as an object of monitoring

At the pedagogical level presented/capitalized in the Curriculum, the discipline „Physical Education” possesses a valuable potential for the formation and development of the students’ personality in the unity of the socio-psychomotor planes. The formative valences of the discipline are varied and valuable: harmonious and healthy development of the body; enhancing, maintaining or restoring motor skills and health; dynamization of psychic processes, including volitional and affective ones; increasing resilience; stimulating intellectual activity; the development of moral qualities, such as team spirit and loyal competition, entrepreneurial spirit, courage and dedication, responsibility, discipline and self-control, patriotic spirit, etc. [5, 6, 7].

The curriculum of the discipline „Physical Education”, 2019 edition, has the following functions [7, p. 1]:

- conceptualization of the curricular approach specific to the discipline „Physical Education”;

- regulating and ensuring coherence between the given discipline and other disciplines, between teaching, learning and evaluation, between the curricular products specific to the discipline, between the structural components of the disciplinary curriculum, between the curricular standards and purposes;
- of designing the educational/contextual approach (at the level of a concrete classroom);
- evaluation of learning outcomes, etc.

The performance of these functions determines the categories of beneficiaries: teachers, authors of teaching materials, education managers, other interested persons, including parents.

The reconceptualized physical education curriculum offers the teacher the freedom and responsibility in training the student, promoting trust in the teacher, but this is conditioned by multiple impact factors, which is conditioned by the availability of human and material resources [7, p. 2]. In this regard, the teacher has the right to decide together with the students:

- which modules will be selected each school year from those proposed in the Curriculum of choice;
- how it will order the compulsory modules and those to be chosen during the school year; which sports events he/she will choose, respectively, in each module;
- up to what level/sublevel, among those given in the Curriculum, the study of a sports test in the gymnasium cycle will advance;
- to what extent it will develop the proposed learning contents;
- how it will highlight the recommended learning activities;
- which of the recommended assessable products will be chosen in each case for each student.

Another particularity of the curriculum for the discipline of physical education in general education, as a concept, is „given priority role to the purposes expressed in terms of competences, which also become criteria for the selection and organization of contents, the choice of training and evaluation strategies” [7, p. 3]. At the same time, through a flexible modular structure, the contents are designed on levels of instruction/classes and directed towards educational purposes presented in the generative matrix of the units of competences [7, p. 6-7].

From a procedural point of view, the Curriculum focuses on the following general aspects [7, p. 4]:

- promotion of constructivist and interactive conception;
- centering on the learner, the student’s interaction with other students/teachers;
- realization of intra-, inter- and transdisciplinarity in authentic learning contexts, ensuring the efficient formation of competences;
- capitalizing on the principles of individualization, differentiation, personalization in the learning process, effectively ensuring school inclusion;
- creating high-efficiency learning environments;
- resizing the evaluation of school results, focusing on the evaluation of the level of manifestation of students’ competences in the context of evaluation criteria through descriptors.

Analyzing the concept of curriculum in the discipline of physical education, we notice that it reflects a complex and multidimensional process and corresponds to the rigors advanced towards the current curricular design. At the same time, we observe that, in the context of modern education, the physical education curriculum is focused on specific aspects of teaching-learning-evaluation of the discipline, also taking into account research in the field of physical education and sport, social changes and the need to respond to the diversified needs of students. In this regard, we support the idea of the authors Guțu Vladimir, Țurcanu Carolina and Șevciuc Maia that „the monitoring of the school curriculum must be carried out through a process evaluation, which aims to control and improve the quality of the application of the curriculum at the level of educational practice” [1, p. 42].

Aspects of curriculum monitoring in the discipline of physical education

The monitoring of the curriculum in the discipline of physical education, as well as pedagogical research, implies a systematic and well-defined approach. In this regard, it is necessary to take into account some essential aspects in the development of an adequate monitoring strategy, which involves: setting objectives:

- clearly defining short- and long-term objectives that align with the concept of curricular monitoring;

- identification of performance indicators: establishment of evaluation criteria that reflect critical aspects of the taught-learned-assessed curriculum;

- resource planning: the efficient allocation of human, material and motivational resources to support the implementation of the strategy.

In this regard, the monitoring plan/program was drawn up, which provides for concrete stages and actions proposed for implementation:

1. *Planning curricular monitoring with the following actions:*

- The conceptualization of the model of monitoring the school curriculum in function has the role of ensuring the coherence and efficiency of the educational process, through a constant and adaptive evaluation of it;

- Familiarization of the monitoring teachers, which consists of organizing training sessions for teachers, in order to present the monitoring model and methodology, but also creating support materials (guides, brochures) to summarize the monitoring model;

- Establishing the objectives of the monitoring of the school curriculum, which include objectives for evaluating the content, objectives for evaluating the teaching process and objectives for evaluating the results;

- Determination of monitoring criteria (relevance, efficiency and accessibility) and monitoring indicators (standardised assessments, feedback, direct observations, extracurricular activities).

2. *Carrying out the monitoring process with the following actions:*

- Correlation and processing of information that involves data collection, data organization and data correlation;

- Fixing information in the Register which includes activities to document the results (results of evaluations, observations from teaching activities, feedback) and Constant updates (ensuring a regular update of the register to reflect the latest data and observations, thus facilitating the accessibility and subsequent use of the information);

- Information processing (processing information from the register to draw relevant conclusions) and providing consultations (Based on the analysis carried out, teachers can provide advice through Discussion Sessions to address students' individual needs or Recommendations for tailored learning strategies);

- Establishing evaluation criteria, using performance indicators (applying indicators to measure the success of the curriculum), Reporting results: (creating reports that summarize the results of the analysis, highlighting the strengths and weaknesses of the curriculum and suggesting improvements).

3. *Elaboration of the school curriculum monitoring report with the following actions:*

- Establishing a curriculum review procedure, in which the collected data is analyzed and the necessary changes are decided;

- Organize the report in a clear and logical form, including sections such as introduction, methodology, results, analyses and conclusions;

- Organizing meetings with different stakeholder groups to discuss experiences with monitoring the disciplinary curriculum;

- Presentation of key conclusions based on data analysis and feedback obtained;

- Distributing the report to teachers and other stakeholders for further feedback and suggestions, ensuring the accessibility of the report to all educational actors, including teachers, students and parents, and creating an action plan for implementing the recommendations in the report.

Mechanisms, tools and indicators for monitoring the curriculum in the discipline of physical education

Given the fact that the general objective of monitoring the curriculum in the discipline of physical education in general education is to detect the gaps/differences between the written curriculum and the one taught, for the success of its implementation, it is necessary to ensure that teachers ensure the conceptual and methodological provisions of the written curriculum in educational practice, and it provides [1, p. 44-45]:

- knowledge of the conceptual, content and methodological dimensions of the written curriculum;
- knowledge of the ways to capitalize on them in educational practice;
- self-monitoring of the level of their capitalization in their own educational practice;
- identification of difficulties in promoting the conceptual framework of the written curriculum in one's own educational practice;
- formulating conclusions and establishing ways to reduce difficulties in applying the conceptual and methodological framework of the written curriculum.

In this regard, we mention that it is fundamental for teachers to have a deep understanding of the conceptual, content and methodological dimensions of the curriculum, to apply this knowledge in educational practice and to carry out constant self-monitoring.

To begin with, the teacher-monitor of the school physical education discipline will be proposed in a monitoring register some indicators of the conceptual provisions of the written curriculum, setting restrictions, visions and difficulties on the scale of levels from 1 to 5 for each one, also allocating the mandatory section of Comments/explanations, suggestions for reducing difficulties (figure 1). These, in fact, will reflect the correspondence between the written curriculum and the taught curriculum (conceptual and methodological framework).

Figure 1. Conceptual provisions of the written curriculum: indicator 1.

5. Prevederile conceptuale ale curriculumului scris sunt **Centrate pe elev** (alegeți nivelul de la 1 la 5 pentru fiecare criteriu): *

	1	2	3	4	5
Țelul învățării la nivelul propriu de dezvoltare:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Țelul învățării la ritmul propriu:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individualizarea activităților de învățare:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivarea elevilor pentru învățare:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implicarea elevilor în luarea unor decizii educaționale:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Se acceptă și se apreciază punctul de vedere al fiecărui elev:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Comentarii/ explicații, sugestii de diminuare a dificultăților *

Introduceți răspunsul

The five indicators/conceptual provisions of the written curriculum proposed to the monitor teachers are [1, p. 49]:

- Student-centered;
- Focus on gradual and step-by-step training of general and specific competences (units competences);
- Centered on active/interactive learning;
- Current content units for students oriented towards Interdisciplinarity;
- The evaluation of learning outcomes must be effective, motivating.

The second stage of the curriculum monitoring is the operational one of the taught-learned-evaluated curriculum, of the concrete themes from the curriculum of the physical education discipline, through which the teacher-monitor fixes the strong and vulnerable parts, difficulties, arising in the learning process, comments and makes suggestions for mitigating the established deficiencies [1, p. 46].

Given the fact that the discipline of school physical education, in addition to the educational aspect, has the purpose of forming the motor skills necessary in daily activity, it is necessary to adapt the Curriculum Monitoring Register to the specific particularities of the discipline.

In this regard, we highlight two aspects specific to the discipline of school physical education, complemented to the general ones that can influence the educational process of the discipline.

The first aspect is related to the preparation and prior organization of the educational process in the discipline of physical education and these consist of the following components:

1. *The number of students in the classroom* - can significantly influence the educational process in the school physical education discipline from several perspectives: individualized interaction and attention, practical activities that require space and resources; motivation and competition; behavior management; diversity of skills; collaboration and team spirit.

2. *The number of the lesson in the timetable* - the time when the physical education lessons take place can significantly influence the educational process. Lessons scheduled in the early hours of the day tend to benefit from greater energy and better concentration from students. On the other hand, lessons scheduled later in the day can be affected by fatigue, which can lead to a decrease in engagement and performance.

3. *Module teaching period* – each season offers different opportunities to learn and practice various sports, adapting lessons according to weather conditions and available facilities. It is important for teachers to plan and structure these periods according to the educational objectives and needs of the students, ensuring that each student benefits from a relevant and valuable educational experience.

4. *The number of the lesson in the taught Learning Module/Unit:* - can influence the level of the educational process in several ways such as: structuring knowledge; skills development; variety of activities; assessment of progress; integration of theory with practice; socializing and teamwork.

5. *The number of students partially or totally exempted from the effort (released)* - can have a significant impact on the quality of the educational process. Here are some ways this can influence lessons: group participation and dynamics; teacher instruction and attention; adaptation of activities; pupils' motivation; development of social skills; assessment of progress; health impact.

6. *The surface of the space in which the physical education lesson takes place* - likewise has a significant impact on the quality of the educational process. Here are some relevant aspects in this regard: the ability to diversify motor activities; student safety, organizing activities according to students' needs; efficient use of sports equipment; involvement in motor activities.

7. *The inventory used to carry out the physical education lesson* - plays a crucial role in influencing the quality of the educational process. Here are some ways this can affect lessons: diversity of activities; quality of training; active participation; skills development; adaptation of activities; student safety; motivation and enthusiasm; assessment of progress.

The second aspect will be related to the direct organization of the educational process in the discipline of physical education. In addition to the general monitoring aspects (related to the complexity of the lesson subject, the formulation of operational objectives, the accessibility and timeliness of the contents, the realization of the recommended activities of the curriculum, the students' activism during the lessons and aspects related to the students' evaluation), specific to the physical education lesson it is also necessary to monitor the following components:

1. *Forms of organization of the physical education lesson* - by adjusting the forms of organization to the needs and level of the class, the teacher can offer a more personalized, dynamic and effective educational experience, which contributes to improving the performance and satisfaction of students in physical education lessons.

2. *Algorithmization of the means of learning in the physical education lesson* - refers to the systematic and sequential organization of exercises and activities in a logical sequence. The aim is to facilitate the progressive and effective learning of motor skills and the necessary knowledge, so that students can learn and perfect movements in a clear and structured way. This strategy allows for faster assimilation of the correct movements, while ensuring that each student advances at their own pace and benefits from a clear and well-structured learning process.

3. *The method of play in the physical education lesson* - the application of this method as mandatory in different phases of the educational process significantly improves the quality of the educational process in the physical education lesson, stimulating both the physical and social and emotional development of the students. The use of this method brings more dynamism, involvement and adaptability, allowing students to learn in a pleasant environment and develop essential skills for life.

4. *Safety in the physical education lesson* – is essential to prevent injuries and create an optimal environment in which students can develop physically and motor in a safe way. The physical education teacher must plan and supervise activities in such a way as to minimize risks and ensure the safety of students.

As mentioned above, the Self-Monitoring Register is designed and proposed to the monitor teacher for completion in a digitized format, forms (figure 1). In this regard, two types of forms have been developed:

- one to reflect the conceptual, content and methodological dimensions of the curriculum in the discipline of physical education;

- the second for the operational monitoring of the taught-learned-evaluated curriculum, where the teacher, through self-monitoring, highlights the possibilities of capitalizing on the conceptual and methodological provisions of the written curriculum in educational practice. The physical education teacher will self-monitor several lessons, (modules and different classes), by filling in separate forms.

Conclusions

Monitoring the implementation of the curriculum is essential to ensure that educational objectives are met and that the teaching-learning process runs efficiently. This monitoring allows the adjustment of teaching strategies, ensuring that students achieve their competences targeted by the curriculum.

The discipline of school physical education has its specific educational aspects, which, in order to effectively improve teaching and learning, it is crucial to also analyze the ways in which the curriculum is implemented in practice. Effective monitoring of the taught-learned curriculum is a dynamic process, which requires commitment and collaboration from all actors involved in physical education, in order to promote not only physical performance, but also the holistic development of students. It allows a continuous evaluation of the teaching-learning process and ensures that the curriculum is applied effectively, contributing to the academic and personal development of students.

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CONCEPTUALIZAREA FORMĂRII COMPETENȚEI LITERAR-ARTISTICE LA ELEVII CLASELOR PRIMARE

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În articol este abordată problema formării la elevii claselor primare a competenței literar-artistice prin conceptualizarea unui model teoretic. Modelul este argumentat de o epistemologie, teorie și praxiologie specifice. Coordonatele epistemică și teoretică se constituie din teorii, concepte, paradigme, principii, concepte estetice, literare, psihologice și pedagogice. Coordonata praxiologică este reprezentată de conceptele: niveluri și criterii de receptare a operei literare, forme de organizare a activității literar-lectorale a elevilor, tipuri de activități, metode hermeneutice, active-participative, ludice. Sistemul de activități este condiționat de atelierul de creație și de scriere creativă, prin care se urmărește stimularea gândirii creative, asociative și laterale, a imaginației elevilor.

Cuvinte-cheie: *competență, competență, literar-artistice, conceptualizare, model, elevi, opera literară.*

CONCEPTUALIZING THE TRAINING OF LITERARY-ARTISTIC COMPETENCE FOR PRIMARY CLASS STUDENTS

The article addresses the problem of training primary school students in literary-artistic competence through the conceptualization of a theoretical model. The model is argued by a specific epistemology, theory and praxeology. The epistemic and theoretical coordinates are made up of theories, concepts, paradigms, principles, aesthetic, literary, psychological and pedagogical concepts. The praxeological coordinate is represented by the concepts: levels and criteria for reception of the literary work, forms of organization of the students' literary-lecturing activity, types of activities, hermeneutic, active-participative, playful methods. The activity system is conditioned by the creation and creative writing workshop, which aims to stimulate creative, associative and lateral thinking, the imagination of students.

Keywords: *competence, competence, literary-artistic, conceptualization, model, students, literary work.*

Introduction

The beginning of the 21st century is called the one of information, human society - society of knowledge, and education - an essential field for obtaining the state of freedom of the human being. The introduction of the curriculum concept in the education of the Republic of Moldova (1997) substantially changed the educational paradigm. Operating from a political doctrine, which required education to convert its own principles to those of the doctrine, the teaching-learning of the Romanian language and literature discipline began to be based on theories, concepts, ideas, principles in the field of philosophy of art, language, aesthetics, pedagogy, psychology etc. Being an integrated discipline, Romanian Language and Literature includes two educational fields: linguistic education and literary-artistic education. The purposes of language education and literary-artistic education are set out in the Romanian Language and Literature Curriculum - conceptual-normative document of the respective school discipline. Since the specific competences themselves constitute the purposes of literary-artistic and linguistic education, they primarily refer to the following linguistic and literary components: „the linguistic and cultural identity of the student in the national context, verbal interactions in various situations of oral communication; reading and receiving literary and non-literary texts through various strategies; the production of written texts of different types and on various supports; language as a system and linguistic norms (lexical, phonetic, grammatical, semantic); linguistic and reading experiences in school and life contexts” [1, p. 7-8].

Literary competence - the purpose of literary-artistic education

The concept of competence, which is quite profound and rich in meanings, is at the same time indispensable to the aims and purposes pursued in practically all fields of human activity (economics, computer science, psychology, medicine, pedagogy, etc.). Broadly speaking, the definition of the term in question depends on the perspective from which it is approached. In relation to the field of education, the definitions of competence summarize several issues: „What is the goal to be pursued?“, „What is the desired long-term outcome?“, „What is the desired end?“ etc. In turn, these problems raise others, since, from one era to another, during the development of society, educational goals change, depending on the educational ideal of the community. Each age, as the history of culture shows, has its own ideal, realized more or less perfectly. In this vein, Gilbert de Landsheere, analyzing the curricula and syllabuses from the perspective of the aims of Belgian primary education from 1897 to 1973, concluded that „over time, the aims of education do not follow one another in a linear and continuous ascent towards a psychological and cultural ideal. On the contrary, the line is sinuous and there is no lack of backward turns“ [apud: 2, p. 30].

In an attempt to establish, in psychological, pedagogical and teleological terms, a model/referential of the design of general competences for the school discipline, Vladimir Gutu defines competence as „a set“ of abilities to act/activate in undetermined situations“, as „an integration of knowledge, skills and attitudes“, as „an integral characterization of personality, in this sense, it means a) integration of knowledge, skills/abilities and attitudes, but also a means of achieving cognitive, social, professional, etc. (psychological level); b) a socially/educationally determined personality trait/quality which is formed and manifested in society (socio-psychological level); c) the aim and purpose of education (pedagogical/theological level)“ [3, p. 6].

As for the literary-artistic competence as the main acquisition of the student reader and as the final goal of literary-artistic education, it was defined by V. Pâslaru as „an integrated whole of literary-artistic, aesthetic-literary and reading knowledge, literary-reading skills and literary-aesthetic attitudes, spontaneously practiced, which allow the true exercise of reading activity“ [4, p. 37]. We notice in that definition three essential components/aspects of literary-reading competence: cognitive (knowledge), psycho-motor (literary-reading skills) and attitudinal (attitudes, desires, emotions, etc.).

VI. Pâslaru, is represented by a system of: a) theoretical knowledge on the concepts of literature and art, the principles of literature and art; b) basic knowledge: aesthetic (principles of artistic reception, the priority of the receiver); literary, relating to form, message, characters, action, feelings, modes of exposition, etc. theoretical-literary, aimed at defining and understanding literary-aesthetic notions and categories; psychological (reception, imagination, thinking, literary-artistic creation); pedagogical (principles of literary-artistic education, aims and objectives of literary-artistic education, knowledge of the system of literary-reading activity of pupils, values of literary-reading competence, etc.).

According to VI. Pâslaru is made up of literary-reading abilities of: a) reception, appropriate to the principles of literature and art, of literary phenomena and works; b) imagining the phenomena of literary works; c) artistic thinking (establishing and highlighting, analyzing, commenting, interpreting, including comparative, of literary phenomena and works); d) literary and artistic creation. The attitudinal domain of literary-artistic competence is manifested in: a) artistic desires, expectations and artistic ideals; b) aesthetic emotions and affective states; c) acts of will in the appropriate valorization of literary works; d) evaluation of literary phenomena and works and evaluation of acts of reception, of one's own reading state, of the acquisitions of literary-reading thinking and creation; e) personal ideas and concepts about the phenomena of literary works; f) literary-artistic and auctorial behaviors [4, p. 38 - 39].

In her research, Alina Pamfil, addressing the issue of reading and interpreting the literary work, insists on the concepts of „cultural competence“, „reading competence“, „comprehension competence“, „interpretation competence“. The first term, in the researcher's view, aims at „the formation of coherent cultural representations, a dialogue with the values of the past and the present, which makes possible the initiation of the student into the spiritual horizon of the community and opens, at the same time, a space for projection and discovery of own identity“ [5, p. 23]. The second concept, „lecturer competence“, is related to the reading activity itself, which, according to the author, „activates some complex cognitive and affective structures, the development of various processes, these extending from the recognition of the word or the selection of

the idea centers of a phrase until the configuration of the global meaning” [5, p. 135]. As for the concepts „comprehension competence” and „interpretation competence”, the author does not insist on them, but on those of „comprehension” and „interpretation”, defining the latter in the following way: „comprehension is the inclusion of the text from the interior of his world and belongs to the innocent or naive look, and the interpretation is the inclusion of the text from the outside and belongs to the critical look” [5, p. 142].

If, in Alina Pamfil’s view, literary-reading competence (a term that the author does not use in her work) is almost synonymous with reading competence, in the case of Paul Cornea, a renowned Romanian researcher in the field of reading theory, we can talk about several types of competences of the ideal reader, namely: communication competence, cultural competence, literary competence, reading competence. From this list it can be seen that the Romanian author makes a certain distinction between literary and reading competence. Thus, in the author’s view, literary competence presupposes knowledge of codes and the experience of transtextuality; it means more than mere acquisition, because ‘its defining feature is creativity, given that in any literary reading it is not only a question of using (appropriate to the situation) the various conventions that make up the genre, style, grouping, author, but also of the ability to invent complementary meanings, to establish links and produce interferences. For every work is part of a zone of literary possibility which is not exhausted by any one convention” [6, p. 88].

In this context, we can talk about the nature and complex nature of literary competence, as evidenced by its six components, which Mina-Maria Rusu highlights in her article: a) the verbal component in which the linguistic dimension is integrated, the textual and the discursive of the language; b) the cognitive component - identifying the intellectual processes that lead to the production and understanding of language; c) the encyclopedic component - involves knowing the linguistic aspects specific to certain fields (science, technology, etc.); d) the ideological component - involves the development of the ability to react to certain ideas, values, principles; e) the literary component - capitalizing on creativity in communication; f) the socio-affective component-involves the formation of feelings and attitudes that can influence linguistic behavior [7, pp. 124-137].

It is known that reading has a considerable positive impact on the development/formation of the human being. Involving the “author-text-reader” relationship, it requires a series of mental skills, involves logical, imaginative, creative thinking activities at the moment when the reader converses with the text.

Conceptualized theoretical model: theories, principles, praxeological component

Any methodology/theoretical model of literary-artistic education, implicitly, of the formation of students’ literary-artistic competence, needs to be argued by a specific epistemology, theory and praxeology. In our research, we opted for a series of theories, paradigms, principles, aesthetic, literary, psychological and pedagogical concepts, necessary and important, through which students are granted the status of subjects of education, re-creators of the literary work. Thus, the epistemic and theoretical coordinates are made up of the following theories, concepts, paradigms: mimesis and catharsis [8; 9]; the origin (=essence) of the work of art [10]; the aesthetic finality of literature [11; 12]; the work as a text [13; 14]; the theory of reception of the work of art [15; 16; 17; 18], the theory of the horizon of expectation and literary and aesthetic experiences [16]; reading theory [15; 17]; the theory of literary-artistic education [4; 19].

The praxeological coordination is represented by the concepts: levels of reception of the work of art [20]; forms of organizing the literary-reading activity of students [21]; literary-reading competence: [22; 23]; methods, criteria for designing, effective implementation of literary-artistic education, evaluation of the levels of literary development of students [4].

Any theoretical and/or methodological construction is viable and valid only if it is based on a system of principles appropriate to the field of research. Synthesizing the opinions of several researchers, we have opted for the following system of theoretical principles from the fields of aesthetics, art, didactics, psychology, and literary-artistic education as the foundation of the Model for the formation of students’ literary-artistic competence through the use of fairy tales:

a) *principles of art and reception*: the unity of creation-reception/perception [Heidegger]; attitude element of the act of “creation-reception” [9]; the principle of association [18]; affectivity as an existential da-

tum of being [24]; the reader - the second subject of the act of creation [15; 16; 13]; imagination - principle of freedom of creation and reception [25], interaction of arts W. von Humboldt [26].

b) *didactic principles*: accessibility of knowledge/respect for age characteristics; individualization and differentiation of learning/respect for individual psychological peculiarities; the conscious, active, thorough acquisition of knowledge; intuitiveness, the link between theory and practice; the systematization and continuity of knowledge;

c) *principles of literary-artistic education*: centering literary and artistic education (LAE) on the field of artistic beauty; structuring LAE objectives on the principles of art, education, artistic communication; orientation of LAE to the self-definition and self-education of the personality from the principles of art; the training in LAE of the fundamental values of humanitas; the foundations of on the laws and phenomena of reception and on the interpretation of literary texts, on the formation of literary-reading skills; education through values and for values; the priority of the hermeneutic (interpretive) approach to the subjects studied; the correlation of instrumental, communicative/literary/lecturer systems; differentiating the students' activity systems according to the text addressed/elaborated, the communication situation, the competence pursued, age

d) *principles of creativity*: operational; updating students' reading experience; stimulating students' creative and associative thinking; freedom of expression.

The stated principles can be considered as norms with strategic and operational value. They regulate the activities as well as the selection of teaching technologies.

Considering that, in the case of our research, the subjects of instruction are primary school pupils, that the school subject Romanian language and literature has its own specificity, which stems from the very nature of literature as an art of the word, the activities, as a constituent part of the praxiological component of the conceptualized model, are didactically structured according to the assessed domain (listening comprehension, speaking, reading, writing), the reading stages (pre-reading, reading, post-reading), the levels of reception of the literary text, the objectives/standards pursued.

Thus for the Listening and Speaking domains, the following types of activities have been selected: listening to the fairy-tale/fragments read by the teacher or professional actors (recordings); identifying/recognizing by listening characters, problem situations, time, space, etc.; discerning information from the fairy-tale; reproducing memorable situations, events, lines of the characters; formulating impressions, ideas, thoughts, attitudes, etc.; uttering lines of the characters; listening to musical fragments in order to relate them to certain features of the fairy-tale. For the field of *Reading*, the following types of activities were provided: cognitive, expressive, research reading; interpretation of real, fantastic events; characterization of the characters; dramatization of the fragment/work; exploration of the fairy tale, according to the outlined objectives; imagining some situations, events; identification of some solutions regarding the formulated problem; relating the values of the fairy tale to the students' own universe of values; text analysis.

The *Writing* domain included activities to collect information necessary for writing character characterizations, for expressing an attitude, etc.; of creative writing: creating a fairy tale/story, redoing a text, developing the idea plan of a projected fairy tale, etc.; modification/development of replicas, situations, events, etc.; of description, by triggering the imagination, of certain circumstances of place, time, etc.

In this vein, we emphasize that the system of activities is conditioned, first of all, by the creative writing workshop as the predominant form of organizing the learning process, which aims to stimulate creative, associative and lateral thinking, and students' imagination. Thus, we have opted for seven types of workshops, each of which stands out for its defining characteristics and objectives: „Recognizing and restoring fairy tales”, „Creating fairy tales”, „Dramatizing fairy tales”, „Carnival of characters”, „Trial by jury”, „Fairy tale, colour, music”, „Screening fairy tales”. Opting for this form of organizing the work of primary school pupils, in order to form their literary-artistic competence through fairy tales, we took into account the following prerogatives: a) the game, in general, is interpreted by most researchers as a major dimension of existence, as exercises to adapt the child to the problems of life, as “anticipation and preparation in order to overcome the difficulties that life raises” [27]. Unlike the traditional standardized lesson, the creative workshop, as a form of organizing the students' activity, does not obey clichés, schemes. Focused on play,

on exercises of imagination, association, creative writing, fantasy, the creative workshop aims to develop the productive and lateral thinking of students, contributes, to a large extent, to the formation of the reader; b) the fairy tale/story is the literary species most loved by primary school students, having a special impact in terms of stimulating their interest in knowledge, triggering emotions, activating the desire for reading, interpretation. Thanks to its characteristics as a literary species, the fairy tale offers unlimited possibilities for its study/interpretation through the application of creative-interactive forms and methods. As for the methods used in the workshops, they must be selected depending on the type of workshop, the age characteristics of the students, and the characteristics of the fairy tale as a literary species. Thus, the theoretical modeling of the actions of formative influence, of the activities carried out within the workshops, also requires a system of methods and procedures applied in order to train students in literary-artistic competence. This system included:

a) hermeneutical methods: expressive reading, which includes actions of specification and practice of aspects related to the text: logical emphasis, pauses, intonation, fundamental narrative tone (in the case of fairy tales); creative reading: actions of re-creation of the work, negotiation of meanings, attribution of added values; literary commentary: decoding meanings/deciphering the meanings of the text, relating the meanings of the work to the students' value universe, etc.; thematic interpretation: actions for formulating the theme, revealing and interpreting the motifs in fairy tales;

b) active-participative methods and procedures: brainstorming: frontal brainstorming/ with image maps, role-playing; judgment process; mosaic; comic strip; jigsaw; chain reading, etc;

c) (c) methods and procedures for developing pupils' creative abilities: creative writing; screen-reading of literary works; association exercises; thought experiments; imaginative experiments; illustration/production of plastic or musical illustrations of the work studied

d) games: dramatization of the fragment/opera; carnival of characters; parade of characters/costumes; simulated meeting with literary characters; gallery tour.

e) (e) methods and procedures for developing critical thinking: problematizing (problem-question, problem-situation with possible answers; literary debate; algorithmization; exercise (identification, comparison, etc.); pyramid, etc.

Conclusion

At the level of the student reader, the theoretical model of literary-artistic competence training through the valorization of fairy tales leads teachers to significant professional performances, validated by the students' results during the training experiment. These results denote the students' ability to reconstruct, restore, elaborate, transform, compare, formulate ideas, create values in actu. The results of the research, including those obtained from the control experiment, have shown that the developed model is a viable construct that can be successfully applied in school practice in order to train students' literary-artistic competence.

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INTEGRATION OF PROFESSIONAL TASKS IN SCHOOL PROJECTS: DEVELOPING KEY COMPETENCES

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This article explores the effectiveness of interdisciplinary project-based learning in fostering and assessing key competencies essential for students' professional success. By engaging students in a series of industry-relevant tasks - such as market research, stakeholder communication, design development, and project presentation - this approach facilitates the practical application of theoretical knowledge in real-world contexts. The study emphasizes the significance of developing critical skills, including analytical thinking, communication, research skills, collaboration, and adaptability. Additionally, the integration of industry feedback provides educators with a framework to evaluate students' competencies against professional standards, thereby enhancing the rigor of competency assessment. This alignment with the evolving demands of today's labor market underscores the importance of cultivating transferable skills that prepare students for the challenges they will encounter in their future careers.

Keywords: *competence, project, research, interdisciplinary approach, solving relevant problems, lifelong learning.*

INTEGRAREA SARCINILOR PROFESIONALE ÎN PROIECTE ȘCOLARE: DEZVOLTAREA COMPETENȚELOR CHEIE

Acest articol explorează eficacitatea învățării bazate pe proiecte interdisciplinare în promovarea și evaluarea competențelor cheie esențiale pentru succesul profesional al elevilor. Prin implicarea elevilor într-o serie de sarcini relevante pentru industrie - cum ar fi cercetarea de piață, comunicarea cu părțile interesate, dezvoltarea designului și prezentarea proiectului - această abordare facilitează aplicarea practică a cunoștințelor teoretice în contexte reale. Studiul subliniază importanța dezvoltării abilităților critice, inclusiv gândirea analitică, comunicarea, abilitățile de cercetare, colaborarea și adaptabilitatea. În plus, integrarea feedback-ului din industrie oferă educatorilor un cadru pentru a evalua competențele elevilor în raport cu standardele profesionale, sporind astfel rigurozitatea evaluării competențelor. Această aliniere la cerințele în continuă schimbare ale pieței muncii de astăzi subliniază importanța cultivării abilităților transferabile care îi pregătesc pe elevi pentru provocările pe care le vor întâlni în carierele lor viitoare.

Cuvinte cheie: *competență, proiect, cercetare, abordare interdisciplinară, rezolvare de probleme relevante, învățare pe tot parcursul vieții.*

Introduction

The role of schools in the lives of students primarily involves preparing them to tackle the challenges they will face as adults. It is crucial to educate students' key competencies that will empower them to become active, engaged members of society, function effectively in the workplace, collaborate in teams, and proficiently acquire, analyze, and apply information. The educator's role is to create conditions that support the development of these skills and attributes, which is challenging to achieve within a purely disciplinary framework. This necessity is further emphasized by the contemporary demand from employers for team members who are developed, proactive, creative, and capable of multitasking.

Integration of professional tasks in school projects

The need to reform the educational system and implement a competency-based approach gained prominence in the 20th century. N. Chomsky [3], D. Hymes [7], R. White [12], and J. Raven [11], among others, have explored the principles of competency-based education. For decades, educators have focused on imparting knowledge to students; however, this approach has not always ensured the practical application of

that knowledge, leading to demotivation among today's youth. In the digital age, where children's attention spans are diminishing and processing information has become increasingly complex, it is essential to effectively convey the relevance of the subject matter, engage students' interests, and demonstrate the practical benefits of the topics discussed.

It is often assumed that all the necessary skills can develop independently in students through knowledge acquired via a disciplinary method. However, reality presents a different perspective, revealing the limitations of this approach. J. Raven says: „People are motivated by a desire to develop and contribute, to have their talents recognized and rewarded” [11]. Also, in „Teaching for Meaningful Learning: A Review of Research on Inquiry-Based and Cooperative Learning” we meet the idea: „Students learn more deeply when they can apply classroom-gathered knowledge to real-world problems, and when they to take part in projects that require sustained engagement and collaboration” [1]. University students encounter new expectations from educators who seek autonomy, the ability to locate, process, and analyze information, and the capacity to work on projects-skills they often lack. Subsequently, university graduates enter the workforce and face new demands and regulations, where employers expect swift adaptation to novel conditions and a thorough understanding of how to navigate situations that differ from those familiar to them. „Not only have the tasks we face changed; the requirements for the types of competencies needed to solve these tasks, as well as the roles we must all play in this process, have also evolved” J. Raven claims [11]. Newman says: „Studies have shown a positive impact on learning when students participate in lessons that require them to construct and organize knowledge, consider alternatives, engage in detailed research, inquiry, writing, and analysis, and to communicate effectively to audiences” [1].

Analyzing the key skills that underpin the competency-based approach, it becomes evident that all of them can effectively assist students during their school years in understanding how to solve various problems when adapted to real-life conditions. Project-based activities could facilitate this process, as they often serve as a foundational principle for the operations of many companies. Lavitt and Boothe say: „To be truly transformational, the learning must extend and endure beyond completion of the learning project” [9]. This may help students develop their key competences and apply them in their future job. The Education Code of the Republic of Moldova [4] identifies the following key competencies:

- Communication skills in Romanian;
- Communication skills in the native language;
- Communication skills in foreign languages;
- Skills in mathematics, science, and technology;
- Skills in digital technologies;
- The ability to learn throughout life;
- Social and civic skills;
- Initiative and entrepreneurial skills;
- Skills for cultural expression and awareness of cultural value.

This list of key competencies leads us to several ideas that educators can utilize to effectively organize the educational process and justify their choice of teaching methods and formats. For example, we can discuss the positive aspects of implementing interdisciplinary projects as a teaching approach that allows students to develop critical and analytical thinking, recognize connections between non-obvious situations and phenomena, and seek unconventional solutions to questions and problems that may seem unsolvable. Interdisciplinary project tasks can also involve the development of communication skills (both linguistic and social) [2, 6]. Teamwork, initiative, and entrepreneurship are essential qualities sought by modern employers. Adaptability and lifelong learning are crucial for future graduates, enabling them to find solutions to unconventional problems in the workplace and acquire new skills as industries modernize and undergo changes, especially when ready-made solutions do not yet exist.

Such projects serve as a practical field for developing students' key competencies, embodying the principles of activity-based and contextual learning approaches, making them valuable within the school curriculum and in professional preparation. Research, such as the work of Lave and Wenger on situated learning and participation in „communities of practice”, confirms that skills are acquired through engagement

in environments closely resembling real-world activities [8]. This is learning „in action”, where students tackle tasks similar to those professionals face, fostering critical thinking and practical adaptability.

Project-based learning, as noted by Barron and Darling-Hammond, develops problem-solving, collaboration, and adaptability skills [1]. Such tasks help students transition from abstract knowledge to practical application, leading to a deeper understanding of professional processes and building „flexible skills” that are highly sought after in today’s fast-changing world.

Implementation

Let us present one example of an interdisciplinary project that encompasses many of the key competencies mentioned above and helps students immerse themselves in a simulation of a genuine corporate team work process they may encounter in the future. Notably, this project is based on a relatively specific elective subject - graphic design - whose National Curriculum was developed and released only four years ago, yet has already captivated many students [5]. Newstetter says: „design-based lessons have several features that make them ideal for developing technical and subject matter knowledge”. „Design projects require students to set constraints, generate ideas, create prototypes, and develop plans through storyboarding or other representational practices. These are all critical twenty-first century skills” [1].

The annual interdisciplinary projects „Corporate Identity” have been conducted at the IPL „Da Vinci” school from October to June during the years 2020-2024 for grades VI-IX.

The goal of this project is to develop a set of corporate identity elements for small businesses in the Republic of Moldova, considering local characteristics and the company’s needs.

The objectives of this project implementation include:

- Researching and analyzing the market to select a suitable candidate company for the project;
- Analyzing competing companies to identify positive and negative examples of corporate identity development within the chosen industry;
- Investigating and analyzing the identities of companies in the selected industry on the international market to identify the best solutions for the chosen candidate;
- Communicating with the company’s administration to ascertain needs and create a project work plan;
- Studying digital tools and their application throughout the project;
- Researching and analyzing examples of presentation results in the graphic design industry to select the best strategy;
- Engaging with industry specialists for feedback and experience acquisition;
- Developing teamwork skills, including the distribution of roles and responsibilities during the project;
- Enhancing skills in working with printed materials and industrial design products;
- Cultivating public speaking skills.

Let us examine the stages involved in the interdisciplinary project „Corporate Identity”:

1. Analysis of the Current Market Situation and Candidate Selection: In the initial phase, students conduct a thorough analysis of the small business market to evaluate current economic and market conditions. They identify candidate companies most suitable for developing corporate identity based on market trends and the specific needs of the segment. During this stage, students gather information online, explore social media, attend various events and fairs, analyze the market in collaboration with a mentor, and communicate with representatives of the companies that interest them.

2. Communication with Company Administration: This stage involves interaction with representatives from the selected companies. Students develop social and communication competencies, honing negotiation skills and establishing partnerships, thereby fostering a professional culture of communication. This can be regarded as one of the most significant skills students can cultivate through the project, which may not be easily achievable within standard educational activities.

3. Identifying Company Needs and Formulating Project Tasks: Students conduct a detailed analysis of the company’s needs, identifying key aspects for developing corporate identity. They create a list of goals and tasks based on the company’s requests, structuring the project activity and laying the groundwork for further implementation.

4. Development of Team Skills and Role Distribution: A critical component is the formation of teamwork skills and the distribution of roles among project participants. Students learn to collaborate in groups, efficiently allocating responsibilities, which enhances their organizational and managerial competencies. At this stage, it is crucial for students to recognize their strengths and weaknesses, allowing team members to take on parts of the project that align with their expertise, fostering mutual learning, deeper inquiry, and seeking optimal solutions with guidance from the mentor. The tasks and roles students encounter and resolve during the project may include:

- Communication with company representatives;
- Defining a work plan;
- Developing the concept of basic elements for the corporate identity, such as a logo, business cards, posters, social media materials, product packaging (if needed), etc.;
- Technical aspects, including working with materials in graphic editors and preparing them for printing and presentation;
- Consulting with specialists in the field and addressing mistakes;
- Presenting the results to the client company;
- Creating a portfolio of materials and presenting the final project to the school community.

5. Competitor Analysis: In this stage, students conduct a competitive analysis of companies across various market segments (small, medium, large businesses) to identify successful and unsuccessful examples of corporate identity development. This research helps students gain a deeper understanding of client market preferences and tailor their solutions to meet the demands of a specific industry within the national market context.

6. Researching Global Practices: Students analyze global trends in corporate identity. They study successful international examples to comprehend the global context and adapt best practices to local conditions, thereby enhancing their research and analytical skills.

7. Digital Tools: At this stage, students acquire specialized digital technologies necessary for developing corporate identity (graphic editors, design, and visualization software). This promotes the formation of digital competencies and deepens professional skills in design.

8. Project Presentation Method Analysis: Students investigate contemporary strategies and methods for presenting work results in graphic design. The goal is to select the most effective tools for showcasing the project to the client, which fosters the development of visual and verbal communication skills and the creation of compelling presentations.

9. Interaction with Industry Specialists: At this stage, students engage with professionals from design and marketing fields, allowing them to obtain expert feedback. This integration of theoretical knowledge with real professional practice may occur through competitions or personal consultations with invited specialists.

10. Working with Printed Materials and Implementation Preparation: Practical preparation of printed products and industrial design materials takes place. Students develop skills in working with printed media and preparing materials for implementation, facilitating the acquisition of practical aspects related to material design objects.

11. Project Results Presentation to the Client: The final stage involves presenting the developed corporate identity to representatives of the client company. Students showcase their work and justify their proposed solutions, enhancing public speaking skills, professional communication, and project presentation. This stage parallels activities in real companies, where adult professionals present their ideas to clients in meetings. In this case, we refer to adapting school assignments to future employer expectations.

12. Project Analysis and Reflection: Upon project completion, a critical analysis of the work performed is conducted. Students evaluate the strengths and weaknesses of completed tasks, analyze mistakes, and develop strategies for their rectification, which contributes to enhancing research and organizational competencies. This stage typically involves discussion among team members and the mentor, where all share impressions of the work done, point out strengths and weaknesses, and debate potential future improvements.

The final results of the project are presented to the school community through publications on social media, presentations to classmates, or community gatherings. This promotes the dissemination of acquired knowledge and experience among students, encourages their engagement in project activities, and elevates the overall competence level of the school collective.

As a result of implementing the interdisciplinary project „Corporate Identity”, it has been found that this work format ignites significant interest in research and project activities among students. Introducing tasks similar to those faced by professionals in real life allows students to understand how the contemporary professional environment operates, what is expected of workers, and what challenges they may encounter in the future. The project format facilitates the integration of knowledge from various disciplines - native language (communication), foreign languages (researching and analyzing information and experiences from other companies in the international market), graphic design (creativity, connections to art and technology), and analysis (research skills) - helping students recognize the interrelations between theoretical knowledge and its practical application. Through analyzing examples, competitors, and company needs, students engage with real business processes, develop critical thinking, learn to make informed decisions, and understand how their actions impact the final outcome, enabling them to transcend traditional school curricula and comprehend where knowledge acquired during education can be applied in real life. The mentor’s role in this process is pivotal as they guide and support students, helping them tackle challenges, structure tasks, and find appropriate solutions. Communication with industry professionals and receiving real feedback immerse students in the professional community, providing valuable insights and enabling them to tailor their solutions to actual business needs. This form of interaction serves as a vital element of professional orientation, helping students perceive the real context in which their knowledge can be applied. Over the past four years, this project has demonstrated that students are indeed eager to show interest, initiative, work beyond the school program, attend various events and meetings, learn to communicate with adults and professionals, grow, and solve unconventional problems.

Conclusion

The interdisciplinary „Corporate Identity” project demonstrates an effective model for advancing and evaluating key competencies in students by simulating authentic professional scenarios. This project-based learning approach facilitates the development of critical skills such as analytical thinking, communication, collaboration, and digital proficiency, and it also provides teachers with a framework to assess these competencies in action. Through stages that include market analysis, stakeholder communication, design development, and final project presentation, educators can observe students’ progress, analyzing how well they apply learned skills to complex, real-world tasks. Engagement with industry professionals enhances this evaluation process by introducing standards from actual practice, allowing educators to refine their strategies and maximize learning outcomes. This reflective and iterative project design strengthens students’ abilities to adapt and problem-solve in professional contexts, preparing them effectively for the demands of the modern workforce.

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**DEVELOPING STUDENTS' RESEARCH SKILLS.
GROUP WORK PERSPECTIVE:
FUTURE OPPORTUNITIES FOR IMPLEMENTATION
IN PROFESSIONAL ENVIRONMENTS**

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This study focuses on analyzing the group-based organization of educational activities and its role in developing students' research skills. In the context of modern education, where the emphasis is on competency development, the ability to work collaboratively is a key aspect of the educational process. Within research activities, students become active participants, formulating objectives, selecting methods, and evaluating results. This process helps to reduce anxiety and increase self-confidence, as the responsibility for the final outcome is shared among all group members. Furthermore, the teacher, acting as a mentor, provides essential support, assisting students in building confidence and coordinating their actions. The study also examines the stages of project-based activities, including defining objectives, selecting topics, distributing responsibilities, implementing the project, and reflecting on the process.

Keywords: group work, research skills, project-based activities, competencies, students, education.

**DEZVOLTAREA ABILITĂȚILOR DE CERCETARE ALE STUDENȚILOR.
PERSPECTIVA DE LUCRU DE GRUP:
OPORTUNITĂȚI VIITOARE DE IMPLEMENTARE ÎN MEDII PROFESIONALE**

Acest studiu se concentrează pe analiza organizării pe bază de grup a activităților educaționale și rolul acesteia în dezvoltarea abilităților de cercetare ale studenților. În contextul educației moderne, unde se pune accent pe dezvoltarea competențelor, capacitatea de a lucra în colaborare este un aspect cheie al procesului educațional. În cadrul activităților de cercetare, studenții devin participanți activi, formulând obiective, selectând metode și evaluând rezultatele. Acest proces ajută la reducerea anxietății și la creșterea încrederii în sine, deoarece responsabilitatea pentru rezultatul final este împărțită între toți membrii grupului. În plus, profesorul, acționând ca un mentor, oferă sprijin esențial, ajutând elevii să-și construiască încrederea și să-și coordoneze acțiunile. Studiul examinează, de asemenea, etapele activităților bazate pe proiecte, inclusiv definirea obiectivelor, selectarea subiectelor, distribuirea responsabilităților, implementarea proiectului și reflectarea asupra procesului.

Cuvinte cheie: lucru în grup, abilități de cercetare, activități bazate pe proiecte, competențe, studenți, educație.

Introduction

The group-based organization of work activities is a structure encountered by many professionals today. This approach encompasses numerous positive aspects, as well as some negative ones, to which we learn to adapt continuously. It is worth considering whether it would be beneficial to provide adolescents with the opportunity to develop and learn in similar conditions during their secondary education. Such an experience could better prepare them for future expectations. Additionally, can this organizational structure enhance students' interest in the subject matter and improve productivity in project-based work? One of the important skills that adolescents develop during their secondary education is communication. This skill manifests naturally during breaks and outside of formal lessons; therefore, fostering communication skills within the classroom setting warrants consideration.

Basic content

Group work serves as an effective form of organizing educational and cognitive activities within the classroom. It involves small groups engaging in both collaborative and individually-oriented tasks assigned

by the educator. This approach promotes active communication among students, instills a sense of responsibility for the outcomes of both individual and group activities, and supports principles of collaboration and mutual assistance. Learning through a group-based organization implies that students acquire knowledge and develop their skills through active engagement, analysis, and research, seeking solutions to problems rather than passively receiving information in a pre-formed manner.

Liimets notes that the group-based organization in the classroom has the following characteristics [6, 7]:

- Awareness among students of their collective responsibility for solving the task.
- Independent completion of assignments by students within groups under the guidance of the teacher.
- Mutual oversight and accountability of each student to the group.
- Consideration of the interests and abilities of each student.

Group work enables students to become active participants in the educational process, where they set goals, choose methods and means to achieve these goals, implement their plans, and evaluate the results of their efforts. An important aspect of group work is the division of a collective task into smaller, manageable assignments that students can complete sequentially and distribute among themselves to achieve optimal outcomes [5]. During group activities, essential qualities necessary for successfully addressing research tasks are developed, such as critical thinking, the ability to analyze various perspectives, and respect for diverse opinions on a single issue. Moreover, this setting creates a precedent for the direct development of research skills, including data collection, analysis, and interpretation [4, 5].

Achieving successful outcomes depends on the adherence to several factors. Based on our experience, we can propose that a series of conditions should be met when planning this type of activity:

- Division of the work process into stages that are comprehensible to students.
- Discussion of the work plan, provision of a clear schedule, and communication of the importance of adherence to this schedule to students.
- A differentiated and individualized approach to working with each group [3].
- Assistance in group formation to ensure effective collaboration.
- Support for the group, guiding students toward success based on their specific needs.
- Discussion of completed work and provision of feedback.

Theoretically, students can navigate all these stages independently; however, group-based organization offers several distinct advantages. When working in a team, adolescents who encounter difficulties often receive prompts and assistance from their peers. At this stage, children develop self-confidence and an understanding that any problem can be collectively resolved, even if it is new or atypical for their comprehension. As adults, we frequently encounter this form of organizational structure in the workplace, making it logical to prepare the younger generation for similar experiences.

Although the school curriculum does not always incorporate group work, students often enthusiastically agree to participate in such activities, recognizing that a successful outcome is achievable even if some group members face challenges at various stages.

Group work allows children the opportunity to make mistakes, as acknowledging and correcting errors within a team is generally more efficient and straightforward than doing so individually. In such situations, students can explore the nature of the mistake in greater detail, examine potential solutions, and experiment with various approaches based on the analyzed information. Again, similar frameworks are commonly encountered in the workplace and during student internships.

Group work significantly reduces students' anxiety levels, alleviating fears of failure and incompetence when undertaking research tasks. Working collaboratively, students experience greater support and confidence, which fosters their active engagement in the research process. This, in turn, leads to the development of research skills, as group dynamics enhance the efficiency of information retention, knowledge activation, and data analysis. Collaborative activities create conditions for a favorable psychological environment, allowing students to focus on research tasks with minimal stress [9, 10].

Through group work, a wide range of educational and developmental objectives can be addressed. First, students demonstrate a notable increase in the volume of material they absorb and the depth of their understanding, while also reducing the time required to form concepts, skills, and abilities compared to tra-

ditional frontal instruction [1]. Second, group activities promote greater cognitive engagement and creative independence, thereby enhancing overall motivation to learn and creating a more comfortable school environment [10].

Moreover, the nature of interpersonal interactions changes: levels of indifference and aggression decrease, leading to more friendly and humane relationships among students. This contributes to increased cohesion within the group, where children begin to understand each other and themselves better, demonstrating greater respect for both their peers and their own capabilities [2, 10].

For teachers, the group-based approach provides opportunities for implementing differentiated instruction [3], taking into account individual inclinations, abilities, and the pace of each student's work. In this context, the teacher's role in educational guidance becomes a crucial element, as it helps to address conflicts that may arise in the early stages of group interactions, creating conditions for successful learning and collaboration.

While students play the primary role in group work, its effectiveness largely depends on the professionalism and efforts of the teacher. For successful implementation of group work, it is essential to prepare students in advance for collaboration, which requires dedicating time during specific lessons. Without this preparation, group work may become ineffective. Organizing the process demands specific skills and additional efforts from the educator, as poorly constructed groups risk allowing less capable students to benefit from the efforts of their more capable classmates. Group division may also be accompanied by difficulties and conflicts, and for students who prefer individual work, separate conditions must be created, complicating the teacher's task [6, 7].

Let's discuss a model of a group project in which the educator emphasized the development of research skills and creativity throughout the process, along with its stages and the resolution of potential conflicts that may arise during the work. The project was implemented between March 15 and April 15, 2024, at IPL "Da Vinci." As part of the project, students were invited to participate in a charitable event by preparing goods for sale at a fair, with the proceeds intended to assist a low-income family in acquiring housing. During discussions, among several proposed options, the project to create a multi-page calendar with illustrations bound with a spiral was selected.

In the first phase, it was necessary to determine the product format, after which the students, together with the teacher, selected the most suitable structure. Each group then focused on choosing a theme for the illustrations, analyzing their interests and abilities. Following discussions with the teacher, the most promising thematic option was approved.

During the planning stage and the allocation of roles, groups assessed the skills of their members, which facilitated the development of self-regulation skills. Disagreements often arise at this stage, particularly if one group member has a differing opinion regarding style or technique. In such cases, the teacher facilitated conflict resolution and the search for compromises. For example, in one group where the majority preferred to work with watercolors, a suggestion was made for a member with a different working style to take on the task of graphic refinement of elements, thus balancing each participant's contribution and achieving a cohesive outcome.

Achieving an unified visual style was so important for us, prompting students to engage in collective reflection and refine their sketches. Throughout the process, students explored the stylistics of various artists who inspired them and reached an agreement on a common style for the calendar, ensuring that the final product appeared cohesive and harmonious. A critical analysis of sketches at each stage was essential. Many groups decided to appoint one or two members responsible for ensuring that the illustrations adhered to a consistent style before beginning work with color.

If the chosen theme came out to be more specific, as in the case of one group that selected the theme of national cuisine, students started additional research on national dishes characteristics of their region. They analyzed the feasibility of conveying the textures and features of these dishes artistically, which required deep creative engagement. At this stage, particular attention was given to developing research competence; students learned to collaboratively gather information, analyze it, and select relevant examples suited to their specific case, consulting the teacher as needed. After each lesson, students presented their interim

results, analyzed them, and discussed potential improvements. The teacher guided the process, supporting reflection and encouraging students to engage in self-criticism and enhance their skills.

For the final stage of the project, students, with the assistance of the teacher, scanned their illustrations and processed them graphically. They were tasked with selecting appropriate fonts, color schemes, and decorative elements for the calendar in preparation for printing. Depending on the students' age and skill level, they could engage in the process at different stages, making the project more inclusive.

The concluding phase of the project involved students participating in a charitable fair, where they presented and sold their product to visitors. This stage contributed to the development of essential communication skills and the ability to interact with an audience. Throughout this process, the teacher acted as a mentor, guiding students in their efforts, fostering their self-confidence, and facilitating the effective application of the knowledge and skills they had acquired in practice. In summary, we will outline the project plan, which simulates professional activity and enables students to develop certain skills through a group-based organizational approach.

1. **Project Initiation.** The project begins with an introduction of its goals and significance to the students. The teacher forms groups and familiarizes the participants with the tasks and expected outcomes.

2. **Determining the Format and Theme.** Each group collaborates with the teacher to select the project theme, discusses potential formats (e.g., calendars, posters), and decides on the product to be created.

3. **Analysis and Distribution of Responsibilities Within Groups.** Each group assesses the skills of its members to effectively distribute responsibilities.

4. **Research and Concept Development.** Students conduct research on the chosen topic, analyze existing examples, and develop concepts. At this stage, the emphasis is on enhancing research skills to successfully process a large volume of information and collaboratively analyze the data obtained.

5. **Project Execution.** During this phase, the actual execution of the project begins. Students create sketches and prototypes, discuss stylistic elements and visual design, exchange ideas, and adjust their work based on feedback.

6. **Presentation of Results.** Each group presents its product, shares their experiences, and discusses the challenges encountered. This stage fosters public speaking skills. In the specific case described above, students participate in a charitable fair where they sell the created product, allowing them to apply their communication skills in practice.

7. **Evaluation, Reflection, and Summation.** Upon completion of the project, groups analyze their work, discuss strengths and weaknesses, and identify opportunities for future improvement. The teacher and students discuss overall achievements and lessons learned from the project experience.

8. Throughout the group work process, students develop communication, collaboration, and discussion skills, enabling them to interact more effectively with one another and find compromises. They learn to take responsibility for completing tasks, which in turn enhances their self-regulation and confidence. Additionally, students acquire skills in conducting research, analyzing information, and formulating hypotheses, laying the foundation for critical thinking.

Conclusion

Group work encourages all participants to be engaged in the process, as each member contributes to achieving a common goal. Thus, this project serves as a powerful tool for the comprehensive development of students' research, communication, and teamwork skills. We can reasonably assert that the claim that group-based organizational activities can indeed facilitate success in professional environments in the future holds true.

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„Ingineria învățării” (POSTMAN, 1992) are efecte destule pentru a fi dobândit adepți și critici. Noua criză sau „revoluție” indusă de tehnologie amețește fără limite, așa încât, sunt tot mai mulți cei care cer să privim atent la efectele pe termen lung, la constantele generatoare de motivații în educație, la relațiile dintre actorii procesului. Articolul își propune să extragă din câteva modele de învățare elemente care susțin că oricât de bine organizate vor fi mecanismele predării și de *înnoită* este tehnologia, permanentă și *inseparabilă va fi relațioarea profesor-elev*. Perspectiva este susținută de recente preocupări mai ample consacrate relaționării didactice și de un recent model generat de analiza transgenerațională a acesteia în care tehnologia este prezentă prin conținutul său informațional reflectat de TPACK supus condiționărilor alternativei pedagogice Reggio Emilia.

Cuvinte cheie: *competență, modele de învățare, relaționare, Reggio Emilia, TPACK, 3PT&I.*

COMPETENCE AS RELATING MODEL

„Learning engineering” (POSTMAN, 1992) has enough effects to have gained followers and critics. The new crisis or “revolution” induced by technology is dizzying without limits, so that there are more and more people who ask to look carefully at the long-term effects, at the constants that generate motivations in education, at the relationships between the actors of process. The article aims to extract from several learning models elements that claim that no matter how well organized the teaching mechanisms will be and how renewable the technology is, the teacher-student relationship will be permanent and inseparable. The perspective is supported by recent broader concerns devoted to didactic relationships and by a recent model generated by its transgenerational analysis in which technology is present through its informational content reflected by TPACK subject to the conditions of pedagogical alternative Reggio Emilia.

Keywords: *competence, learning models, relating, Reggio Emilia, TPACK, 3PT&I.*

Introduction

The implication, but above all, the insistence on the role of digitalization in school, generated strong disputes between technophobes and technophiles. It is necessary to offer them the measure of school concerned not with encouraging extremes, but with elements favorable to good growth, character formation through education. Each industrial revolution has brought more intensity to the debates regarding the role of technology in education, either because of the need to guarantee the continuity of its fundamental principles, or because there have always been unconditional defenders of curricular revolutions as in the form of technological ones.

The work brings arguments in favor of a good understanding of the relationship between technology and school starting from models and examples capable to provide it. The hypothesis, found in the conclusion, is that the role of technology has always been and will always remain the same.

Models of Successful Learning

The concern for the idea of a *Mastery Model*, of a guaranteed mastery model of student learning, was established quickly after the undeniable successes in the industry, which offered various examples of the fact that good organization is also effective. In this sense, the evolution from learning centered on objectives [1, 1976] *to the one on competences will be easy, precisely because efficiency takes precedence according to the economic model*. Thus, at the beginning of the 20th century, the Winnetka Plan was an-

nounced, by Carleton Washburne and Henry C. Morrison, from Chicago - by which maximum performance was desired in any unit of time reserved for learning. We can say that *engineering* gets its safe place in this field, previously, almost exclusively reserved for the teacher-student relationship, for the permanent *reminder* [18] of one from the other and from the environment.

In the middle of the 20th century, the programmed training, thought on account of the technology of B. F. Skinner (1965) for which the impulse given by a stimulus was decisive, the idea was accredited that learning a behavior needs to take over a simpler sequence and then go through the whole way of training, step by step.

In the same period, John B. Carroll (1963) elaborates the „Model of School Learning” - based on factors that influence students’ success and their interaction. The idea of such a model is based on the teacher’s activity in teaching foreign languages, in which, in his/her opinion, it is important to know how much time a student needs to reach a certain level of knowledge of that language. The speed of acquiring knowledge and skills to use the new language can also predict performance. We will add to this nuance the idea that success, as early as possible, but also in the shortest time, brings success and the stronger engagement of anyone in the learning action [17]. Certainly, it is known that other factors also intervene, which make possible this rapid acquisition of skills, but also delays. The elements that accelerate the attraction for learning and involvement with increased success, we attribute to the relating between the actors of process [10].

John B. Carroll believes that learning time is directly proportional to the student’s abilities, and in the conditions of instructional activities it is ideal to take them into account. The conclusion of offered model is that each student needs his/her own type, different from others, to acquire a certain level. Thus, it neither denies the possibility of acquiring that level of skill acquisition, nor does it require that all students reach the same milestones in the same unit of time.

Benjamin Bloom and his collaborators obtain similar observations - analyzing the differences in the rhythm of students’ learning - noting that for the same types and durations of the teachers’ lessons, the students have different responses, it is not possible to predict the level of success of the students due to the variables characteristic of the teacher’s actions only. Starting from Carroll’s model, he will build his own model based only on the pace of learning and by reporting to the level we want the student to reach.

If we have these elements, then we can establish appropriate strategies so that students - most of them - can go the distance from the starting stage to that level. Aptitude becomes „the amount of time it takes the learner to master a learning task.” [3]. Although there is enough research to support that most students can achieve a required level of learning, it is recognized that different time is needed for each student, even if the same goal is being pursued. Bloom estimates that only one per cent, i.e. between 1% and 5% of students have the opportunity to excel in a subject, and another 5% are unable to learn a certain subject. Consequently, the aptitude - understood as learning pace - is a real problem for 90% of students. The ray of optimism given by Bloom consists in emphasizing that since aptitude is understood as the rhythm of learning, time can be modified by interventions on the environment and on the „learning experience” in school and/or at home [2]. In other words, learning situations bear the imprint of relating between teacher and student, with or without their will. The science of relating will be mastered by the teacher-with effects both for himself/herself and for his/her students. Well, even for his/her students’ students, through transgenerational effects [11].

The conditions in which learning will take place become important, because, for Bloom, several strictures are mandatory:

- *the training approach* should be carried out “*sensibly* (sn) and systematically”. The focus is on that sensitivity that we need to find in the quality of teacher-student relating. Relating itself is the source and model of learning, which becomes self-learning with the source elements and model for self and others.

- *the students’ support* can only be natural because the teacher intervenes only when needed and for as long as it proves necessary. It is more important for the student to know that he/she is not alone than to have a permanent guardian.

- *the time to solve the tasks* is individual. Knowing and respecting differences is equally important for both the teacher and the student. In each unit of time, everyone knows how much they can get and, above all, what they have to do, for the valorization of their learning relationship and future joint actions.

- *there is a clear criterion* regarding the task that students have to carry out [1] to achieve the model. We will notice that, in fact, we are talking about a level on which they have agreed which is neither the teacher's nor only the student's - because each has brought rational, reasoned and proven corrections in favor of additions or reductions compared to a certain too tall or too short level.

For the viable relationship and its continuity, it is a priority to respect the possibilities and expectations, in particular, of the student, but also of the teacher, who, of course, can address other teachers - asking for help, or giving up or taking over tasks. The assessment of students itself is not an opportunity to "measure" knowledge, skills, but rather one of guidance, orientation of future learning through means, strategies, criteria, principles that the student becomes aware of, understands due to the "corrections" observed in his/her teachers. The moment of evaluation is an important and useful one for both actors. The student himself/herself needs to know how the successes and blockages in the process reflect on both. If the student is asked to make progress, then he/she has the right to know how this request is reflected at the level of teacher - his/her most important learning partner. Thus we find, what is remarkable for our topic, that the relationship, the action of their relating does not disappear, but can move, predominantly in the affective and volitional, motivational plane.

The Keller Plan, developed in the same period of the 1960s, valorizes the ideas of „reinforcement”, present in conditioning theories - in vogue for that era. With the Keller model - presented in the work „Engineering Personalized Instruction in the Classroom” of 1967 - teaching is understood as a certain *engineering of personalized instruction*, whereby if you know what is missing or what can be accelerated, you introduce that element and success comes. For him, the relationship is one that lends itself to engineering interventions, an idea that will be emphasized more and more and will be transferred to an “learning engineering” [12].

What Bloom's and Keller's strategies have in common remains the goal-centeredness of learning. Skills are important to achieve goals. The difference between the strategies of the two authors is given by the level at which the research is carried out and the subjects targeted by them. While Bloom deals with school students, the pre-university level of learning, Keller targets university students. In his first meeting with the psychology students, he tells them, “This is a course where you can move through, from start to finish, at your own pace. You will not be held back by other students or forced to move forward until when you are not prepared. At best, you may complete the course requirements in less than a semester; at worst, you may not complete the work in that time.” [7, p.80-81].

His plan, PTS – Personalized Training System, imposes five conditions:

- The observation of your own rhythm,
- The advancement, the transition from one stage to another is done after there is proof that everyone has acquired what was requested;
- The lectures and demonstrations are used, above all, *as means of motivation* - to stimulate the pupil/student to undertake the task - not only as sources of information and the hope that they will become knowledge;
- The word used as an oral or written expression is important in the teacher-student relating (communication). (It is the responsibility of teacher to ensure that it is well chosen and carefully presented;
- The use of supervisors will enhance *the personal-social aspect* of educational process [7].

Their role is as objective observers of the students, but also of the teachers, who will receive the necessary elements to change the verbal, nonverbal, paraverbal behaviors and to valorize the contexts, the valences noticed as free in the students.

Emphasis in favor of the relating through each of the five elements are evident, which bring new arguments regarding the importance of respect that governs the relationship between teacher and student, the need for criteria on the basis of which the relationship will develop and improve. The rigors of moving from one stage to another turn into guarantees.

From the same perspective of attention to relating based on mutual respect for the potential of expectations and needs, no activity of the teacher will be carried out if it is not an opportunity to motivate the involvement of students in the process. The word, the expression of teacher will permanently retain its persuasive quality, as a link between the rational and the affective of the relationship. Finally, the need for

objectivity in assessing the evolution of students (pupils), any „supervisor”, this time a wider observer, from outside the school system, remains preoccupied with the „*personal-social aspect* of the educational process”, i.e. with the significant increases from the level of each person from the perspective of his/her harmony with the social layer, the group, the community, the society he/she is a part of.

Keller’s “engineering” was benefited by the age of his audience, students able to understand their role in the mechanism in which they were included. The adult can react, he/she knows his/her motivations, he/she has the necessary strength to react according to some criteria, principles already acquired. These ascents of educational engineering stop in the 80s and 90s of the last century and return, with greater force, at the beginning of the 21st century, under the impetus provided by new technologies, which could not bypass the school - because the school feels obliged to use them, but the interests of the producers prove most interested in the safe market it offers.

In the current stage, we are witnessing, on the one hand, the manifestation of unconditional enthusiasm for accepting technology as the absolute master of the instructional-educational process, being considered mandatory to adapt to it, on the other hand, there are criticisms against the „obtuseness of educational institutions to change” the suspected inability of teachers to effectively use new methods and technologies [13] or their conservatism declared as defenders of humanist values - in the era of posthumanism and posttruth. For these reasons of the omnipresent action of technophobes, it is forgotten that the model was thought for training, so it is mandatory to state that the school does not have simple instruction as its objective.

John Carroll’s model - believes Torshen - „had the most important implications in the design of competency-based training programs because it suggested that each student will reach a certain level of performance, if they allocate enough time for this purpose. It is assumed that each person has this capacity, if the training is suitable for him/her, if he/she devotes the necessary time and is fully involved in the learning process. In special situations, an additional time will compensate for both the lack of yield and efficiency as well as the student’s non-involvement. Consequently, the programs must be designed in such a way as to offer options for using time in accordance with the student’s needs”. John Carroll’s *The Mastery Model* is the support for thinking about a competency-based curriculum because it specifies the basic conditions:

1. There should be aspects of the curriculum that involve the basic competences, concepts and attitudes that the pupil needs to learn. The proposed model will aim to:

a) defining the behavioral indicators on the basis of which it will be assessed whether the pupil has reached the minimum pass level;

b) identifying the presence or absence of those behaviors - noting who got them and who didn’t.

2. Teaching staff should be able to implement learning activities that guarantee the acquisition of the required skills, concepts, facts and attitudes.

3. The content of objectives to ensure the necessary and sufficient elements to justify the effort and resources of applying the model.

And yet, we will say that full and effective use of the content offered through the curriculum may never occur. The cause often lies in the lack of interest in observing the relational context in which a particular skill was born. Knowing that oment and its defining elements is important, especially for professor. He/she will schedule the repeated return to situations favorable to the maximum exploitation of the creative potential of those links confirmed as viable.

For the better and early understanding of the inevitable relating, it is necessary to consider it as an expression of universal determinism. From such reporting is born the consciousness and responsibility of valorizing all the valences that, by definition, we have at our disposal because the world as a whole has them.

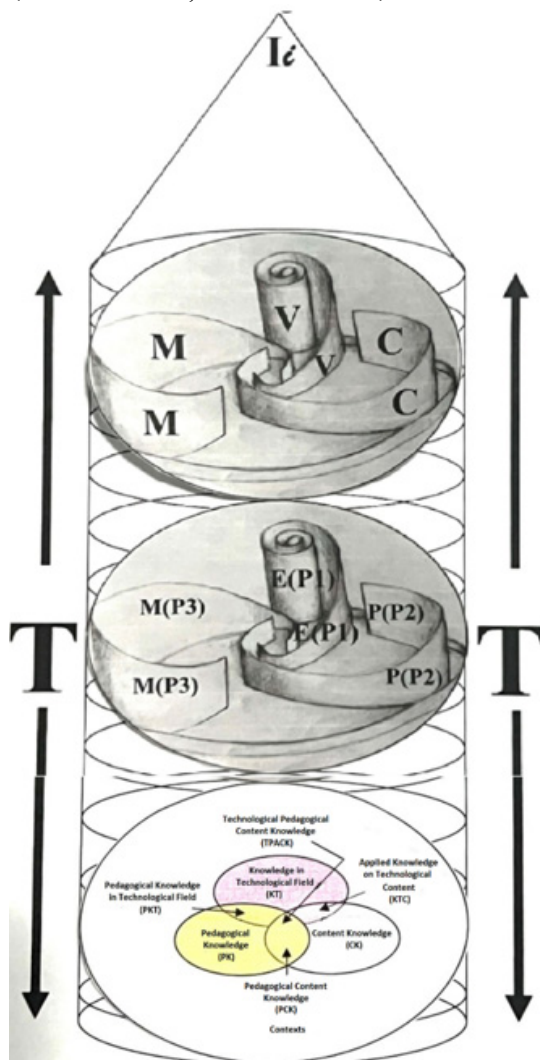
Integrative Models with Focus on Relating

In the construction of interdependencies’ image, we cannot forget another law, that of indeterminism (Heisenberg), which draws our attention to the fact that in any situation confusing factors can intervene - from the information erroneously provided by instruments, to the eye, the ear, our senses, which can be sources of misunderstandings and misinterpretations. These dangers are even greater, therefore, and more important to know, in the humanities, where subjectivism, knowledge, experience, own expectations, con-

texts are always in the making. In this continuous change the invoked competences themselves receive influences. The relationship with others and the environment remains essential - by referring to values and principles. Continuity and unity has its support in the teacher-student-environment interaction, of those three teachers - as the Reggio Emilia alternative calls them - and in its evolution over time - as presented by the 3PT&Ii model [11].

Human capital - invoked for the first time by the economist Adam Smith (1723-1790), in his work “The Wealth of Nations” - can only be evaluated from the perspective of knowledge, skills and abilities of individuals, but Smith’s analysis also includes the sum of knowledge bases in an organization that become understood and managed as *the value of employees’ knowledge and competences* [9], and knowledge is joined by the quality and viability of relationships supported and developed by attitudes and motivations; of skills, capabilities; experience and expertise; personality traits built together by each generation and transgenerationally.

Figure 1. 3PT&Ii Relating Model (Pascu M-S, Șoitu, L., 2024).



The TPACK model - *Technological Pedagogical Content Knowledge* [8] centered on the importance of technology, the medium that becomes a carrier of pedagogical content, allowed us to analyze the effects recorded at the level of the relating between those 3Ps, those three teachers, from the perspective of the Reggio Emilia alternative – the teacher, the pupil from whom learns and his/her teacher, the environment as a source of learning for all. The result, in the model we have built, is reflected by what becomes, is preserved at a higher level, beyond one or more generations, which decants the products of technology into new knowledge and new technologies. The 3P model subjected to the time coordinate T records, as we said, renewed knowledge C, an environment M with its new and constant elements of resistance, but from an educational perspective the values V will also be noticed, which guarantee uninterrupted continuity.

Of course, the three levels with metastable elements, never constantly placed on the same coordinate, are possible to function, since there are always personal, group, community „i” interests, but also the ideal „I” by which the question „what kind of man we want (must) build” so that his/her (man’s) being is not affected. For these reasons, in order to highlight the continuity of process, we placed the two I&i at the top of triangle, each with the role of motivating the individual, group and common actions of each generation and their strings. It is the image we have of the „Cornerstone” as an element that is present both at the base of construction and at its Hight.

Our conclusion will be shaped by the axis of entire approach: any learning model, any perspective of approaching the necessary competences will not be able to avoid - neither sequentially nor over longer periods - the relating between the actors of process, which permanently includes educators, students and the natural and social environment.

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MODALITIES OF IMPLEMENTING VOLUNTEERING ACTIVITIES BY NON-FORMAL EDUCATION PROGRAMS

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Volunteering refers to the activities undertaken by individuals who, of their own volition and without financial remuneration, engage in supporting others or the community. It offers benefits not only to those who receive assistance but also to the volunteers, who develop competencies and values such as empathy, responsibility, and communication skills. The importance of volunteering in societal development lies in its ability to promote solidarity, social inclusion, and community cohesion. Additionally, it contributes to fostering a culture of mutual aid, supporting the integration of vulnerable individuals and reducing the risk of social exclusion. Non-formal education plays a crucial role in promoting volunteerism as it provides a flexible framework adapted to the needs of participants, fostering the development of skills necessary for active community engagement. Through interactive and experiential activities, non-formal educational programs stimulate active participation and learning through practice, thus facilitating involvement in volunteer initiatives. Programs like the National Community Action Strategy (SNAC) and the European Voluntary Service (EVS) are exemplary models of best practices. SNAC promotes social inclusion through activities that bring together typical students and those with disabilities, thereby supporting diversity and tolerance. EVS facilitates youth mobility across different countries, encouraging them to engage in volunteer projects that promote active citizenship and intercultural competence development. These initiatives demonstrate how volunteering, supported by non-formal education, can contribute to building a more cohesive and inclusive society.

Key-concepts: *personal and professional development, non-formal education, vulnerable individuals, volunteering.*

MODALITĂȚI DE IMPLEMENTARE A ACTIVITĂȚILOR DE VOLUNTARIAT PRIN PROGRAME DE EDUCAȚIE NEFORMALĂ

Voluntariatul se referă la activitățile întreprinse de persoane care, din proprie voință și fără remunerație financiară, se angajează în sprijinirea altora sau a comunității. Oferă beneficii nu numai celor care primesc asistență, ci și voluntarilor, care dezvoltă competențe și valori precum empatia, responsabilitatea și abilitățile de comunicare. Importanța voluntariatului în dezvoltarea societății constă în capacitatea sa de a promova solidaritatea, incluziunea socială și coeziunea comunității. În plus, contribuie la promovarea unei culturi a ajutorului reciproc, sprijinind integrarea persoanelor vulnerabile și reducând riscul de excluziune socială. Educația non-formală joacă un rol crucial în promovarea voluntariatului, deoarece oferă un cadru flexibil adaptat nevoilor participanților, încurajând dezvoltarea abilităților necesare pentru implicarea activă a comunității. Prin activități interactive și experiențiale, programele educaționale non-formale stimulează participarea activă și învățarea prin practică, facilitând astfel implicarea în inițiative de voluntariat. Programe precum Strategia Națională de Acțiune Comunitară (SNAC) și Serviciul European de Voluntariat (SVE) sunt modele exemplare de bune practici. SNAC promovează incluziunea socială prin activități care reunesc elevii tipici și cei cu dizabilități, susținând astfel diversitatea și toleranța. SEV facilitează mobilitatea tinerilor în diferite țări, încurajându-i să se implice în proiecte de voluntariat care promovează cetățenia activă și dezvoltarea competențelor interculturale. Aceste inițiative demonstrează modul în care voluntariatul, susținut de educația non-formală, poate contribui la construirea unei societăți mai coezive și mai incluzive.

Concepte-cheie: *dezvoltare personală și profesională, educație non-formală, persoane vulnerabile, voluntariat.*

The problem

In recent years, society has faced a series of challenges that, just a decade ago, would have seemed unimaginable. The COVID-19 pandemic has not only altered the lifestyle of citizens worldwide but also reshaped the way individuals relate to one another and the issues they encounter. Similarly, the war in Ukraine, which may superficially appear to be a localized military conflict between two neighboring nations, has had far-reaching negative impacts on a global scale. Both the pandemic and the war have affected

more than just the medical or military dimensions; they carry multiple political, economic, cultural, social, and demographic connotations. Issues such as misinformation, displacement, social isolation, communication barriers, economic losses, restricted access to quality formal education, and, in extreme cases, the complete abandonment of education, along with the exacerbation of intercultural differences, are just a few examples of these widespread consequences [19]. The phrase „Nothing will be the same as before!” may seem cliché, but in the current context, it has never been more relevant.

Against this backdrop, it is evident that a growing number of individuals are increasingly vulnerable to the major global issues society faces [1]. To overcome these obstacles, an increasing number of economic, social, cultural, and educational agents are proposing various support and reintegration programs to assist individuals who are, for varying durations, affected by these challenges. For instance, one way to support vulnerable individuals is by engaging them in educational programs. Primarily, this pertains to formal education programs, structured by accredited institutions (schools), which deliver courses based on an official instructional curriculum, with outcomes validated through recognized competency certificates. The importance of formal education is indisputable, as the qualifications obtained through diplomas enable vulnerable individuals to secure employment, thereby helping them to overcome some of their vulnerabilities [3]. Equally important is non-formal education, which complements formal learning. It encompasses all organized and systematic activities conducted outside the formal educational setting, designed to supplement and facilitate learning for those seeking to improve their skills in a particular domain [7].

The main objectives of non-formal education are as follows [4]:

- Supporting those who wish to develop particular sectors such as commerce, agriculture, services, industry, etc.;
- Assisting the population in better exploiting local or personal resources;
- Literacy initiatives for those facing difficulties;
- Professional advancement or initiation into a new field of activity;
- Health education, leisure activities, etc.

By its nature, non-formal education is more flexible and closely aligned with the needs and interests of its beneficiaries. Thus, through participation in optional educational programs, individuals facing difficulties can either enhance a set of pre-existing skills and competencies or acquire new ones, enabling them to better integrate into the labor market or society. This creates the premises for superior professional and social inclusion of these individuals, which, in turn, will lead to a reduction in issues that they may pose to local communities [15].

Best Practices in Implementing Volunteering for Vulnerable Individuals/Groups

Etymologically, the term „volunteer” originates from the Latin „voluntarius” and the French „volontaire”, referring to an individual who willingly and deliberately engages in an activity for the benefit of another person, a group, or a community, without seeking any form of remuneration. The benefits of such volunteering actions extend not only to the recipients but also to the volunteers themselves. For the former, the gains may include the resolution of issues for which they sought assistance, while for the latter, the benefits are primarily professional and moral. Volunteers can accumulate professional experience, enhance their specialized and interpersonal skills, and develop personality traits such as communication, sociability, self-respect, empathy, concern for the struggles of disadvantaged individuals or groups, community role assumption, and responsibility fulfillment [5].

Mihaela Neacșu [12] argues that volunteering has extraordinary educational value, being „a form of learning through practical action” that can foster competencies in volunteers. She emphasizes that many of today’s volunteering programs, initiated and developed by various non-governmental organizations, rely on the concept of „peer education”. These programs are implemented through educational support provided by young volunteers to their peers, coupled with shared life experiences, allowing all participants to benefit as they learn from one another.

Summarizing the aforementioned points and findings from various specialized studies, [2, p. 13] identify several benefits of volunteering:

- The opportunity to share accumulated experiences for the benefit of others;
- Physical health;
- Psychological and emotional well-being;
- A sense of purpose and utility in life;
- A feeling of belonging to a group or community;
- Enhanced social interaction;
- Reduced loneliness/isolation;
- Enjoyment/fun;
- Support from peers and for those around them;
- Pride/self-esteem;
- Confidence;
- Resilience;
- Leadership skills and opportunities;
- Broadened perspective/awareness;
- New career opportunities;
- The opportunity to express generosity;
- Learning opportunities.

Moreover, the roles of „volunteer” and „beneficiary” are interchangeable, allowing those who have helped at one point to also receive support, and thus everyone gains an understanding of their partners’ feelings while developing the aforementioned personal qualities [9]. This interchangeability enables vulnerable individuals to engage as volunteers in addressing problems that they or other community members face, laying the groundwork for “inclusive volunteering” .As [2] describe, this form of volunteering is open to all individuals, irrespective of age, culture, gender, sexual orientation, religion, ethnicity, social status, or disability. In other words, inclusive volunteering adapts the „classic” concept of volunteering for everyone. This approach is rooted in the premise that vulnerable individuals are best positioned to understand their own problems, making it natural for them to be the first to seek solutions. Additionally, the benefits experienced by volunteers who themselves face vulnerability can lay the foundation for increased social inclusion [18].

Thus, volunteering is an invaluable tool for supporting vulnerable individuals by allowing them, on the one hand, to benefit from assistance, and on the other, to engage in managing their own problems. This can create conditions for the social inclusion of disadvantaged individuals, empowering them to transform from „social beneficiaries” into true „social actors” (Sultana, 2021).

When an individual decides to volunteer, it is essential to consider several questions about the values underlying this initiative [2].

- How will they feel when encountering people in difficult situations (wounded, impoverished, suffering from terminal illnesses, dependent on psychoactive substances, etc.)?
- What motivates them to get involved?
- How much time are they willing to dedicate to this activity?
- In which areas of activity do they feel most comfortable?
- Do they have the necessary skills to volunteer in their chosen field?
- Is there an associative structure where they can collaborate with others who share similar visions to carry out their preferred activities?

Similarly, the host organization that receives and coordinates volunteers must adhere to a series of steps, as outlined by [2, pp. 45-55]:

A. Preparation of the Organization for Volunteer Involvement:

- Creating tools for needs analysis to identify areas where volunteer engagement is necessary;
- Developing the organization’s vision regarding the role and involvement of volunteers;
- Drafting objectives and goals for the volunteer program;
- Establishing policies and procedures for implementing volunteer activities within the organization;
- Defining specific tasks for each volunteer;
- Efficient management of material resources;

- Initiating new projects that can involve volunteers;
- Supporting the personal and professional development of volunteers.

B. Volunteer Recruitment:

- Developing volunteer recruitment strategies;
- Preparing recruitment materials;
- Directing efforts during volunteer recruitment.

C. Volunteer Selection:

- Preparing the host organization to receive new volunteers;
- Conducting interviews and selecting volunteers.

D. Orientation and Training of Volunteers:

- Developing orientation and counseling programs for volunteers, regardless of their field of action;
- Providing support to organization members in working with volunteers;
- Designing initial and ongoing training programs for all volunteers.

E. Volunteer Supervision:

- Direct and indirect supervision of volunteers;
- Evaluating the individual performance of each volunteer.

F. Monitoring Volunteers by Collecting Evidence Regarding Their Work.

G. Volunteer Motivation.

H. Recognition of Volunteer Merits.

I. Continuous and Final Evaluation of Volunteers and Volunteer Programs.

It is evident that working with volunteers is not as simple as it may seem at first glance; any non-governmental organization or public institution has multiple responsibilities, from identifying, selecting, and involving volunteers to evaluating and monitoring their performance. Practically speaking, volunteers have the same rights and obligations as paid employees, except that their involvement is voluntary and intrinsically motivated, with rewards that differ from financial compensation. Nevertheless, the number of individuals willing to volunteer is steadily increasing, and the following paragraphs will analyze several examples and opportunities in this regard [16].

As mentioned in the previous sections, education – through all three of its forms (but particularly formal and non-formal education) – plays a crucial role in motivating individuals to volunteer and in developing the competencies required for benevolent activities. Schools, as integral parts of the community and primary promoters of these two forms of education, can be both beneficiaries and providers of volunteering for their partners. Primarily, in conducting the educational process, schools need significant support from the community, which may include material and financial resources, ensuring quality human resources, and providing advanced knowledge sources, among others. Other challenges faced by schools may include high absenteeism and dropout rates, families' inability to support formal education for their children, insufficient material and technical resources, inadequate counseling and information for parents, and community difficulties in supporting and adequately rewarding those involved in educational efforts. In such conditions, the main objectives of volunteer activities aimed at schools might be: supporting equal educational opportunities for all students involved, providing educational information and counseling to their families, enhancing the institutional development of educational providers, ensuring lifelong learning for harmonious and sustainable student development, and promoting inclusive education for students with special educational needs, etc. Meeting these objectives and addressing the needs of schools through volunteer activities can optimize the instructional-educational process and improve the quality of student training and development [5].

One of the major contemporary challenges for society, which education plays a vital role in addressing, is the inclusion of vulnerable individuals who face one or more disabilities. Without delving deeply into the subject, it should be noted that inclusive education requires schools to adapt to the psycho-individual characteristics of each student, regardless of whether they have disabilities [14]. Such a school eliminates the concept of „special education” and replaces it with that of a „school for all”. Various strategies for including students with special educational needs are known in practice, but their success is significantly influenced,

among other factors, by the community's willingness to accept diversity (of all kinds) as a normal aspect of existence [6].

In this context, one of the main programs proposed by educational authorities for implementing inclusive education is the National Community Action Strategy (SNAC), through which typically developing students and those with various disabilities engage together in activities, enabling them to get to know each other and discover and appreciate the qualities they possess. The main aim of SNAC is to promote and develop volunteer activities in the community, through which students and teachers commit to supporting individuals or groups disadvantaged socially, educationally, etc. The primary operational approach involves creating links between high schools, on one side, and special schools, residential care centers, social housing, day centers, and hospitals on the other, thereby establishing the conditions for diversity, acceptance, and mutual tolerance. The core motivation of SNAC is that, on the one hand, disadvantaged individuals can benefit from voluntary support from other community members, while the latter learn to discover and appreciate all their peers, regardless of the problems they face. Moreover, initiating community actions during schooling is justified by the fact that school inclusion constitutes the first step towards lifelong social inclusion [13].

Another program that enables individuals to support their peers at risk is the European Voluntary Service (EVS), funded by the European Commission [10]. The program supports the transnational mobility of young people aged 18 to 30, encouraging them to volunteer in various fields within organizations in a country other than their residence, usually within the European Union, but other partner countries are also included. EVS aims to enhance social cohesion, solidarity, tolerance, and understanding among young people while promoting active citizenship and non-formal learning. By participation in EVS projects, volunteers can develop foreign language communication skills, personal and professional abilities, intercultural competencies, and empathy, enabling them to take responsibility in helping to solve the problems

A young person who wants to participate in the European Voluntary Service (EVS), it is crucial that they are affiliated with a sending organization accredited by the National Agency in their country of residence and are accepted by a host organization, also accredited, in another EU or partner country. One of these two organizations submits a project to the European Commission, and with the funds obtained, the volunteer's expenses, including transportation, subsistence, and allowances, can be reimbursed. Some of the fields in which volunteering can be conducted through the EVS program include: culture and arts, minorities, rural or urban development, youth information on various topics, health, anti-discrimination, environmental and animal protection, media and communication, equal opportunities for all, social integration, active citizenship, strengthening of the associative sector, administrative measures, delinquency, interfaith dialogue, civil protection, children's rights, the active role of women, development cooperation, disability, education through recreational activities, youth policies, regional cooperation, anti-drug programs, heritage conservation, European information, youth and sports, intercultural dialogue, among others. Activities involving risks for the volunteer, such as providing first aid in medical emergencies or interventions in disaster or conflict zones, are not included. It is important to note that host organizations reserve the right to select volunteers based on objective criteria, while ensuring no form of discrimination is made.

Generally, the duration of a volunteer placement through the EVS ranges from one month to one year, and each person can only apply for such a project once in their lifetime. A young person interested in participating must approach a sending organization that will assist them in identifying their preferred field and a host organization willing to accommodate them. This sending organization will ensure initial training, maintain constant communication with the volunteer and the organization they are volunteering for, assess their performance, and help them reintegrate into the community upon completing the placement. Similarly, the host organization is responsible for appointing a mentor, supporting the volunteer's social integration in the local community by facilitating language learning, contact with other young people, providing accommodation, meals, a financial allowance, and opportunities to carry out the volunteering activities specified in their contracts. At the end of the placement, the volunteer will receive a Youth-Pass certificate, confirming their volunteer status and the skills acquired. In this way, any young person wishing to engage in a volunteer program can be assured of receiving the necessary support to succeed in their endeavors [8].

Beyond the direct benefits that the National Community Action Strategy and the European Voluntary Service can provide to individuals in need, it is essential to emphasize that these programs foster the creation of a supportive environment for the implementation of volunteerism. This supportive framework facilitates the development of positive attitudes towards the inclusion of vulnerable individuals through volunteering, as well as the establishment of procedures that allow various social actors to commit to promoting volunteerism. A supportive environment for inclusive volunteering is grounded in elements such as social inclusion policies, social acceptance, the provision of formal and non-formal education, the creation of a supportive infrastructure, cooperation among key stakeholders, and the provision of financial support for implementing various volunteer programs. Constructing this supportive environment requires the involvement of multiple agents operating both „horizontally” (governmental institutions as well as non-profit associations) and „vertically” (from the local to national or European levels). It is crucial that these agents act in a concerted manner, under the coordination of local or regional volunteer centers [2, pp. 59-60].

According to the authors (*ibid*, p. 61), the main requirements for building a supportive environment for volunteerism aimed at vulnerable individuals include:

- Organizing a favorable context for implementing volunteer actions;
- Supporting governmental and non-governmental organizations interested in sending or receiving volunteers;
- Encouraging volunteerism among as many individuals as possible, including those from vulnerable backgrounds;
- Expanding and diversifying the range of volunteer programs;
- Promoting authentic partnerships between the public, private, and non-profit sectors.

The previous sections have highlighted some of the most important best practices in the field of volunteering, demonstrating that, when well-regulated and supported by appropriate social policies, it can significantly change the lives of both beneficiaries and volunteers. There are numerous volunteering programs applicable in Romania and across the European Union, and personal examples provided by various public figures illustrate that volunteerism is something more people should take into account. The reason these actions are worth promoting is to make people aware that a single person or a small group cannot bring about significant changes, but they can provide a model of best practice to which others can refer, and through the replication and dissemination of these experiences, more people will be engaged, thereby driving the desired change [11].

Conclusion

It is well known that volunteerism plays a significant role in reducing the social exclusion of vulnerable individuals, as voluntary engagement allows for the resolution of some of the problems faced by disadvantaged groups. The effectiveness of these actions increases when the volunteers themselves come from vulnerable backgrounds, as they are better able to empathize with the needs of their peers and can offer appropriate solutions from an “insider” perspective. This lays the foundation for inclusive volunteerism, a modality in which individuals facing difficulties are both volunteers and beneficiaries of the action. Other benefits of volunteerism include improving the physical and psychological well-being of those involved, expanding social networks, enhancing employment prospects and career development opportunities, boosting self-esteem, personal dignity, and the sense of value by demonstrating that, despite their difficulties, individuals can still be of use to the communities they live in. Current practice shows that an increasing number of organizations for vulnerable individuals are involving their beneficiaries in volunteer activities, with a prime example being associations of parents with children with disabilities, who produce various items for sale and use the proceeds to continue developing therapeutic programs [14].

In this way, the groundwork is laid for all community members to understand that they are part of both the problem and the solution, and through their personal contributions, they can help steer things in the desired direction [17].

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CURRICULAR ADAPTATION FOR STUDENTS WITH SEN – POSSIBLE STRATEGIES AND OBJECTIVES

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Curricular adaptation has as its essential point the reform of education contents, the general objective being: adaptation and active integration of children with special educational needs in life and society. An appropriate school curriculum for students with CES must emphasize, mainly, the development of personality traits in the affective, motivational, character and socialization fields, the development of individual work skills, the harmonious development of psychomotor behaviors.

The differentiated curriculum involves the methods of selecting and organizing the contents, teaching-learning methods, assessment methods and techniques, performance standards, psychological learning environment.

Considering the diversity, way and specific peculiarities of learning of all children, including those with special educational needs, we can draw the conclusion that one of the essential qualities of the new school curriculum aims at a greater degree of flexibility, so that it will allow each child to advance at his/her own pace, to be treated according to his/her learning abilities.

Keywords: *curriculum adaptation, forms of organization, project, student, CES, strategies.*

ADAPTAREA CURRICULARĂ ÎN CAZUL ELEVILOR CU CES – POSIBILE STRATEGII ȘI OBIECTIVE

Adaptarea curriculară are ca punct esențial reforma conținuturilor învățământului, obiectivul general fiind: adaptarea și integrarea activă în viață și societate a copiilor cu cerințe educative speciale. Un curriculum școlar adecvat pentru elevii cu CES trebuie să pună accent, în principal, pe dezvoltarea trăsăturilor de personalitate din domeniul afectiv, motivațional, caracterial și al socializării, dezvoltarea deprinderilor de muncă individuală, dezvoltarea armonioasă a conduitelor psihomotrice.

Curriculumul diferențiat presupune modalitățile de selectare și organizare a conținuturilor, metodelor de predare-învățare, metodelor și tehnicilor de evaluare, standardelor de performanță, mediului psihologic de învățare.

Având în vedere diversitatea, modul și particularitățile specifice de învățare a tuturor copiilor, inclusiv și a celor cu cerințe educative speciale, putem trage concluzia, că una din calitățile esențiale ale noului curriculum școlar vizează un grad mai mare de flexibilitate, astfel încât va permite fiecărui copil să avanseze în ritmul său, să fie tratat în funcție de capacitățile sale de învățare.

Cuvinte-cheie: *adaptare curriculară, forme de organizare, proiect, elev, CES, strategii.*

Introduction

The adapted curriculum must be designed as a specific support for the continuous training and development of each child regardless of his/her level of development. The adaptation of curriculum content takes into account both the volume of knowledge, and especially the psychological processes and functional peculiarities of the nervous system of students with special educational needs, in which the compensatory function determines a series of changes in the neural networks of information transmission and processing.

The essential point of **curriculum adaptation** is the reform of educational content, the general objective being: the adaptation and active integration into life and society of children with special educational needs.

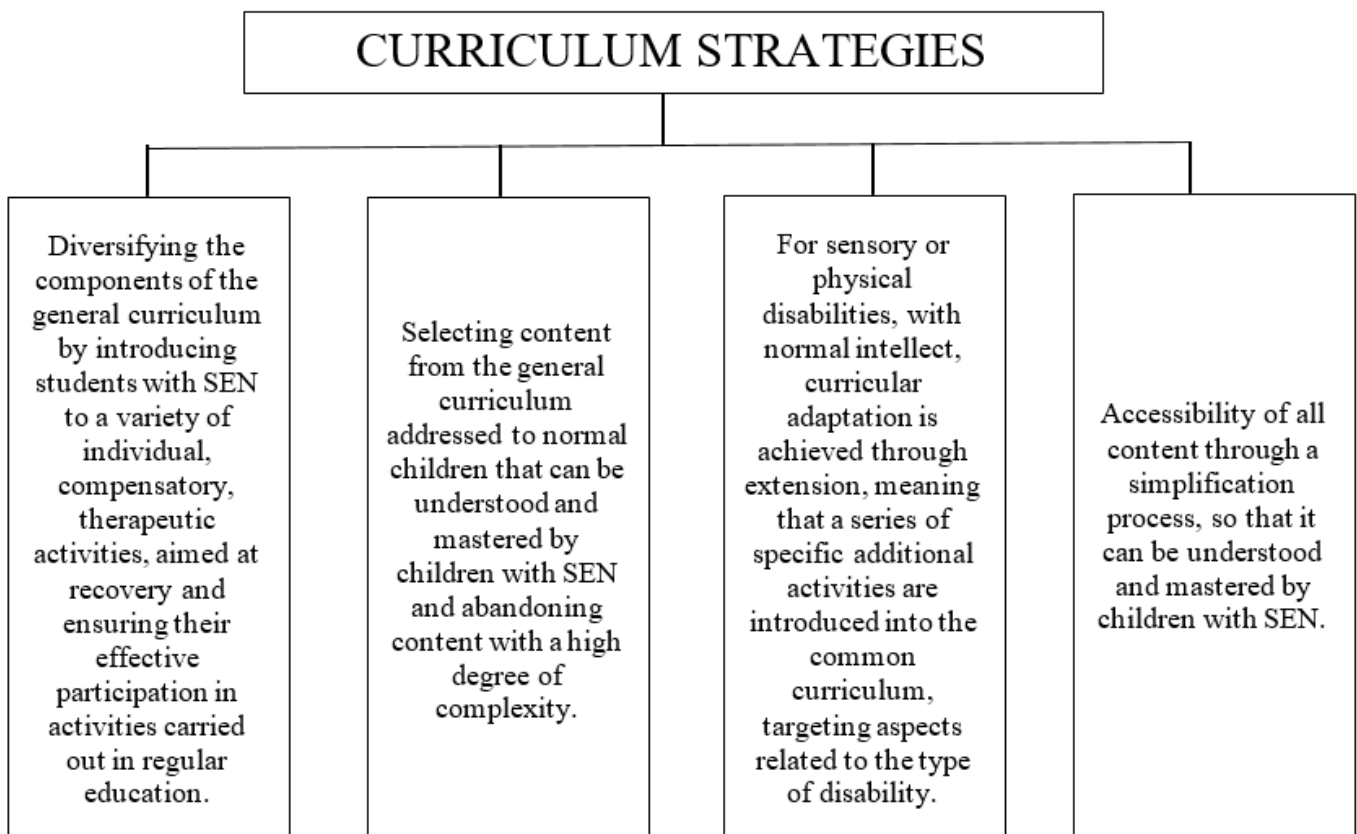
This aims at: (1) psychophysical and intellectual recovery; (2) the formation of a scientific conception of the world; (3) the development of autonomous thinking and responsibility for integration into the social environment; (4) the education of general-human and national values by educating the qualities: kindness, love of work, humanism, social responsibility, etc.

Conceptual Approaches Regarding Curriculum Adaptation

Current pedagogical literature defines curriculum adaptation as *an innovative way of designing* the curriculum, which involves synthesizing and didactically organizing the contents from different fields of knowledge, so as to ensure the acquisition by children of a coherent, unitary image of the real world. The term of *adapted curriculum*, as defined by various authors, primarily suggests the correlation of contents, but this approach requires a curricular approach in which the starting point is most often the intended purpose/purposes, according to which all other components of the instructional-formative process are chosen [3].

The main strategies that could be used to design an adapted curriculum are detailed in the figure below:

Fig. 1. Strategies for Designing Adapted Curriculum.



An appropriate school curriculum for students with SEN should focus mainly on the following areas:

1. Development of personality traits in the affective, motivational, character and socialization domains – self-image, goals, interests, passions, motivations, concordance between personal potential, achievements and the value of products produced, individual and group activities, degree of tolerance and understanding towards those around them and towards their values, affective balance, game, leisure activities, individual, school, social responsibilities, relationships with colleagues and with those around them, behavior, demeanor, attitudes, respect, support, control of aggression, attitude towards work, development of personal and social autonomy, etc.

2. Development of individual work skills – study skills and personal learning style, social learning, extracurricular learning activities, attitude towards school success/failure, thought processes, verbal and nonverbal, oral and written communication, reading, basic arithmetic operations, mode of solving tasks/problems, etc.

3. Development of moral, religious and aesthetic conduct – the system of moral values, attitude towards religious values, areas of artistic interest, attitude towards various social events and phenomena, degree of involvement in various activities with ethical or aesthetic connotation, etc.

4. Harmonious development of psychomotor conduct – basic psychomotor skills (locomotion, writing, gestures, mimics, etc.), dynamic games and physical exercises, resistance to physical effort, etc.

The organization and management of instructional-educational process must be oriented towards the application of a rich arsenal of correctional-remedial didactic activities, which will lead to an increase in the efficiency of preparing these children for life and production activities, their active integration into the current socio-human community.

Considering the diversity, manner and specific learning characteristics of all children, including those with special educational needs, we can conclude that one of the essential qualities of the new school curriculum is a greater degree of flexibility, so that it will allow each child to advance at his/her own pace, to be treated according to his/her learning abilities. This process of introducing innovations at the classroom level „requires time, personal interaction and contacts, continuous training and other forms of people-based support” [6, p. 391].

The organization and management of teaching-learning activities must be structured on concrete levels and stages of education, with strictly defined curricular areas and contents, measurable through acceptable evaluation dimensions, intended for the fair assessment of the level of development, intelligence, intellectuality, morality, humanity, spirituality of each child, including children with special educational needs.

Curriculum adaptation can be achieved through elements detailed in the table below:

Table 1. Ways to Adapt Curriculum.

No. Crt.	Ways to Adapt Curriculum	Details
1.	Extension	- introduction of additional activities that mainly target aspects related to the acquisition of specific languages (dactyleme, Braille alphabet, sign language, etc.) and communication, spatial orientation, socialization and community integration activities, practical activities focused on professional training appropriate to the type of deficiency.
2.	Contents Selection	- selection of certain contents from the general curriculum, which can be understood and acquired by children with SEN; giving up contents with a high degree of complexity.
3.	Accessibility and Diversification of General Curriculum Components	- involvement of students with SEN in a variety of individual, compensatory, therapeutic activities, aimed at their recovery, and ensuring their effective participation in the activities carried out in regular education.
4.	Adaptation of Teaching Methods and Procedures	- use of predominantly intuitive methods and procedures that help the student with SEN to understand and internalize the contents taught in class.
5.	Adaptation of Assessment Methods	- use of assessment methods that highlight the evolution and performance of students not only intellectually, but, above all, in application: the degree of valorizing the aptitude potential and the ways to solve some typical life problems or problem situations, the possibilities of relating and communicating with those around you, professional performance, etc.

The differentiated curriculum involves the methods of selecting and organizing content, teaching-learning methods, evaluation methods and techniques, performance standards, and the psychological learning environment; the goal is to differentiate learning experiences and adapt the instructional-educational process to the student’s aptitude and understanding possibilities, interests and educational requirements, and learning pace and style. This differentiation takes into account, first of all, the specifics of aptitude potential, the dominant personality traits, and the ability to understand and process information/knowledge acquired by the student in the instructional-educational process. Starting from this premise, we can talk here about an individual/personalized curriculum.

Developing a flexible curriculum involves the following:

- respecting the rights of each child to instruction and education according to his/her potential and capabilities;
- training children with special educational needs in appropriate behavior, which will allow their adaptation and social integration;
- developing the necessary capacities for independent resolution (within the limits allowed by the degree of deficiency) of life problems, self-control in difficult situations, modification of methods and techniques of intellectual work that ensure efficiency, adaptation, school and social integration, the emphasis being placed on:
 - development of children's personality;
 - development of individual work skills;
 - development of moral conduct, aesthetic sense, harmonious development of motor conduct.

For students with SEN, the curriculum must have the following objectives:

- To allow students to interact and communicate with a wide variety of people.
- To allow students to express their preferences, communicate their needs, make decisions and choose those options that they are guided by or that other people respect.
- To promote the ability to advocate for their own cause or to use the diversity of support and assistance systems.
- To prepare students for adult life, ensuring the greatest possible degree of autonomy and to support them in establishing relationships of mutual respect and dependence on each other.
- To lead to an increase in students' awareness and understanding of the environment in which they live and the world around them.
- To encourage students to explore, to be curious (to research) and to seek challenges.
- To offer them a wide range of learning experiences at each of the school stages, according to their age.

Therefore, by adapting/improving the school curriculum to the needs of all children, including those with special educational needs, we will be able to contribute to their school and social integration.

Expectations towards teachers are inevitably becoming more complex, consistent with the higher expectations from graduates of the education system. Each teacher must have, at a developed level, the skills they want to form in their students. At the same time, they must ensure the well-being of each student, stimulate their motivation for learning, support them to strengthen their self-esteem and resilience, and work adapted to students belonging to at-risk categories. Participation in learning communities, professional development programs and collaboration with management teams and other community actors become conditions for the successful fulfillment of these complex roles.

In what follows, we exemplify through an individualized training project

We started from the information that: a global knowledge of the student is needed (pedagogical, didactic, social, psychological); to gradually and concretely establish the objectives; to diversify the teaching methods and techniques used/not used; to combine the forms of organization (frontal, microgroup, individual).

A. Individualized instruction begins with the needs of a single student:

1. The contribution made is presented by the developmental stages of a student.
2. To identify special requirements.
3. To select the strategy that focuses on exploring qualities and deficiencies.
4. To explore existing resources to support the participation of student with SEN in the educational process.
5. To develop an educational, corrective, personalized project, developed through teamwork.
6. To activate the authentic psychic potential of the child with SEN.
7. To manage the psychic development of the student with SEN.
8. To establish the objectives (development and application of a methodological approach).
9. To establish the method/methods.
10. To establish the purpose (presentation of an example of good practice in the recovery process of the student with SEN)
11. To choose the forms of organization: private-individual instruction.

B. Actions integrated into the realization structure: teaching-communication; learning-reception-assimilation; evaluation carried out throughout the activity:

1. To facilitate the connection between child protection services and the school.
2. To ensure the responsible and complementary training of professionals in the system (school) including the family.
3. To start from the idea that students are different, have different levels of understanding.
4. To design the tasks, rhythm and school activities according to the characteristics of each student.

C. Establishment of specific (collaborative) strategies: to contribute to the socialization of students and determine the continuous curricular adaptation to the student's requirements and needs.

D. Supporting didactic principles: equal rights, equal opportunities, access to any form of education, early intervention, cooperation, partnership, ensuring support in the community.

E. Role of supporting teacher: facilitator by creating adapted teaching materials.

F. Type of approach required by supporting teacher: organizing consolidation-practice moments through different approaches; students with SEN have limited capacities for distributive attention when writing/reading/calculating.

G. Advantage of supporting teacher's intervention: implementing specific techniques for managing the behaviors of students with SEN.

H. Elements of concept/project of individualized instruction

The following is the pedagogical version of a teaching project with the stages provided by Professor Constantin Cucoș in „*General Pedagogy*”, by lesson types (teaching, evaluation, consolidation, etc.) less the contents that will be adapted depending on the student's deficiencies [4, 5].

The mixed lesson: aims to achieve, in approximately equal measure, several teaching goals or tasks: communication, systematization, fixation, verification. It is the most frequently encountered type of lesson in educational practice, in small classes (due to the diversity of activities involved and the multiple tasks they perform).

Lesson Moments:

1. *Organizational moment*
2. *Verification of the acquired contents* – verification of the topic, verification of the knowledge, skills, abilities acquired by the student;
3. *Preparing students for the reception of new knowledge* – is usually achieved through an introductory conversation, in which previously acquired knowledge by students is updated, relevant to the new topic, by presenting problem situations, for overcoming which new knowledge is necessary;
4. *Specifying the title and objectives* – communication must be done in an accessible form, what is expected of them at the end of activity;
5. *Communication/acquiring new knowledge* – through a methodical strategy adapted to the objectives, the content of topic and the students and by using these teaching aids that can facilitate and streamline the achievement of this didactic task;
6. *Fixing and systematizing the taught contents* – through repetition of applicative exercises;
7. *Explanations for continuing learning at home and for completing the topic.*

The approaches of learning activity, developed through occasional auxiliary means (through an “occasional recourse to a relevant approach of another school subject” and through systematic means (through a „systematic recourse to a relevant approach of another subject in order to achieve an objective of a study program”) are adapted to the peculiarities and training needs of learners with SEN [3, p. 242].

Conclusions

Curriculum reform is a priority issue of contemporary pedagogy and is an important component of the curriculum, metaphorically translated by some authors as the „backbone of the educational system”, due to the growing capacity to introduce value changes in the curriculum - representing an essential premise in achieving learning. If in the traditional vision the contents of education were focused on learning to know and, to a lesser extent, on learning to do through a strictly disciplinary approach to knowledge, currently

the achievement of the other two types of learning is also necessary - learning to live together with others and learning to be, which, at the level of contents, means overcoming the limits of intradisciplinarity, by promoting integrated contents, which achieve a unification of knowledge and are based primarily on the efforts of the educated.

The process of curricular adaptation of school programs is a current issue given the difficulties encountered by mainstream teachers who teach in classes where students with SEN are integrated. In conclusion, the achievement of curricular adaptations through a joint effort of all involved actors (teaching staff, support teachers, specialists) is the ideal way to efficiently design an adapted program for children with disabilities, having all the prerequisites for its successful implementation.

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PROCRASTINATION IN PROFESSIONAL PERFORMANCE AMONG ANXIOUS ACTIVE INDIVIDUALS

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The given article deals with postponing some actions, making decisions that in the future lead to its aggravation. A large number of studies are analyzed on the procrastination of actions by people and what is the cause of these procrastinations, but also what are the consequences. Researchers confirm that self-control and impulsivity are two traits that predict procrastination. It is argued that there is a direct relationship between procrastination and the level of manifestation of anxiety, stress, depression, between procrastination and impulsivity, which are genetically correlated.

In this context, an express study is presented on the issue of postponing actions and the factors that influenced the decision to postpone. The objectives, the methods, the respective dependent and independent variables are described. About 348 people of different ages and social groups participated in the study. The research results are analyzed and the respective conclusions are formulated.

Keywords: *procrastination, procrastination, anxious individuals, impulsivity, self-control.*

PROCRASTINAREA ÎN PERFORMANȚA PROFESIONALĂ PRINTRE INDIVIZI ACTIVI ANXIOȘI

În articolul dat se abordează problema amânării unor acțiuni, luării de decizii care în viitor duc la agravarea acestora. Se analizează un număr mare de studii privind amânarea de către persoane a acțiunilor și care este cauza acestor amânări, dar care sunt și consecințele. Cercetătorii confirmă că autocontrolul și impulsivitatea reprezintă două trăsături care prezic amânarea. Se argumentează existența directă a conexiunii dintre nivelurile de manifestare a anxietății, stresului, depresiei, dintre amânare și impulsivitate care sunt corelate genetic.

În acest context, se prezintă un express-studiu privind problema amânării acțiunilor și factorilor ce au influențat asupra deciziei de amânare. Se descriu obiectivele, metodele, variabilele respective – dependente și independente. În studiu au participat circa 348 de persoane de diferite vârste și grupuri sociale. Se analizează rezultatele cercetării și se formulează concluziile respective.

Cuvinte-cheie: *procrastinare, amânare, indivizi anxioși, impulsivitate, autocontrol.*

Introduction

Procrastination, the voluntary and irrational delay of a necessary action, underlies several social issues (Steel, 2010). In fields ranging from environmental concerns to personal health, we postpone addressing these matters, allowing them to worsen over time (Gallagher, 2008; Sirois, 2007). For instance, at least 80% of U.S. residents have delayed saving for retirement so extensively that they can no longer make up for the lost time spent procrastinating (Byrne, Blake, Cairns, & Dowd, 2006; Venti, 2006). This has been the subject of numerous studies aimed at explaining why people procrastinate and exploring the neural substrates of this process. Specifically, task aversiveness, future incentives, and delays in receiving those incentives have been confirmed as task characteristics that affect procrastination. Self-control and impulsivity have also been identified as two of the key traits predicting procrastination (Zhang, Liu, Feng, 2019).

The literature has established a direct correlation between procrastination and increased levels of anxiety, stress, depression, fatigue, and a significant decrease in satisfaction with various aspects of life, particularly those related to work and income. Physiological and pathological anxiety is associated with a tendency toward procrastination through the unnecessary delay of decisions or actions. Individuals who procrastinate avoid facing potential negative emotions triggered by confronting a particular task that causes them anxiety or negative expectations (failure, criticism, poor performance, etc.). Anxiety is not only a possible cause

of procrastination but also an effect of it, as individuals tend to feel anxiety when they postpone necessary actions or experience a heightened intensity of already existing anxiety.

Gustavson and colleagues reported in 2014 that procrastination and impulsivity are genetically correlated, mainly through genetic influences on goal management, which was later used to explain the genetic correlation between procrastination and executive function skills (Gustavson, Miyake, Hewitt, & Friedman, 2015). Neuroimaging results show that procrastination and impulsivity are associated with the volume of gray matter in the dorsolateral prefrontal cortex (P. Liu & Feng, 2017), a brain region responsible for regulating emotions and cognitive control. Impulsivity may provide little additional variance beyond self-control when predicting procrastination scores (Steel & Klingsieck, 2016), and most of its effect on procrastination may be mediated by self-control (Lee, Kelly, & Edwards, 2006; C. Zhang & Feng, 2018).

Another study demonstrated that by making temptations less attractive through cognitive effort, we can resist temptations and improve our task performance (Leroy, Grégoire, Magen, Gross, & Mikolajczak, 2012a, 2012b). At the neural level, it is well documented that resisting temptations depends on prefrontal regions such as the ventrolateral prefrontal cortex or dorsolateral prefrontal cortex (Camprodon, Martínez-Raga, Alonso-Alonso, Shih, & Pascual-Leone, 2007; Giuliani, Mann, Tomiyama, & Berkman, 2014; Li et al., 2013; Yokum & Stice, 2013). Impulsivity appears to work against self-control efforts by increasing sensitivity to pleasurable distractions (Dawe, Gullo, & Loxton, 2004; Dawe & Loxton, 2004). Individuals with high impulsivity scores showed increased brain activity in the ventral striatum during reward receipt, while self-control sought to reduce brain activity in that specific area (Plichta & Scheres, 2014).

Purpose of the Paper

Procrastination is a phenomenon present in our daily lives, with varying intensity for each of us, yet it is insufficiently studied and often overlooked, both individually and societally. The impact of procrastination is felt personally, but more so professionally, where it can have detrimental effects. Anxiety is a growing phenomenon globally, with numerous factors triggering it. But we can ask, what unwanted and unfavorable phenomena can anxiety lead to? Could procrastination be one of the undesirable effects of anxiety? How can we prevent procrastination and avoid its consequences? To address these questions, we aimed to investigate the correlation between anxiety disorders and procrastination, particularly in active individuals.

General Objective of the Study

The general objective of the study is to observe the possible correlation between procrastination and anxiety in active individuals and the impact on professional performance.

Specific Objectives:

1. Determine the level of correlation between procrastination and anxiety across age groups in active individuals during the study.
2. Determine the level of correlation between procrastination and anxiety based on gender in active individuals during the study.
3. Determine the existence of a correlation between procrastination and professional performance in active individuals.

Research Hypothesis

We hypothesize that the presence of anxiety increases procrastination and decreases professional performance in active individuals.

Research Method

To achieve the proposed objectives, we considered the questionnaire method appropriate for this research. The questionnaires were administered only to active individuals, who were informed in advance about the purpose and duration of the study, as well as the fact that data processing would be exclusively statistical at the sample level. The research took place between December 2023 and April 2024.

Research Variables**Dependent Variables**

The dependent variables in this research are: level of anxiety; degree of procrastination.

Independent Variables

It was observed that both the level of anxiety and the degree of procrastination are influenced by several factors. In this case, we identified the following as independent variables: age; gender; level of education; place of origin; professional occupation.

Extraneous Variables

Since the research was conducted online, we must account for the presence of extraneous variables. To reduce their effect, the questionnaire was administered during the first part of the day. The extraneous variables in this research are: work schedule; level of environmental noise; respondents' level of fatigue.

Measurement Instruments

Two measurement scales were used: one for anxiety and the other for procrastination: the Hamilton Anxiety Rating Scale and an adapted version of the Pure Procrastination Scale (PPS). In addition to these two scales, a set of self-assessment questions was also used.

Sample of Subjects

The research was conducted on a sample of $N = 348$ participants, all over the age of 18. Of the 348 participants, 167 were male (47.99%) and 181 were female (52.01%). The sample was divided into age groups with 10-year intervals, up to the age of retirement, noting that the first age group had an 8-year interval, starting from the age of adulthood (18 years) to 25 years.

Based on the level of education, the sample of subjects was divided into two main categories: those with high school and post-secondary education, and those with university and post-graduate education. The distribution of the sample according to their place of origin was categorized into two groups: urban and rural.

Given the possibility that a person may have multiple professional occupations, we took this into account and provided respondents with the option to select multiple answers in this regard. As a final criterion for distribution, we also considered the marital status of the participants at the time of completing the questionnaires.

Among the study participants, approximately 39% reported clinically significant levels of anxiety, with men reporting clinically significant anxiety levels at around 30%, lower than women, who reported 47%.

In the first three age groups (18-25 years, 26-35 years, 36-45 years), where there were at least 30 respondents, we observed the following incidence of elevated anxiety levels: approximately 50% in the 18-25 age group, about 39% in the 26-35 group, and just under 24% in the 36-45 group. This shows a decrease in the incidence of anxiety as age increases.

Regarding education levels, the incidence of clinically significant anxiety is nearly the same, with about 41% among those with secondary education (high school and post-secondary) and just under 39% for those with higher education (university and post-graduate). Respondents from urban areas reported clinically significant anxiety levels in just under 40% of cases, slightly higher than those from rural areas, who reported just over 35%.

In terms of professional occupation, students and individuals over 18 still in school reported clinically significant levels of anxiety at approximately 42%. Public sector employees reported anxiety levels of under 31%, private sector employees over 40%, entrepreneurs under 35%, and freelancers under 38%.

Unmarried individuals reported clinically significant anxiety at just under 45%, which is higher than both married individuals, who reported anxiety at under 30%, and divorced individuals, at under 19%.

Regarding gender and age, men in the 18-25 age group reported clinically significant anxiety levels at under 38%, those aged 26-35 at just over 33%, and those aged 36-45 at under 18%. Among women, those aged 18-25 reported anxiety levels of over 66%, those aged 26-35 around 43%, and those aged 36-45 under 29%.

When it comes to education, men with secondary education reported clinically significant anxiety levels at approximately 35%, while those with higher education reported levels under 30%. Women with secondary education reported anxiety levels of 50%, while those with higher education reported approximately 46%.

Regarding procrastination, approximately 64% of the study group reported a significant degree of procrastination. Among men, around 62% reported significant procrastination, less than women, where over 66% reported it. By age group, those aged 18-25 reported significant procrastination at over 70%, those aged 26-35 at under 70%, and those aged 36-45 at under 55%.

In terms of education, individuals with secondary education reported significant procrastination at over 74%, more than those with higher education, who reported under 63%.

For urban participants, over 65% reported significant levels of procrastination, compared to around 61% for rural participants. For individuals from urban areas, over 65% reported significant levels of procrastination, compared to approximately 61% for those from rural areas.

Regarding professional occupation, students or individuals over 18 still in school reported significant procrastination at over 68%. Public sector employees reported procrastination levels under 53%, private sector employees under 65%, entrepreneurs over 61%, and freelancers over 82%.

In terms of marital status, unmarried individuals reported significant procrastination at over 69%, which is higher than both married individuals at over 55%, and divorced individuals at over 56%.

For men in the 18-25 age group, significant procrastination was reported by over 62%, those aged 26-35 reported over 74%, and those aged 36-45 reported under 53%.

Women in the 18-25 age group reported a significant level of procrastination at over 79%, more than those in the 26-35 group, with over 66%, and those in the 36-45 group, with just over 57%. Men with secondary education reported a significant level of procrastination at over 75%, while those with higher education reported over 58%. For women with secondary education, over 73% reported significant procrastination, and for those with higher education, it was just under 66%.

A statistical analysis was performed using SPSS version 26.0, and the results indicated a strong correlation ($r = 0.518$) between anxiety and procrastination across the entire study group. This correlation was also observed for both genders. In terms of age groups, a strong correlation between anxiety and procrastination was found in the 18-25 and 26-35 age groups, while a moderate correlation was found in the 36-45 group.

Among the 136 participants who reported clinically significant levels of anxiety, 90.44% reported procrastination ranging from mild to severe, compared to 48.11% of those without clinically significant anxiety. When considering only moderate to severe levels of procrastination, 80.88% of anxious individuals procrastinated, compared to 30.18% of those without significant anxiety.

A simple linear regression was conducted using SPSS, first setting anxiety as the dependent variable and procrastination as the predictor or independent variable, yielding a regression coefficient of 0.425. When the roles were reversed, with procrastination as the dependent

variable and anxiety as the predictor, the regression coefficient was 0.632. This suggests that anxiety has a stronger influence on procrastination than procrastination has on anxiety.

A gender-based linear regression was also conducted, setting procrastination as the dependent variable. For men, the regression coefficient was 0.724, while for women, it was 0.594. This indicates that anxiety influences procrastination more strongly in men than in women.

Findings and Conclusions

The results obtained from this study indicate a high positive correlation between anxiety and procrastination, with procrastination negatively influencing the professional performance of active individuals. Although the study shows a much higher incidence of anxiety among the population compared to official data (published by the Romanian Ministry of Health), the pattern persists, indicating that anxiety is more prevalent among women compared to men, with a considerable difference.

A decrease in the incidence of anxiety with advancing age has been observed, which confirms the findings from the study conducted by McDonald and his collaborators (McDonald et al., 2022). This trend of decreasing anxiety with age applies to both men and women. Aging brings with it rich and diverse life

experiences, reducing the number of vague, unpredictable, and uncontrollable dangers, thus lowering the chances of experiencing anxiety.

Contrary to findings in the literature (Hald, G.H. et al., 2020), the current study found that among divorced individuals, the incidence of anxiety is considerably lower (18.75%) than among single (44.64%) or married (29.59%) individuals. Given that the vast majority of divorced participants in the study are over 36 years old, these results can be attributed to life experience, decision-making, self-awareness, and self-management. Additionally, we do not know the duration since the divorce; in cases of a longer period, the effects of divorce may diminish.

According to the results obtained from this study, the majority of people procrastinate to some degree. Although the literature indicates that men are more prone to procrastination (Steel, 2007; Gröpel and Steel, 2008), the findings from this study show that procrastination is more prevalent among women (66.85%) than among men (62.18%), although the difference is small. A possible explanation for this is that, although anxiety influences the emergence of procrastination or the increase in its degree to a lesser extent in women, the significant difference in anxiety prevalence between women and men may contribute to the higher percentage of women reporting significant levels of procrastination.

The study shows that as individuals age, the percentage of those who procrastinate, to any degree, gradually decreases, confirming findings in the literature (Steel, 2007). The level of conscientiousness increases with age (Roberts, Walton & Viechtbauer, 2006), while younger individuals have lower self-control (Jurado & Rosselli, 2007; Reyna & Farley, 2006) and higher impulsivity, making the temptation of immediate rewards greater among younger individuals. All these factors influence the onset or exacerbation of procrastination, helping to explain why younger individuals procrastinate more than older individuals.

In line with the literature, the results of this study show that individuals with higher education have a lower degree of procrastination compared to those with medium education, confirming that better education helps reduce the degree of procrastination. The same alignment with the literature is observed regarding the environment of origin, with individuals from rural areas exhibiting a lower degree of procrastination than those from urban areas.

Regarding the professional classification of the participant group, a above-average incidence of procrastination was recorded among students (68.63%), but especially among freelancers (82.76%). While the explanation for students may be based on the fact that most of them are young, the high degree of procrastination among freelancers can be attributed to the lack of authority to hold them accountable, the degree of freedom they grant themselves, and the self-established work schedule, which often leaves room for task postponement. This was also highlighted by Ferrari and his collaborators in 2005.

The first objective of this study was to determine the level of correlation between procrastination and anxiety based on age group. In the three age groups analyzed, a high correlation was observed in the 18-25 age group ($r=0.502$) and the 26-35 age group ($r=0.541$), and a moderate correlation in the 36-45 age group ($r=0.402$). This slight difference may suggest that if a person is anxious, they are less likely to procrastinate compared to someone in the other two age groups.

The second objective aimed to determine the level of correlation between procrastination and anxiety based on the participants' gender. In the case of both genders, the level of correlation is high, with Pearson correlation coefficients being very close in value ($r=0.520$ for men, $r=0.524$ for women), indicating that there are no significant differences regarding the relationship between procrastination and anxiety based on gender. The third objective was to determine the existence of a correlation between procrastination and the professional performance of active individuals. The results show that the percentage of individuals who self-evaluate their professional performance as good or very good decreases as the level of procrastination increases, while the percentage who self-evaluate it as poor or very poor increases with higher levels of procrastination, confirming the findings in the literature (Steel, 2007). A small percentage of individuals with severe procrastination rated their professional performance as very good, which may be due to freelancers. We also observe a significant increase in the percentage of participants who self-evaluated their professional performance as acceptable, with the maximum level reached among those with

a high degree of procrastination (48.57%), slightly decreasing to those with a severe degree (44.44%). Thus, we can conclude that the degree of procrastination negatively influences the professional performance of the study participants.

Conclusion

The research hypothesis of the study was that the presence of anxiety leads to an increase in the degree of procrastination and a decrease in professional performance among active individuals. As we determined through simple linear regressions, anxiety influences the onset of procrastination or its increased degree. At the same time, we observed that an increase in the degree of procrastination leads to a decrease in professional performance among active individuals. When we correlate these two results, it follows that anxiety increases the degree of procrastination while simultaneously decreasing professional performance among active individuals, thereby confirming our research hypothesis.

Limitation

The distribution of the study group across age groups was uneven, with the first two groups being approximately equal in size, while the number decreased in the subsequent groups. An equal distribution in this regard would have been ideal.

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SPECIFIC ASPECTS OF THE ECOLOGICAL EDUCATION PROCESS AT PRESCHOOL AGE

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Environmental education is a matter of educational policy and requires international cooperation on nature conservation issues in the development and implementation of global strategies in this field. In this respect, the aims and objectives of environmental education are to: educate environmental awareness, which implies a sense of responsibility and solidarity between individuals for the preservation and improvement of the environment; develop the ability to take decisions, identify and implement solutions to prevent and solve specific problems relating to the individual's relationship with the environment; prepare citizens to positively influence political, economic and social decisions on the environment.

Keyword: *environmental education, environmental competence, environmental actions, environmental perception, environmental education, environmental literacy, environmental action, education/ learning.*

ASPECTE SPECIFICE ALE PROCESULUI DE EDUCAȚIE ECOLOGICĂ LA VÂRSTA PREȘCOLARĂ

Educația ecologică constituie o problemă de politică educațională și necesită o cooperare internațională în problemele ocrotirii naturii în elaborarea și aplicarea unor strategii globale în domeniu. În acest sens, finalitățile și obiectivele educației ecologice urmăresc: educația conștiinței ecologice, ce presupune simțul responsabilității, a solidarității dintre indivizi pentru păstrarea și ameliorarea mediului; dezvoltarea capacității de a lua decizii, de a identifica și a pune în practică soluții pentru prevenirea și rezolvarea problemelor concrete legate de relația individului cu mediul său de viață; pregătirea cetățeanului pentru a influența pozitiv deciziile politice, economice și sociale cu privire la mediu.

Cuvinte-cheie: *educație ecologică, competența de protecție a mediului ambiant, acțiuni ecologice, percepția ecologică, educație/ învățământ.*

Introduction

The researcher Crețu, N. mentions that the 1972 UN Conference on the Environment made the following appeal: „Protecting and improving the environment for present and future generations has become a primary objective of humanity”. People need to acquire the attitudes, knowledge, motivation, commitment and tools to take action, individually and collectively, to solve current problems and prevent new ones’

The identification of the major themes for reflection has led to the development - at the educational level - of specific responses, by enhancing „new education” with new types of content, mentioned in UNESCO documents, one of which is environmental education [10, p. 39].

To the question „How would you define the notion of ecology to a pre-school, a pupil and an adult?”, Academician I. Dediu states: „To a pre-school child I would explain this notion as follows: the environment means the family, the kindergarten, human society, the surrounding nature (air, flowers, animals, geese, butterflies), which are to be protected. To a pupil I would say the same things plus ecological instruction deep study of ecology and environmental protection.

To an adult - all of these taken together plus the responsibility towards the growing, rising, and future generations” [17, p. 9]. Thus, the basis of ecological behavior at the pre-school age is the cultivation of love for the nature of the native land and the basic skills of its protection.

Therefore, the approach to the problem of environmental education of pre-school children aims to develop appropriate environmental behavior and actions to protect the environment. Preschool children must be taught to understand nature, appreciate its value, see its beauty, approach it and protect it.

To this end, the actions organized with children of pre-school age will pursue objectives that are accessible and achievable through content and teaching strategies, according to an appropriate thematic focus: actions of getting to know the inert and living nature characteristic of the native land, their characteristics; fostering the acquisition of ecological knowledge and skills through experimental and demonstrative activities; training the 6-7 year old preschoolers in carrying them out; educating and developing the ability to protect, protect the fauna and flora of Moldova; to train children in activities designed to contribute to the care of animals and plants; to learn, by means appropriate to the age of the pre-school, some rules for the protection and protection of flora and fauna of the native land; to visit nature reserves where flora and fauna are protected by law.

These activities carried out with children will reveal: the danger of extinction of some plant and animal species, the harmful effects of hunting rare animals; the danger to insects from water and air pollution.

At the same time, it is important to point out that the issue of environmental education should be made aware of by teachers, who contribute to the formation of a child's integral personality. The implementation of environmental education at the pre-school level requires good training of educators in this field, which should constantly strive to modernize teaching - learning through interdisciplinarity, ensuring sustainable and viable assimilation of information.

Research on the issue of environmental education offers a polarity of conceptions, models of environmental education and training of preschool children (Ia. Gabiev, S. Jurat, G. Chirică, C. Andon, I. Dediu, V. Cecoi, E. Morei, I. Ganea, E. Popov, R. Cucereanu, N. Carabet, L. Gordea, E. Haheu, S. Gînju, A. Teleman, P. Samorukova, S. Nicolaeva etc.).

Basic content

Other researchers note (Ia. Bumbu, M. Mîtcu, D. Roșcovan, etc.) that ecological education of the population is possible only if it contains the following components: the existence of an integrated system of knowledge about the interaction between society and nature; ecological informatization of the population; the existence of a system of norms and rules of behavior in nature.

From this perspective, environmental education must play an active role in the educational process. Hence the question arises: where, when and how can we, as educators, who, unlike teachers, have to deal with the young subject - the young child - who is waiting for information, explanations and conclusions that will help him or her to develop a vision of the world around him or her? Obviously, the basic area of activity is „Science and Technology”, which includes the dimension „Environmental Education”, on the other hand, we could integrate elements of environmental education with the other areas of activity.

The choice of age (6-7 years) for our research was not by chance, because according to the results of research on the age characteristics available (J. Piaget, L. Vigotschi, U. Șchiopu, etc.), it is the most effective age for a basic understanding of the links and interdependencies in nature and for understanding simple concepts. At this age stage children develop rapidly, they have an intuitive-imaginative thinking as well as some elements of logical thinking.

Units of competence for 5-7 year olds:

- Reach and describe specific conditions of human life;
- Identify and argue the role of humans in maintaining an ecological environment;
- Active participation in caring for and protecting the environment;
- Explain, in their own words, the role of plants, animals, natural phenomena in the environment

The following types of activities are recommended:

- Conversation-oriented activities: „Why do we need to save energy resources?”, „What is the impact of means of transportation on the environment?”, „How and why do we need to protect plants, animals?”, „Why do we need plants or animals?” etc.);
- Activities to determine the advantages and disadvantages of environmental protection;
- Practical activities on how to care for and protect the environment by integrating established rules;

- Activities highlighting the human role in environmental protection (e.g. Earth Day, Environment Day, etc.);
- Activities carried out using interactive methods (Dream technique, Famous places, Mystery travel, Picture map, Blazon technique, etc.);
- Activities based on closed/open educational software and interactive games.

Due to the transdisciplinary nature of ecology, Chirică, G mentions, environmental education facilitates the development of complex thinking, involving also a strong social effect, requiring better communication between people, between different generations, between scientists and the general public, having, at the same time, an important ethical dimension [6, p. 43].

For all these reasons, environmental education is considered to be lifelong education, a prerequisite for the formation of a culture with an ecological perspective and global responsibility.

- Examples of content at this age, the curriculum proposes:
 - Nature: sky, air, earth, waters, plains, hills, mountains, forests, animals, people. Earth. Water, sun, air, fire-the basis of the integrity of nature.
 - Main elements of the universe (moon, sun, planets, cosmic vehicles): similarities, differences.
 - Recognizing natural phenomena (wind, blizzard, rain, frost, hail, lightning, storm, thunder, thunder) at the time of their occurrence.
 - Living bodies: they breathe, feed, move, grow, multiply, adapt to conditions. Inert bodies don't breathe, don't feed on the synesthetator, don't grow, don't multiply.
 - Existence of the four seasons, their sequence and specific phenomena.
 - Ways in which living organisms adapt to seasonal changes in nature: decrease in temperature, light intensity, withering of vegetation, disappearance of insects, migration of traveling birds, etc.
 - Particular environmental adaptations of plants: roots, stems, branches, leaves, ways of propagation, their importance in nature and in human life.
 - The environmental adaptation characteristics of animals (fish, birds, mammals, insects).
 - Plants as living organisms: their structure, root, stem, leaf, flower, seed; characteristics, living environments, nutrition, importance.
 - House plants.
 - Animals, as living beings, can be of different groups: insects, fish, amphibians, birds, mammals; characteristics, living environments, nutrition, importance, their life in nature and maintenance in captivity.
 - Human activity in nature.
 - Human growth and care of plants and animals, their living conditions: air, light, warmth, clean water, food, soil, shelter.
 - Application of measures to protect nature and the environment.
 - Civilized conduct in nature [9, p. 22-23].

Curriculum area Science, environmental knowledge and ecological culture Reference objectives:

- To specify the particularities of adaptation of groups of organisms to their living environment, seasonal changes, day-night sequence (children will use the terrarium for observations and identify the adaptations of animals to their living environment).
- To show a caring and participative attitude towards nature (children will participate in the care of plants and animals in the terrarium). Theme of the project: From the world of those who do not speak.
- Nowadays, in many countries of the world, environmental protection education has become a new dimension of the curriculum, with the aim of initiating and promoting a responsible attitude towards the environment, making children aware of the dangers of a sharp degradation of the environment.
- Environmental protection has become a major objective of the contemporary world. That is why mankind is looking for solutions to prevent the pollution of the living environment and create a balanced and life-enhancing environment [14, p. 34].

The logical scheme of approach to environmental education presents several stages that describe a formative path that can be followed by any teacher, by carefully capitalizing on the content and methodology specific to the subject:

1. Perception and observation of nature. This first stage can best be realized through nature outings, excursions, camps. It is the first step of direct contact with the elements of the environment and is the prerequisite for the following stages.

2. Determining sensations, feelings and making children aware of them. As a result of perceiving aspects of the environment, the children's attention is drawn to the pleasure of looking at a clear sky, breathing in the fresh air of a forest, listening to the murmur of a stream, etc. At this stage, it is the role of the teacher to discuss and draw attention to these aspects and to emphasize the benefits of a clean, healthy environment, as well as our belonging to natural life systems and the communication between us and the natural environment.

3. Personal involvement. Through discussion, after establishing one's place and role in space and time, in the social framework, ways of individual involvement and how we can be of help can be revealed.

4. Assuming responsibility. This stage is essential in forming an appropriate behavioral structure. Where there is involvement, there must also be responsibility. The above-mentioned stages of environmental education ensure, according to the level of this age, the adoption of environmental behavior [p. 39].

- Environmental education is based on five objectives:

- Awareness. Children are helped to develop an understanding and sensitivity to the whole environment and its problems.

- Knowledge. Children gain knowledge about how the environment works, how children interact with the environment, how environmental problems arise and how they can be solved.

- Attitude. Children acquire a set of values and feelings of caring for the environment and maintaining its quality.

- Learning. Children are guided to acquire the skills needed to identify and investigate environmental problems and contribute to solving environmental problems.

- Participation. Children gain experience in using the knowledge and skills acquired to take positive and well-considered actions that will lead to the eradication of environmental problems.

- It is implicit that the information motivates, accompanies and supports sensory perception, the analysis of sensations, the integration into the natural system of life, the definition of personal roles, individual involvement and taking responsibility.

- Building an action strategy. This stage is the transition to concrete action.

The fact that, as teachers, we organize various actions with children is not enough. The really important thing would be to give children the interest and skills that will enable them to understand how to organize such actions and to act on their own impetus [12, p. 8].

In order to train children to behave in an environmentally friendly way, we can start with a simple idea, but one that is quite effective in terms of emotions and feelings: putting the child in the place of the element in nature that has suffered human aggression.

Educational project developed and implemented at the level of the educational institution ECO-GINDERGARTEN. The aim of the project is for children to learn to act as members of the society, to adopt individual and community eco-protective behavior, forming their skills of participation and initiative in eco-protective community actions.

Project objectives:

1. To study the specialized literature, to research the didactic strategies favoring the sensitization and training of children's affective and volitive behaviors in an ecological sense.

2. To select ways and forms of working with pre-school children in the realization of activities that would develop ecological beliefs and behaviors of good educational practice.

3. Elaboration of an action plan, including a variety of quality, attractive and formative activities, which would allow children to promote a positive attitude towards the environment.

4. Create a favorable and stimulating educational environment to motivate children to protect nature.

5. Realization of a strategic partnership with parents, teachers in the institution in order to develop innovative results and to support the exchange of best practices.

6. Evaluation of the educational project with the aim of improvement and valorization.

Action plan implemented (What? When? How? Responsible, resources)

Planning

1. Literature review;
2. Selection of research and observation instruments;
3. Equipping the educational environment;
4. Partnership with EIT parents and teachers;
5. Planning activities (play activities, experiential activities, learning activities, watching environmental movies, nature observations, open discussions, workshops, visits, etc.).

Implementation of planned actions:

- Thematic projects: „We learn, we play, we protect nature!”, „I do great things as a child!”, „Little ecologists in action!” „Let’s love the earth and nature”!
- Pollution of Planet Earth!
- Educational activities: „Water - the source of life!”, „Fire-friend or foe!”, „We’ll plant beautiful flowers, we’ll decorate the plot!”, „We’ve planted a little tree, fresh air to breathe!”, „We sort the rubbish and put it in boxes!”, „We play, together we recycle and save the planet!”.
- Extra-curricular activities: „Nature’s cry”, „Autumn through the eyes of a child”, etc.
- Exhibitions in partnership with other groups: „We collect, we select, we make toys for the Christmas tree”, „We recycled, we made trinkets”, etc.
- Experiential activities: „From buds to petals”, „It’s raining outside”, „It’s raining outside”, „The air”, „The rainbow in splendor”, „The properties of water”, „The volcano”.
- Creative art workshops on environmental themes (albums, collective works, posters, etc.).
- Direct and guided observation of natural phenomena;
- Role-play; didactic games;
- Exercises to form beliefs/behaviors in relation to nature;
- Open discussions;
- Competitions: „Parade of costumes made of recyclable materials”.

Theoretical and experiential foundation of environmental education for children aged 6-7 is an imperative of the day.

The issue proved to be complex and topical, demonstrating the timeliness and necessity of developing a formative approach to the organization of environmental education of pre-school children. Thoughtless and sometimes cruel attitude to nature - the result of moral uneducation of children, when they are deaf especially animals and plants, are incapable of empathy, sympathy, pity, can not understand other people’s pain and come to the aid. Preschooler is characterized by imitation, due to which he borrows patterns of behavior, easily succumbs to external influences. Borrowing can be both pedagogically valuable and negative, because critical thinking is underdeveloped in children. They imitate the behavior of adults in nature, their actions, attitude to animals, plants. Adults, with intent or unwittingly wounding children’s souls with cruel treatment of nature, harm the cause of education of humanity in children, traumatize their immature psyche.

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THE EFFECTS OF GADGETS IN CONFLICT BEHAVIORS AMONG PRESCHOOLERS

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This article brings to the fore the influence of gadgets on preschoolers, as well as their effects on behavior and self-esteem. The article presents the influence of gadgets in the child's development, being a determining factor for the conflictive, aggressive behaviors that appeared at a given moment in preschoolers. The effects of virtual violence on children are presented, studies that highlight the adverse effects of gadgets used at a young age. Through a study, we highlighted the influence of the virtual world on the preschooler's self-image, because self-esteem influences the conflicting behaviors that appear among preschoolers. The research showed, along with other studies, the negative influence of gadgets on the preschool child, as long as the time allocated to them exceeds a certain threshold and the content of the viewed materials is not in a relationship congruent with the degree of maturation of the body and the cognitive and affective potential of the user.

Keywords: *conflicts, preschoolers, gadgets, kindergarden, self-esteem.*

EPECTELE GADGETURILOR ÎN COMPORTAMENTELE CONFLICTIVE ÎNTRE PREȘCOLARII

Acest articol aduce în prim-plan influența gadgeturilor asupra preșcolarii, precum și efectele acestora asupra comportamentului și stimei de sine. Articolul prezintă influența gadgeturilor în dezvoltarea copilului, fiind un factor determinant pentru comportamentele conflictuale, agresive aparute la un moment dat la preșcolarii. Sunt prezentate efectele violenței virtuale asupra copiilor, studii care evidențiază efectele adverse ale gadgeturilor folosite la o vârstă fragedă. Printr-un studiu am evidențiat influența lumii virtuale asupra imaginii de sine a preșcolarii, deoarece stima de sine influențează comportamentele conflictuale care apar în rândul preșcolarii. Cercetarea a arătat, alături de alte studii, influența negativă a gadgeturilor asupra copilului preșcolar, atâta timp cât timpul alocat acestora depășește un anumit prag și conținutul materialelor vizualizate nu este într-o relație congruentă cu gradul de maturizare a acestora. corpul și potențialul cognitiv și afectiv al utilizatorului.

Cuvinte-cheie: *conflicte, preșcolarii, gadgeturi, grădiniță, stima de sine.*

Introduction

People find it difficult to tear themselves away from the television. Most of them can't live a single day without at least watching the news program, and when the TV is missing from their home, they become irritable, nervous, argumentative, etc. Many people complain that they can't do their housework because of the TV, because it eats them up all the time or because, after a few hours of watching, they feel much more passive, less focused and less able to solve family problems than before viewing. It is impossible to find an activity by which children are quieted so quickly and almost immobilized for a long period of time, as happens when they are sitting in front of the television. Besides, this is also the reason why parents and in some cases educators use the TV as a sedative. [Mirela Pandelică, 2023, p. 54].

More and more parents sense the negative effects that watching TV has on their children and avoid exposing their little ones to such things, or at least limit their access to TV to one short cartoon a day. Even if some do not understand how this affects their children, they can notice the effects: the child stares at the moving images, his eyes water or his head hurts.

Waldorf pedagogy agrees with this idea and offers us the explanation of the fact that preschoolers should not watch TV at all. On television, everything moves much too fast for the child's ability to perceive. The tension increases through the rapid change of the image and filming angles, but it makes understanding difficult.

The fantasy of the child sitting in front of the television is deactivated, his eyes remain fixed on a gray surface and follow the rush of bright points. He is unconscious, hypnotized, in a state of trance and receives images that follow one another with the speed of lightning and which are deposited in his subconscious, from where he accesses them when needed and gives short answers, which he does not connect and which seem to be fragments of what he saw on television.

Television, by its very nature, can only offer simple stimuli that can only be answered in a simple way - the horse on the screen cannot be touched, cannot be reached, cannot be played with, can only be looked at, but only for a short time.” [Knipping, Ursula, „Pedagogia Waldorf în grădiniță”, Editura Triade, p.3]

I found this experiment who tests the hypothesis that background, adult television is a disruptive influence on very young children’s behavior. Fifty 12-, 24-, and 36-month-olds played with a variety of toys for 1 hr. For half of the hour, a game show played in the background on a monaural TV set. During the other half hour, the TV was off. The children looked at the TV for only a few seconds at a time and less than once per minute. Nevertheless, background TV significantly reduced toy play episode length as well as focused attention during play. Thus, background television disrupts very young children’s play behavior even when they pay little overt attention to it. These findings have implications for subsequent cognitive development. [<https://pubmed.ncbi.nlm.nih.gov/18717911/>, accessed at 27.11.2023, 11.35].

Australian Bureau of Statistics, announced that Australian health survey discovered that pre-school children have often at least one screen-based electronic device in their own bedroom. [<https://www.abs.gov.au/>, accessed at 27.11.2013, 11.50].

Gani, (2017) emphasized the fact that preschoolers master digital languages very well. The presence of gadgets brings major changes among children, several studies show the impact of the use of gadgets in early childhood. [Cho & Lee, 2017, p. 303-311], states that it has been scientifically proven that screen time reduces the attention span of preschoolers. interaction with gadgets, time spent in front of screens, without interaction with people has a negative impact [Zivan et al., 2019].

Also, a study from 2018 reveal that young children are too often exposed to mobile devices (MD) and most of them had their own device. The adverse effects of a early and prolonged exposure to digital technology on pre-school children has been described by several studies. Aim of the study is to analyze the consequences of MD exposure in pre-school children. Analyzing the documented effects of media exposure on children’s mental and physical health, according to recent studies, devices may interfere with learning, children development, well being, sleep, sight, listening, caregiver-child relationship. In according to literature, the Italian Pediatric Society suggest that the media device exposure in childhood should be modulated by supervisors. [<https://pubmed.ncbi.nlm.nih.gov/29898749/>, accessed at 27.11.2023, 12.29].

The television does not stimulate the child’s creativity and development and it is good that a preschool child should not be left in front of the television. Later, when he gets to school, he can have gradual and selective access to television.

The so-called educational shows confuse the child through substitutions with monsters or unreal characters, with which he identifies years after watching some animation series. For example, in 1997 in Japan, about 700 children were hospitalized with spasms and respiratory disorders after „enjoying” the animated series „Pokemon”. Every parent knows from experience that all children imitate the attitude, gestures and behaviors of their favorite heroes on television and which, unfortunately, are often not positive.

Cartoons exist through speed and changing proportions, and their message is often imbued with aggression and violence. They are interesting later, around 10 years. Before this age, children replace images with their own observation. For the child, it is not the sharing of knowledge that is important, but the own active observation of an animal and the life that accompanies its observation. That’s why if he observes an animal alone, even a cockroach, it is more educational for the child and more stimulating than any animated film.

On the other hand, the sound plays an important role when the child is listening to music or watching TV, because he gets used to a background noise and then he cannot fall asleep without it, or he will not be able to do his homework later on total silence, because he is used to constantly hearing noises or music. Some preschool children refuse to eat if they are not watching a video or a music clip at the same time. Or all these are distractions that prevent them from concentrating. In addition, they can make them always wait for the

surrounding environment to entertain them, which can have consequences on the quality of their life and the ability to feel good even in solitude - one of the causes that lead to maturity in emotionally dependent girls by other people.

Culture, states Vâgotsky (1985), is what sculpts the system of the self through values, attitudes, knowledge and behaviors learned in the family and then reinforced by other social environments (school, workplace, friends, teachers, girlfriends, neighbors, extended family). Each individual learns how to behave appropriately, what is good, what is beautiful, what is true. He learns directly or indirectly, the condition being that he has contacts after which a certain potential is confirmed or denied.

Through all these exchanges, transactions with those around, with parents and family in the first place, the child builds his self. The construction of the self starts from childhood and continues until adulthood and can be influenced by certain factors that can distort reality.

During the preschool period, the child acquires a physical perspective on the self, developing what we call the body schema made up of the child's physical parts and bodily motor activities.

Between 3 and 5 years, self-control, self-service, initiative, gender concept and relationships with other children are acquired.

Any action undertaken by the child awaits confirmation, this serves as an evaluation, a guide that guides his behavior, attitudes and conduct. Some confirmations can serve as reinforcements for a behavior, others on the contrary, based on the feedback received, the child creates his own profile of values, which defines his self-esteem and respect for his own person. The lack of it cannot direct the steps towards good knowledge, towards knowing what is good and what is bad, towards the formation of a real self-image.

The use of gadgets and penetration into the virtual space for a long time diminishes the time devoted by the child to inter-human relations, robotizing him and leaving him little time for feeling and thinking about himself.

Every child has needs, desires and emotions. On the way they are received and responded to, on the experiences the child lives in relationships with the people in his immediate environment (family, group of friends and/or colleagues, educators) his subsequent attitude towards life depends, that's why the virtual world could intervene with modifications of the surrounding world, the mirror of the soul being thus deformed.

For young preschoolers, the most important source of self-esteem formation is the teacher's or parents' assessments, the virtual world not providing the child with an answer. The messages transmitted by them are internalized by the child, leading to the inoculation of the feeling of adequacy or inadequacy as a person.

Children with real self-esteem are better able to cope with risky situations and behaviors that could arise in unhealthy interpersonal relationships or in failures. Adults (parents and educators) must support them in terms of identifying, expressing and controlling negative emotions by: constantly encouraging them to express their own emotions, building a safe, approving environment for them; selecting activities beneficial to development (in this sense, children's interaction with the virtual world should be supervised), teaching children to use their imagination in expressing their emotions („*What would you like to say to the person who bothered you?*"); the narration of a similar situation experienced by an adult (“*When I was your age, it happened to me too... and I did this...*”), as well as the acceptance of one's own person.

I support them by expressing requirements taking into account the child's age, by planning activities in advance. (When he knows that more difficult situations arise for the children, to do his best to help them overcome them. If he anticipates the children's needs, the probability that they will be cooperative will increase), by focusing on the positive aspects (acquisitions, achievements) and mention them, by offering the option to choose (this gives the feeling of controllability of the situation by themselves and, as a result, they will oppose less), but also by offering rewards. [Mirela Pandelică, 2023, p.68].

The self-concept represents the set of all the individual's representations about himself accompanied by their appreciation.

If self-image is a descriptive dimension of personality (it is how a person describes himself, how someone thinks he is) self-esteem or self-respect is an evaluative dimension of personality (it shows us how how satisfied we are with our self-image or how much we like our own person).

The self-image answers the question: „Who am I and what can I do?”. It is a „filter” through which people perceive reality, for example some people will only remember failures and attribute successes to chance, thus maintaining a negative self-image.

Self-esteem refers to how we self-evaluate, how „good” we consider ourselves compared to others or our own standards, it expresses the extent to which we accept or approve of ourselves.

Self-esteem reflects how much we are worth in our own eyes, expresses the feelings towards ourselves as persons - in other words, the favorable or unfavorable attitude towards us.

So a person who describes himself in mostly positive terms will have a positive self-image and a high level of self-esteem, while a predominantly negative self-description expresses a negative self-image and a low level of self-esteem. low self-esteem.

Therefore, building self-esteem depends on parenting practices, on the way parents see and take care of their children. Children with good self-esteem, confident in their abilities, usually have parents with good self-esteem, tolerant, who clearly and firmly define the limits. Within these limits, children have the opportunity to be creative and independent, while also having the feeling that they are protected. These parents satisfy the child’s needs for a healthy development, respect his opinions and take them into account when making decisions that concern the family [Coman, Petruța, Aspects of the socialization process of the young child, page 7-10, in Methodological Laboratory no. 1-2/2006, supplement of the “Primary Education” magazine, Miniped Publishing House, 2006].

Respecting the child’s opinion, asking for his opinion about things or situations that concern his or his family’s life, although imposed by the Child Law, as his right, depends to the greatest extent on the mentality of the community. Self-respect (esteem) is important because it represents a quality that persists over time. A girl who at preschool age has a sense of her worth will grow up as an adult with good self-esteem, will be able to assume responsibilities and will become a mother who will respect her children. Childhood experiences play an essential role in the development of self-image. Thus, childhood successes and failures, as well as the ways in which parents react to them, define the image we will have of ourselves. The attitude of parents, teachers, colleagues, siblings, friends, relatives, contributes to the creation of the self-image of the future adult. For example, repeated negative labels „you’re good for nothing”, „you’re stupid”, will induce the child to distrust himself, creating a negative self-image for him, as long as a child is repeatedly told that he is smart and capable, he will come to believe this, integrating it as part of his self-image. Also, the attitude of certain virtual heroes, through their actions and appearance, can influence the attitude about one’s own person. Little girls identify with characters whose image is artificial and which is not in agreement with the real role of women in modern society. They dream of becoming princesses, creating a distorted image of themselves in relation to their own possibilities.

Starting from the fact that self-esteem and the presence of gadgets influence the behavior of preschoolers, we bring to the fore an experimental study carried out on a group of 5 preschoolers aged between 5-6 years, belonging to a group of preschoolers from the Kindergarten with Program Extended „Light of the Forest”, Pitesti, Argeș county:

The theoretical objective is to argue the influence that the virtual world has on the preschool child’s self-image. The main practical-applicative objectives of the study are:

O1: Exposure of children to various gadgets for a period of one hour that does not have significant negative effects on children

O2: Experiential psychodiagnosis of children’s self-image by applying the dynamic exercise “Orchard” following children’s exposure to various gadgets.

O3: Children’s involvement in usual activities within the usual kindergarten program focused on self-discovery and expression.

O4: Experiential psychodiagnosis of children’s self-image by applying the dynamic exercise „Our World” following children’s involvement in usual activities within the regular kindergarten program focused on self-discovery and self-expression.

O5: Measuring and evaluating the effects on preschoolers’ self-image following the two games undertaken.

In the continuation of the investigation, we started from the following general hypothesis: when children

get involved in activities carried out in the virtual space, their self-image becomes more and more distant from what they are in reality.

Data collection methods and tools

In order to collect the data, an experiential diagnostic procedure was used, consisting of the children's involvement in experiencing some dynamic games, as a basic tool for the observation sheet of video images centered on self-image. This instrument was built by the method of groups of experts, and the fidelity was evaluated by two procedures:

Inter-rater reliability as measured by the rank correlation coefficient. The obtained value of the Spearman Rho coefficient was medium to strong and statistically significant at a threshold of 0.001 (Spearman Rho =0.5, Sig=0.000, which indicates a high interrater agreement.)

Internal consistency, measured using Cronbach's Alpha coefficient. The Cronbach's Alpha coefficient value indicates a very good internal consistency (0.914).

We can say that the conceived tool has a high fidelity.

Content validity was ensured by the involvement of experts in the construction of exercises, items, and response options.

The „t” test performed revealed a significant difference between the group of children with behavioral disorders in terms of the global score obtained by the FOIV ($t=2.294$, Sig.=0.029).

We can thus state that FOIV has a good validity.

Results analysis

After completing the rating sheet of the results at the initial application, a data distribution was obtained with an average of 76.5 and a standard deviation of 9.63, a maximum of 86.00 and a minimum of 60.00.

In the final application, the data distribution had the following characteristics: average 100.2, standard deviation 7.66, the minimum being 89.00 and the maximum 108.00.

- The hypothesis of the research was that the world of gadgets influences the preschooler's self-image in a negative way.

- To determine the extent to which the data confirmed the hypothesis, the «t» test was used, for dependent samples, performing a before-after test.

- After comparing the scores and the probability, a significant value of $t=-4.386$ was obtained at a significance threshold of $p=0.012$, the research hypothesis was confirmed, so a statistically significant result was obtained.

Through experiential techniques, the child's self-image takes shape, highlighting the role of using gadgets not as a source of information or entertainment, but as a way of spending free time, practically, a way of life.

Supervision of children's actions is a priority for adults, and its lack can bring major damage to the structure on which the personality will later develop, contributing, together with age-specific activities, to the creation of a profile that allows it to adapt to the environment and implicitly, the development.

The involvement of children in activities designed to develop creativity, the body and to allow the child to express himself freely, has proven to be effective, the child's self-image, as well as his way of acting, behavior in general proving to tend towards positivity, unlike of static activity, lacking dynamism and purpose. The virtual world, through the lack of palpability and most of the time conscious understanding, penetrates inside, without effort, without limits and above all without control. The child is put in the position of and select and organize contents by themselves, which far exceed their psychic possibilities, physical and psychic maturation not reaching the threshold that would allow this fact.

Conclusions

The presented research showed, along with other studies, the negative influence of gadgets on the preschool child, as long as the time allocated to them exceeds a certain threshold and the content of the viewed materials is not in a relationship congruent with the degree of maturation of the body and the cognitive and affective potential of the user.

The limits of this research are given by the small number of subjects involved in the study, the experiential diagnosis not allowing the interaction with a large number of subjects for optimal results, but the results of the study can constitute a starting point for other studies regarding the so widespread phenomenon, the virtual world.

Due to the fact that gadgets pursue only the economic side of life by marketing various programs, devices, toys that resemble certain characters (the virtual world promotes characters far different from the real world, some supernatural, others tending to perfection, with special powers, far of the child's real potential).

Children identify with these characters by creating an imaginary world (the imaginary world is normal at this age if it has a positive, healthy basis) and with the passage of time it does not diminish, but evolves.

Boys identify with heroes, girls with princesses. An example in this sense could be represented by the so-called “princess” syndrome, which comes with a baggage of frustrations that can cause controversies and conflicts between preschoolers. [Mirela Pandelică, 2023, p.75].

By identifying with these characters, whom they watch daily and for a long time, they move away from childhood, with its vulnerabilities and pleasures, with the games of movement that develop the body and implicitly the mind, passing into another stage of age and behaving agree with her. Hence, we can notice behaviors in which violence, irascibility, and inappropriate clothing predominate, which inevitably lead to conflicts.

It is natural for the personality to take shape on a background created by the imagination, but the heroes in the book give the possibility of adjusting the behaviors over time, unlike the heroes of the cartoon series that appear daily in front of children and to which the child becomes dependent, practically in every day guiding his steps.

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CERTAIN SUGGESTIONS REGARDING ELEMENTARY ECOLOGICAL CULTURE OF EARLY SCHOOL-AGE STUDENTS

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În lucrare sunt examinate unele idei referitor la cultura ecologică elementară a elevilor de vârstă școlară mică. Ideile de bază reflectate în lucrare sunt următoarele: conceptul și componentele constitutive ale culturii ecologice elementare; criteriile și indicatorii de evaluare a culturii ecologice elementare la elevii de vârstă școlară mică sub aspect cantitativ și calitativ. Criteriile fundamentale sunt: cunoștințele ecologice elementare; trăirile emoționale sau atitudinile de ordin ecologic; abilitățile/ acțiunile și deprinderile ecologice mentale și practice. Cultura ecologică elementară a elevilor de vârstă școlară mică integrează în sine un sistem de cunoștințe, trăiri emoționale sau atitudini și abilități mentale și practice de ordin ambiental.

Cuvinte-cheie: *conceptul și componentele culturii ecologice elementare, criteriile și indicatorii, cunoștințele ecologice elementare, abilitățile și atitudinile ecologice.*

UNELE SUGESTII PRIVIND CULTURA ECOLOGICĂ ELEMENTARĂ A ELEVILOR DE VÂRĂ ȘCOLARĂ TIMPURIE

In the paper, certain ideas are examined regarding the formation of elementary ecological culture in early school-age students. The basic ideas reflected in the work are the following: the concept and constituent components of elementary ecological culture; the criteria and indicators for the evaluation of elementary ecological culture in early school-age students in quantitative and qualitative aspects. The fundamental criteria are: elementary ecological knowledge; emotional experiences or ecological attitudes; mental and practical environmental abilities/actions and skills. The elementary ecological culture of early school-age students integrates in itself a system of knowledge, emotional experiences or attitudes and mental and practical skills of environmental order.

Keywords: *concept and components of elementary ecological culture, criteria and indicators, elementary ecological knowledge, ecological skills and attitudes.*

Introduction

Man as a sociohuman being is responsible and obliged to preserve and enrich by all means the natural living environment. In the first decades of the 20th century, academician V. Vernadski warned humanity about the negative, irresponsible attitude of man towards nature. He was firmly convinced that if human society does not take care of the natural environment, humanity will self-destruct [10]. The uncontrollable actions of human society have brought TERRA to the brink. Humanity has taken and takes everything it likes from nature and almost nothing or very little fortifies it reasonably. Care and responsibility towards the natural environment must always accompany human activity. The relationship between society and the natural environment is a question of existence or non-existence of the human species.

The rapid development of society and the preparation of personality for the future require major changes in education. Education aims to anticipate social changes to form a personality open to change and development, able to integrate without major difficulties in the dynamics of social life and contribute to its progress. Man has the mission to predict the evolution of events and processes that society will generate in the possible future. At the same time, the human species must be an active participant in these changes (economic, moral and spiritual, scientific and cultural, political and informational events and phenomena) [6].

The anticipatory development of personality is conditioned by the competence to face the future positively, to predict and adequately analyze social events and probable natural phenomena, to adequately evaluate the consequences of decisions and actions. Anticipation directly implies the assumption of responsibility and obligation in the determination, design and positive realization of the future within the limits of national

and general human values. The development of society is determined by the intense changes of sciences, techniques, technologies and arts. Man as a socio-human being is permanently involved in the objectivity and natural inevitability of the laws of nature development, in the irrational change of lithosphere, biosphere and stratosphere. The result of such involvements endangers the existence of flora, fauna and human being. The danger comes from the consciousness and behavior of the personality in which uncontrollable changes occur quite frequently. We emphasize the fact that the imbalance in the natural environment is a consequence of the uncontrollable and unbalanced development between the consciousness and the behavior of personality, in some cases also the uneven and non-value development of the psychic formations [1, 7].

„In society there are many prejudices that inhibit the activity of forming the ecological culture in the personality, destroy the beneficial relations between man and his/her living environment. These are: a) the idea that nature exists to be mastered and exploited by man; b) the idea of „uncritical” optimism (the disappearance of thousands of plant and animal species should not worry us); c) the idea that nature is infinite and has infinite defense capabilities against the imbalances that threaten it; d) the idea that it is necessary to return to a technical civilization, based on traditional agriculture, crafts, domestic economy” [5, p. 136].

These ideas are destructive and are aimed at intensifying man-nature conflicts, which can and will contribute to disastrous consequences for the existence of human species and the living world.

The universal law - the balanced development of nature, society and personality is violated by the human species, endowed with a creative potential formed and developed at the maximum level. Human society is responsible for the environment. This indebtedness is generated by the non-value-motivated actions of human species for the increasing satisfaction of material and physiological needs.

The change and development of contemporary world is profound, complex and radical. In order to change and develop science and culture, technique and technologies, economy, politics and human spirituality, it is beneficial to change and develop in a planned way, positive consciousness and behavior of personality and society under moral, ecological, technological, professional, managerial aspect. Solving the problems related to environmental education is possible when ecological education will become a problem of educational policy and ideology and will permanently accompany all types of socio-human activities.

Concept and Constituent Components of Elementary Ecological Culture

Ecological education is an oriented process of training and self-training, development and self-development of consciousness and behavior in personality and society. The product or result of environmental education and self-education is ecological culture. The formation of elementary ecological culture in early school-age students is carried out in the framework of formal, non-formal and informal education.

The level of ecological culture is determined by the formation and development of ecological consciousness and especially the attitudes of responsibility and obligation regarding the preservation and improvement of natural environment, the formation of skills to make positive decisions and to detect/discover optimal practical solutions regarding the human relationship (and society) with the natural living environment, to prepare the personality to positively influence the relationship between man and the natural environment. The term ecological culture is treated differently in the educational sciences. Next we examine some of them. Thus, in the view of A. Teleman and S. Gînju, ecological culture is an outcome of education about the environment and aims to develop responsibility towards the environment, the motivation to participate in activities to improve the environment by promoting a lifestyle compatible with a healthy natural environment and conducive to life [9].

E. Stamati offers, in our opinion, a broader definition regarding the content of ecological culture. „Ecological culture is expressed in the responsible readiness for behavior and activities in accordance with moral duty and the rule of law.... Emerging emotional empathy and internal protest lead to the need for action to change the situation - environmental action. In them, ecological consciousness and thinking acquire a specific practical orientation, which manifests itself in the form of certain facts” [8, p. 108]. According to M. Hadîrcă and E. Chiriac “ecological culture is an outcome of ecological/environmental education, which is formed through a lasting educational process, oriented towards the formation of consciousness (knowledge, opinions, beliefs and ecological attitudes) and ecological behavior (facts, habits and ecological habits) of the emerging personality” [4, pp.162-163].

For early school-age students, the formation and development of elementary ecological culture is carried out within formal, non-formal and informal activities and needs to be designed and carried out in relation to age and individual particularities, with their life and activity experience. The key factors in the formation of ecological culture belong to social institutions: state and non-state organizations, family, education and educational system, formal associations and mass media.

The content of educational process is based on general culture. „General culture ensures the axiological substance of the content of learning (and of education) which is the basis of curricular construction of the education plan and school programs” [3, p. 700]. Next, S. Cristea mentions that “within the education system, general culture ensures the pedagogical foundations of specific objectives of each level of education” [3, p. 704]. In the framework of primary education, the acquisition, internalization and valorization of elementary general culture is ensured.

Education in the broad sense of the word, including the ecological one, is oriented towards the formation and development of consciousness and behavior in personality and society. *The consciousness of personality* regardless of its content (intellectual, moral, ecological, aesthetic, professional, hygienic, political) is made up of the following basic components: the system of acquired and realized knowledge, representations, judgments and reasonings; mental abilities and skills; virtual activity intentions and models or activity projects in various life situations and conditions; opinions, beliefs and ideals. *Behavior* in general terms is made up of the following components: the system of actions and deeds, skills and habits of a practical order, which are constantly accompanied by reactions and emotional/sentimental states. From the above, it appears that *the basic/primary ecological culture* of early school-age students represents or constitutes a prototype or mold of the general culture.

The components of ecological culture are generated by the general social culture. These components are the following: a) *knowledge* about nature and the means of activity that ensure their application for the transformation and preservation of environment. Knowledge about nature is of a different kind – factual, notions, laws and theories, principles and rules of behavior regarding the natural environment, knowledge related to means of activity or action, evaluative or attitudinal knowledge; b) *the means of activity* or the system of ecological capabilities or skills; c) *emotional (sentimental) attitudes* that form and develop based on emotional experiences. Emotional experiences have specific content for each side/educational component, in our specific case they have ecological content. Emotional experiences generate in the personality the system of motives/needs towards the environment. They can be direct (related directly to the natural environment) and mediated (moral, aesthetic, economic, professional, etc.).

In the first half of the 20th century, the renowned psychologist L.S. Vygotsky demonstrated that consciousness is not located after life, but life is located after consciousness [11]. “We want to emphasize the fact that if consciousness is not well formed and developed, it is in an unbalanced state in its structural components, then the life designed by people with this type of consciousness is capable of generating socio-human phenomena and processes, unwanted, undesirable, negative, not accepted by human society. Such people can in some cases generate destructive effects for the human species. Social crises are the result of limited and poorly organized education” [7, p. 332].

Based on ecological culture, man and society design, organize and regulate their activities in relation to the natural environment. Ecological culture constitutes the “substance” of activity of man and society in relation to nature. The unity of social environment with the natural one constitutes the fundamental criterion of ecological culture. Ecological culture consists of two fundamental components: a) *spiritual* (knowledge, principles and skills, opinions, beliefs and ecological ideals); b) *practice* (all forms of interaction of man and society with nature or actions and deeds of influence, preservation/conservation and enrichment of nature).

Currently, a new ranking of ecological culture values is necessary. Its base or core needs to be constituted by new reasons/moral duties, norms and rules of behavior based on the Human Eco principle. Attitudes of moral behavior constitute the core of ecological culture, and the principles of humanism education such as: democratization, solidarity, responsibility, obligation and duty towards the present and the future of the Earth represent the fundamental reasons for building relationships between Man and Nature.

Diagnostics of Elementary Ecological Culture in Early School-Age Students

The formation of ecological culture is possible through a permanent and efficiently organized training and education, starting from childhood, primary school, gymnasium, high school, university and continuing throughout the personality's professional activities. The process of forming the ecological culture is mainly oriented towards the formation and development of attitudes of responsibility and obligation of all people/society towards the natural environment. People are meant to assume knowledge, skills and attitudes to act individually and in groups/teams in solving environmental education problems. The fight for a favorable living environment will be won only to the extent that education will be based on the affective/attitudinal dimension of Man/society-Nature relations.

Through the experimental study, we pursued the major objective of extensively examining/evaluating the elementary ecological culture of primary school students, taking into account their developmental peculiarities, the components of ecological culture and the educational experience described and analyzed in pedagogical sciences.

The elementary ecological culture of early school-age students includes/integrates within itself a system of knowledge, emotional experiences/attitudes and mental and practical skills of an environmental order. Thus, elementary ecological culture can be measured quantitatively and qualitatively by applying three fundamental criteria: a) ecological knowledge; b) emotional experiences or ecological attitudes; c) mental and practical ecological skills or actions, facts and skills.

Criterion - elementary ecological knowledge (*What knowledge does the student possess?*)

1. Possesses knowledge of life on earth, in soil, water, air.
2. Knows the vegetation of the forest, the meadow, the garden, the plain.
3. Has knowledge about domestic and wild animals, endangered animals.
4. Acquires knowledge about the nature of the native locality.
5. Knows the specific characteristics of the living environments of plants and animals.
6. Knows and name certain plants and animals that live in the locality and the vicinity of locality as well as the basic natural factors (water, air, soil).
7. Nominates certain protected natural objects from the Republic of Moldova.
8. Knows the ways of rational use of the components of natural environment.
9. Has basic knowledge about waste processing methods.
10. Has knowledge about the impact of local environmental sanitation actions on the quality of life.

Criterion - emotional experiences or primary/core ecological attitudes (*Which attitudes underlie the behavior?*)

1. Shows tendencies to participate in environmental care activities: school yard, slum, park, forest, protective strips.
2. Shows responsibility towards the environment of the locality.
3. Expresses sensitivity and aesthetic taste towards nature.
4. Demonstrates curiosity in learning about natural phenomena.
5. Shows tendencies to learn new things from the surrounding environment.
6. Expresses the desire to discover new knowledge and phenomena from the natural environment.
7. Manifests positive emotional feelings towards activities organized in nature.
8. Demonstrates creative questioning tendencies in environmental activities.
9. Shows sensitivity regarding life on earth, in soil, water, air.
10. Has tendencies to be active in natural environment research projects.

Behavioral criterion – elementary ecological actions and facts (*What mental and practical skills does the student master?*)

1. Has the ability to argue the consequences that demonstrate excess in the collection of natural resources: hunting, fishing, deforestation.

2. Possesses actions and basic facts of positive behavior towards the natural environment.
3. Has the ability to participate in actions to comment on the various behaviors of peers and other people unfavorable for the natural environment.
4. Has the ability to argue the role of local organizations and associations in the protection of natural environment.
5. Masters the ability to explain certain connections in the environment.
6. Demonstrates the ability to care for decorative plants.
7. Demonstrates the ability to identify the elements of human living environments (rural/urban locality; of the living environments of plants and animals – terrestrial, aerial, aquatic, underground in the locality).
8. Possesses the ability to determine certain relationships or dependencies from the world of plants, animals and the ability to fit into actions to protect the local environment;
9. Masters the ability to argue the importance of waste processing and environmental protection.
10. Has the ability to identify relationships between living things in the immediate and more distant living environment.

The nominated criteria and indicators constitute the basic parameters, by means of which the system of educational activities oriented towards the formation of elementary ecological culture among early school-age students can be diagnosed and designed. In studying the level of formation of ecological culture among students, *the Test* was applied: „**Elementary Ecological Culture of Early School-Age Students**”, elaborated on the basis of nominated criteria and indicators. The results obtained from a qualitative and quantitative aspect are placed in Table 1. **Rating and interpretation of results.** For each statement, as many points are obtained as indicated by the answer option (not at all -1; a little -2; a lot -3; very much -4). To calculate the score, the sum of scores obtained for all statements is made. The minimum value is 30 points and the maximum is 120 points.

According to the number of accumulated points, the students were placed in the following groups-levels of elementary ecological culture training.

30-60 points – low level

61-90 points – medium level

91-120 points – high level

Table 1. Results Obtained Regarding Level of Elementary Ecological Culture Training for Early School-Age Students.

Level	High	Medium	Low	Total
Percentage of students examined	13% students	42% students	45% students	100%

The data presented in Table 1 demonstrate that the majority of students have a good and very well formed elementary ecological culture (average level – 42%; high level – 13%), and at the low level of formation and development of elementary ecological culture there are 45 % people.

These results have a general character regarding the formation of elementary ecological culture in students and are related to the age characteristics of second grade students, who are from the countryside and who constantly spontaneously contact nature. Most of them believe that nature is a source of existence for people and „heals its wounds” by itself.

The presented data generate two nodal questions:

- Why do many students show curiosity and interest in learning about nature, but consider nature only as a source of human life?

- Why elementary ecological actions and facts are predominantly formed at a low level in relation to the degree of acquisition of ecological knowledge.

In order to answer these questions and clarify some causes of the imbalance between knowledge - emotional experiences/attitudes - actions and ecological facts, we resorted to the separate investigation of ecological culture components: *the criterion - ecological knowledge; the criterion - emotional experiences or ecological attitudes and the behavioral criterion - ecological actions and facts (mental and practical skills).*

Based on observation, conversation with students and parents, the following data/facts were revealed regarding the level of formation and development of elementary ecological culture among students. The obtained results are placed in Table 2.

Table 2. Results Obtained Regarding Mastery Level of Knowledge, Emotional Experiences/Attitudes and Actions, and Elementary Ecological Facts by Students.

Criterion	Ecological Knowledge			Emotional Experiences or Ecological Attitudes			Ecological Actions and Facts		
	High	Me- di- um	Low	High	Me- di- um	Low	High	Me- di- um	Low
Percentage of students examined	58%	36%	6%	45%	39%	16%	26%	39%	35%

The obtained data demonstrate that the majority of students, 58% subjected to the diagnosis, possess high-level ecological knowledge and 45% show high-level ecological attitudes. Ecological actions and facts at this level are present only in 26% students. We observe that actions and practical ecological facts at the low level constitute 35%. Behavioral actions in relation to knowledge are formed and developed at a modest/reduced level.

Students with a high level of formation of elementary ecological culture are characterized by the following defining characteristics:

a) possess knowledge about life on earth, in land, water and air; have information about domestic birds and wild animals; have knowledge about the nature of my hometown; know the specific characteristics of living environments of plants and animals; have information and name certain plants and animals that live in the locality and the vicinity of locality and the basic natural factors (water, air, soil); possess knowledge about the ways of rational use of the components of natural environment and waste processing;

b) show tendencies to participate in the activities of care and preservation of the natural environment (school yard, slum, park, forest); demonstrate responsibility towards the environment of locality; are curious about the phenomena of nature; manifest desires, tendencies to know the new from the living world; demonstrate sensitivity to life on earth;

c) possess actions and elementary facts of behavior towards the natural environment; fall into actions of commenting on the various behaviors of peers; argue the role of local organizations and associations in the protection of natural environment; participate in plant and animal care actions; possess the ability to identify the elements of human living environments; argue the importance of waste processing and environmental protection.

Students placed at the average level of elementary ecological culture formation knowledge, attitudes, actions and behavioral facts are approximately at the same level of development. The obtained data demonstrate the following characteristics: knowledge – 36% students; attitudes – 39% people; ecological actions and facts - 39% students.

We note that the level of possession of ecological knowledge is slightly lower compared to the level of formation and development of ecological attitudes and actions. This difference is insignificant and constitutes 3% students. This fact is due to the so-called psychological phenomenon named by the psychologist L. Bojovici „psychic court”, which is mainly characteristic for children of preschool and early school age. Students imitate the teacher, peers, elders, different literary characters, behave and show similar actions.

The low level of ecological culture training is characteristic for students who possess some fragmentary knowledge regarding general ecological problems and which are mostly not supported by concrete examples. They show interest in the phenomena of nature and especially in the living world. The attitude towards the surrounding world is passive-contemplative, characterized by a low emotional level in the perception of objects and phenomena in nature. They show a pragmatic attitude towards nature and fundamentally realize

the value potential of nature for man and society. As a rule, these students emotionally admire the objects and phenomena of nature. Attitudes of responsibility towards the natural environment are manifested periodically. They encounter certain difficulties in communicating with peers and adults on environmental issues, communication skills are formed and developed at a low level. In some situations, the separation of the „I” from the surrounding reality is manifested.

Attitudes towards the natural environment are dominated by cognitive interest and sympathy for living beings. Moral reasons are manifested through actions to care for animals and birds, manifest tendencies to improve and preserve the environment. Caring for animals and plants is done under the guidance of adults. Experience of contact with the environment is good and has a positive influence on the formation of interest in environmental issues and generates certain tendencies to participate in activities to protect the natural environment.

Conclusions

- Elementary environmental culture represents a system of knowledge, emotional experiences or attitudes, mental and practical ecological actions and facts. It is the result or product of formal, non-formal and informal environmental education. Elementary ecological education is a priority of the activity of training and development of the personality of early school-age students. It needs to be carried out in accordance with the age and individual characteristics of students, with the conditions of life and activity of the educational subjects. The purpose of ecological education is the oriented process of forming elementary ecological culture in students. Parents need to be environmentally trained/educated. They feel the lack of some guidelines and practical recommendations regarding the beneficial realization of children’s ecological education.

- The fundamental criterion of ecological culture is the unity of consciousness and behavior relative to the environment. Educational agents are meant to explain and demonstrate to students that man, as a social being, belongs not only to the social but also to the natural environment, and the duty of each person is to show responsible and caring attitudes towards him/her. Within ecological education, teachers and other educational agents have the obligation to be guided by the following principles-rules: the formation of attitudes of responsibility and obligation towards the natural environment is an indissoluble component in the general development of student’s personality; ecological culture integrates components of intellectual, moral, emotional education and practical life activities; the process of forming elementary ecological culture is based on the principles of: continuity, systemacity, interdisciplinarity, unity in the formation of consciousness and behavior; the cohesion of formal, non-formal and informal education; harmonizing traditional and participatory-active methods; permanent inclusion of students in practical activities possible to protect the environment.

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METHODS AND DIDACTIC ASSESSMENT TASKS THROUGH THE PRISM OF SOCIO-CULTURAL THEORY

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This study examines a range of effective teaching methods in the educational process in accordance with the meaning of socio-cultural theory. The present research, elucidates the defining aspects of the socio-cultural theory proposed by L. S. Vîgotski, highlighting the characteristics of the proximal zone of development and the relevance of scaffolding in the educational process. The relevance of this study lies in identifying the types of scaffolding and, in accordance with these, formulating teaching tasks and adapting effective teaching methods to the evaluation process. The findings of this study suggest that pupils and students develop their thinking and reasoning skills more effectively when the teaching tasks and evaluation methods correspond to the proximal zone of development.

Keywords: *Socio-cultural theory, Zone of proximal development, Scaffolding, Teaching methods.*

METODE ȘI SARCINI DE EVALUARE DIDACTICĂ PRIN PRISMA TEORIEI SOCIO-CULTURALE

Acest studiu examinează o serie de metode eficiente de predare în procesul educațional, în conformitate cu sensul teoriei socio-culturale. Prezenta cercetare, elucidează aspectele definitorii ale teoriei socio-culturale propuse de L. S. Vîgotski, evidențiind caracteristicile zonei proximale de dezvoltare și relevanța schelei în procesul educațional. Relevanța acestui studiu constă în identificarea tipurilor de schele și, în conformitate cu acestea, formularea sarcinilor didactice și adaptarea metodelor de predare eficiente la procesul de evaluare. Rezultatele acestui studiu sugerează că elevii și studenții își dezvoltă mai eficient abilitățile de gândire și raționament atunci când sarcinile de predare și metodele de evaluare corespund zonei proximale de dezvoltare.

Cuvinte cheie: *Teorie socio-culturală, Zona de dezvoltare proximă, Schele, Metode de predare.*

Introduction

Current learning theories have significant implications for teaching because they focus on the development of cognitive processes in pupils/ students. These theories, including constructivism (social constructivism and cognitive constructivism), cognitive theory and socio-cultural theory, share several ideas, the most important of which concern: (1) knowledge building; (2) embedding learning and development in a socio-cultural context [13].

In this context, pupils/students develop their thinking and reasoning skills in the same way that they learn language, gestures, interpersonal behaviors, manners and tastes - through their social interactions with family, school and community. According to L. S. Vîgotski (1978), socio-cultural theory emphasizes that any aspect of a child's cognitive development occurs twice: first socially in interaction with others, and then psychologically or internally. Whatever language and logical structures that children use in their thinking have been learned first through social interactions [13].

Theoretical aspects of the socio-cultural theory proposed by Vîgotski L. S.

Social constructivism is a theory of learning proposed by L.S. Vîgotski in 1968. This theory involves two aspects, first, the theory states that language and culture are the frameworks through which people experience, communicate and understand reality. According to L. S. Vîgotski, language and culture play essential roles in both human intellectual development and how people perceive the world. This means that, learning concepts are transmitted through language, interpreted and understood through experience and interactions in a cultural setting, secondly, social constructivism recognizes the social aspect of learning and the use

of conversation, interaction with others, application of knowledge as an essential aspect of learning and a means to achieve learning goals [1].

Socio-cultural learning theory highlights the psychological and social nature of consciousness, the social origins of the human psyche, and how higher cognitive functions such as reasoning, understanding, planning, and memory develop from social experiences. Human activity is not limited to a chain of reflexes or adaptive behaviors, but also involves a component of interaction with the environment, a component during which the subject is transformed [16].

In this context, Vygotsky L.S. supports the principle that only that learning that contributes to development is satisfactory, on the one hand, and, on the other hand, militates for the principle of unity between intellect and affectivity, because intellectual development is inextricably linked to motivational development [16].

It is also important to mention that the cognitive construction of the person is carried out in interactive contexts, in which the child and the adult engage in a joint activity. The child's knowledge and skills develop precisely because of this cooperation process, which involves „experts” and a „beginner”. The more experienced person provides a framework (or scaffolding) on the background of which the child operates in the direction of a better understanding. In Vygotsky's conception, cognitive development is the result of a double formation, external and then internal, in a movement whose direction is from social to individual, and not vice versa [12].

The socio-cultural theory proposed by Vygotsky emphasizes the social nature of knowledge, by capitalizing on language and cultural elements, emphasizes the importance of interpersonal relationships in the transmission and generation of educational content, emphasizes the role of social interaction in the development of knowledge. Vygotsky offered a new view of the characteristics of learning, interpreted as a product of the quality of adult-child interactions. The psychological concepts promoted by Vygotsky (the scaffolding and the zone of proximal development) allow a resignification of the educator's status. One of the author's approaches is that language helps cognitive development. The use of language as a means of communication and enrichment of the individual cognitive experience, plus the role of culture and group. Knowledge is achieved by ‘mental activity’ that develops through the use of different forms of language. The construction of individual information is mediated by interpersonal relationship, group activity. Social processes facilitate language learning. A child in a preverbal stage of development has an intelligence seen as a potentiality. As language is acquired and developed, thought processes evolve [11].

Another approach of the psychologist Vygotsky refers to the fact that social factors contribute to cognitive development. Through „collaboration, the child develops more than if he worked alone”. The pupil „is stronger, smarter than in his individual activity” when he collaborates with those around him with a higher level of development [6].

An important concept in sociocultural theory is known as the zone of proximal development. The zone of proximal development provides a conceptualization of how the child's developmental potential can be understood. Vygotsky (1978) defined the zone of proximal development as the distance between the actual level of development determined by independent problem solving and the level of potential development determined by solving problems under the guidance of an adult or in collaboration with more capable peers [8].

In this context, the child's capacities are first manifested in an inter-individual relationship, when the social environment provides the child's guidance (a process described by Bruner as a relationship of assistance or collaboration between the child and the adult), and only then the individual activities are triggered and controlled, as a result of a process of interiorization. The author invoked thus considers that each higher psychic function occurs twice during the child's development: first in a collective activity directed by the adult (as an interpsychic function) and only secondly as an individual activity, as an inner property of the child's thinking (as an intrapsychic function). The most eloquent example in this regard is that of language. This semiotic instrument of utmost importance in cognitive development appears first as a means of communication between the child and the adult (or entourage), and then it turns into an internalized language, passing through a phase of egocentric language [12].

Stages of the Zone of Proximal Development

There are three distinct stages in which a student can develop their skill set. For learning to take place, it is essential that the teacher understands the essence of these stages, in which the student is involved [5].

1. *Tasks that the student can't accomplish.*

Tasks that are outside the student's zone of proximal development are those that cannot be performed even with the help of an expert. If the task does not fall within the proximal development zone of the student, then it is necessary for the teacher to identify tasks appropriate to the level of qualification of the student.

2. *Tasks that the student can perform with assistance.*

When a student is close to mastering a set of skills needed to perform a task, but still needs the guidance of an expert (teachers, peers, support teacher, etc.) to do so, it is considered to be in their zone of proximal development. In this situation, an expert can use various techniques to help the student better understand the concepts and form the skills necessary to perform an individual task.

3. *Tasks that the student can perform without assistance.*

At this stage, the student is able to perform tasks independently and has the necessary skill set. When a pupil has reached this stage, the teacher can increase the level of difficulty of the tasks to find the next proximal zone of student development and to encourage further learning [5].

Based on Vygotsky's theory of socio-cultural learning and the zone of proximal development, Shepard (2005) points out that scaffolding is a strategy that teachers use to advance learning in the zone of proximal development [9].

In this context, scaffolding involves both structural and procedural supports that guide and enable students to work within their own proximal zone of development so as to develop their full intellectual potential [2].

The scaffold describes the process of transition from teacher assistance to independence in student activity. This answers the common question about the student's proximal zone of development: If a student can perform high-level tasks with only assistance, then how can this student perform tasks at the same level independently? [15].

Donato (1994) states that scaffolding is a concept coming from cognitive psychology. He confirms that during social interaction, a more capable participant, through the use of language and other supportive conditions, can help the student advance to a higher learning mechanism with their knowledge and skills. In education, scaffolding is an instructional structure through which the teacher shapes the learning strategy or task and then transfers this responsibility to the students [15].

The use of the supportive scaffold facilitates, helps and accelerates student learning. „When teachers and peers use scaffolding in cooperative learning, the learning improves”. In this context, the question arises how capable the teacher is to determine how much help is needed, in order for the student to complete the task in an independent way and to be successful as when the task was carried out with the help of the teacher [15].

1. According to Van de Pol, there are three types of scaffold classifications [10]:

2. Describing and providing different means and techniques of support for teachers: modeling, adjusting, calibrating the required level of support, providing feedback, training (demonstrating), questioning and cognitive structuring (decomposition) of the problem being solved.

3. Description of the teacher's functions within the joint action with the student: recruitment - reducing the student's action in „degrees of freedom”, maintaining the direction, marking critical features, controlling the student's frustration and, finally, demonstrating a model of the correct action.

4. Identifying the link between the means offered and the goals/intentions that the teacher sets [10].

Because scaffolding is such a dynamic intervention, harmoniously adapted to the student's progress, the support provided by the teacher during the scaffolding depends very much on the characteristics of the situation, such as the type of task and the student's responses. Scaffolding is therefore specific to learning situations, with each situation requiring adaptation of certain techniques [17].

According to researchers Kang, Thompson & Windschitl [9] five prominent types of scaffolding are highlighted:

(a) Scaffolding: merging text with drawings;

(b) Scaffolding: contextualization of the main phenomenon;

- (c) Scaffolding: provision of the observation sheet;
- (d) Scaffolding: use of the evaluation grid;
- (e) Scaffolding: providing incomplete sentences.

Scaffolding: merging text with drawings. This type of scaffolding involves students explaining main phenomena using both text and drawings. Such tasks are carried out on posters, where students reproduce models that reflect relationships between the components of a system. For example, „Graphically represent the carbon cycle in nature”.

Scaffolding: contextualization of the main phenomenon. Assessment tasks require students to explain general phenomena, scientific ideas, the representation of which is found in the textbook. For example, „Why do the seasons change?” „Why do the descendants of some and the same parents look different?”

Table 1. Example: Observation sheet.

Observation sheet	
Earthworm	
- Body size	_____
- Body color	_____
- Number of segments (approximate)	_____
- Particularities of the dorsal part	_____
- Particularities of the ventral part	_____
- Mode of travel	_____
Conclusions on the belonging of the earthworm to the phylum	
Ringworms	_____

Scaffolding: provision of the observation sheet. The observation sheet is a teaching aid that students turn to while building their response. There are two types of observation sheets. The first considered as a „simple observation sheet” is a list of scientific concepts/terms presented in a table. The second, called an „explanation observation sheet”, which asks students to explain several aspects of the main phenomenon, as well as relationships between ideas, observations, models. For example, „Describe the structure of the body and movement to the earthworm, based on the observation sheet (table 1)”.

Scaffolding: use of the evaluation grid. The evaluation grid is a tool to measure student acquisitions and contains a set of criteria and a grading scale (e.g.: often, rarely, never or points are given on a certain scale, e.g. from 1 to 5).

For example, „Assess, according to the evaluation grid (table 2.), a colleague’s plant cell model”.

Table 2. Example: Evaluation grid.

Evaluation grid	
The plant cell model	
The cell contains all the main components specific to plant cells	2 points
The cell contains some main components specific to plant cells	1 point
The cell does not contain a cell wall	0 points

Scaffolding: providing incomplete sentences. The incomplete sentences proposed by the teacher prompt the students to focus on the message and complete the sentence with the missing information. There are two types of incomplete sentences. Some focused on focus and some focused on connecting. Incomplete focus sentences require students to focus their attention on the main phenomenon and explain it by fill-

ing in the missing words/phrases. For example, „When blowing through a straw in lime water, I noticed that it _____. I know this phenomenon because _____.” Connecting-focused incomplete sentences require students to make deeper connections between key components of scientific explanation, such as evidence and reasoning. For example, „Evidence concerning the origin of man, comes from _____.”

In this context, we propose didactic evaluation methods suitable for the types of scaffolds (table 3.)

Table 3. Didactic methods of evaluation in correspondence with the types of scaffolding.

Types of scaffolding	Didactic evaluation methods. Characteristic
Scaffolding: merging text with drawings	<p>The „portfolio” is a complex and flexible evaluation tool, which contains and structures an „archive”, a collection, a set of information related to performance, theoretical and practical skills, which determine a student’s academic progress [apud. 3].</p> <p>This tool represents a collection of products of the student’s activity, structured and signified accordingly. The portfolio provides a complete picture of the student’s progress over the time frame for which it was designed, by reference to criteria formulated at the time of design. It allows the investigation of students’ products, which usually remain uninvolved in the evaluative act, representing an incentive for carrying out the whole range of activities. The portfolio can be part of a summative assessment, providing not only specific information, at a certain moment of the student’s acquisitions, but even information regarding the evolution and progress recorded by him over time, along with important information about his concerns [apud. 3].</p>
Scaffolding: contextualization of the main phenomenon	<p>The „6 WHY?” method it is taken from the British didactic and consists in preparing the answers for six consecutive questions „why?”, hence the title of the method. By using the „6 why?” method. a question is asked, and from the question follows the answer, and then - a question from the previous answer, and so it continues up to 6 questions and 6 answers. Each question must begin with „why?”, and the answer follows with: „because/ because/ because”. The mentioned method is dynamic and engaging. The discussion proceeds from the initial topic, reaching a relevant end. Formulating an argument, no matter how valid and correct, can provoke a contradictory discussion and the person launching the argument must be prepared [19].</p> <p>Technique „6 Why?” challenges students to prepare an argumentative speech, while the speech is not truncated with the expression of questions. Students who have communication skills will know how to organize these responses into a coherent and persuasive text, highlighting the main phenomenon [4].</p>
Scaffolding: provision of the observation sheet	<p>„Observation” represents a method of direct knowledge, which allows the understanding of a reality by perceiving the concrete facts of its manifestation. In the framework of systematic and independent observation, a direct research action of reality prevails, by directing learning in didactic sequences designed at the level of interaction between intuitive knowledge and logical knowledge. This method capitalizes on the classic scientific research model by means of inductive and deductive reasoning, which ensures the direct investigation of objects, facts, events, relationships, correlations.</p> <p>The pedagogical function of this method aims at the formation/development of the spirit of objective research of objective, natural and social reality, based on criteria of scientific rigor assumed at psycho-pedagogical and social levels appropriate for each school level. The effective realization of this function requires the stimulation of the spirit of observation, evaluable in terms of a general pedagogical aptitude, at levels of superior cognitive competence, which engages the operationality and flexibility of thinking [18].</p> <p>As a rule, this method involves the use of an observation sheet that facilitates the learning process and develops observation skills.</p>

Scaffolding: use of the evaluation grid	<p>The „project” is an interactive method used in summative assessment, which facilitates effective communication between students, being characterized by a theoretical, practical, creative, active and effective character. The project can be carried out at the teacher’s request by the students as a moment of activity or synthesis at the end of a didactic unit after the completion of the teaching and learning of thematic concepts. Thus, the teacher will evaluate, through the project, the knowledge, skills and abilities of the students accumulated after each unit, including verbal expression [7].</p> <p><i>Project evaluation grid:</i></p>	
	Evaluation criterias	Score awarded
	Compliance with the structure proposed for the elaboration of the project.	0 points - lack of the proposed structure. 1 point - partial compliance with the structure. 2 points - making the product according to the established structure.
	Integration of informational content through graphic organizers, suggestive images.	0 points - lack of graphic organizers and suggestive images. 1 point - organizing the content through graphic organizers and images inappropriate to the topic. 2 points - content organization through graphic organizers and images adapted to the topic.
	The relevance of the project (utility, interdisciplinary connections, etc.), the connection between the proposed subject for the project and the product.	0 points - the product is irrelevant, there is no connection with the topic proposed for the project. 1 point - the product is partly relevant, it shows interdisciplinary connections. 2 points - the product is relevant, totally related to the subject proposed for the project, the interdisciplinary nature is visible.
	Demonstrating knowledge of the project’s content through the clear and captivating presentation of a coherent, logical speech, within 5-7 min.	0 points - the speech does not have a perceptible structure, it is presented unclearly and has no cohesion between ideas, lexical errors are committed. 1 point - the speech contains distinct ideas, explicitly formulated, according to the elaborated project, the presentation lasts more than 7 minutes. 2 points - the speech contains distinct ideas, explicitly formulated, according to the elaborated project, the presentation falls within 5-7 minutes.
	Formulating appropriate answers to the questions asked by colleagues and the teacher in accordance with the presented project.	0 points - the answer to any question asked by colleagues and the teacher is missing. 1 point - formulating the partially correct answer/only for some questions asked by colleagues and the teacher. 2 points - formulating the correct answers to all questions asked by peers and the teacher.
	<p>„Four-step argument”. Purpose of use: Formation of the skills of expressing opinion, position in a particular problem. As a result, we get a profoundly reasoned assessment. In the case of controversial issues, the technique allows an analysis of different opinions to determine the extent to which they are convincing [14]. <i>Algorithm of use:</i></p>	

Scaffolding: providing incomplete sentences.	The structure of the argument	Formulating the argument
	Thesis (statement)	The thesis should be short, a simple affirmative sentence.
	The explanation (the premises)	Write down 2-3 statements, intended to reveal the essence of the thesis. Arguments are punctuated by meaningful formulations: because, the fact is explained by..., considering the fact that...
	Evidence (supporting evidence)	According to the presented topic, references to certain aspects are selected in order to illustrate the launched thesis. Several pieces of evidence can be used to support a thesis.
	Conclusion	Strengthening the hypothesis, by resuming it in a nuanced way, if the argumentation demonstrated the thesis stated initially or contradicting the hypothesis, if the argumentation demonstrated the respective hypothesis. Various persuasive words are used: surely, obviously, clearly, therefore, therefore, in conclusion, etc.
<i>Conditions:</i> Necessarily respecting the proposed structure: thesis, the explanation, evidence, conclusion. Stimulating the search for more evidence (not less than 2-3) to support a thesis [14].		

Conclusions

Referring to the socio-cultural theory, we emphasize that the tasks and teaching methods of assessment in accordance with the scaffolding types must be used in the context of the students' proximal zone of development in order to provide the possibility of highlighting the students' real abilities. Therefore, pupils/students develop their abilities to think and reason effectively through interaction and socialization in the educational process.

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FACTORIAL STRUCTURE OF THE CREATIVE SELF SHORT SCALE: A POPULATION STUDY OF HIGH SCHOOL STUDENTS IN ROMANIA

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Creative self-efficacy has become one of the most relevant constructs in education, being correlated with self-motivation, increased personal competence of students, creative performance, and their overall ability to produce creative work. A sense of creative self-efficacy and its application in a variety of circumstances can have an impact on students' work at school as well as beyond the educational environment. The present study sought to translate the Short Scale of Creative Self (SCSS) into Romanian and to evaluate its psychometric properties. SCSS is an instrument capable of assessing students' creative self-efficacy and its development, an approach of interest in the educational environment, not only for students but also for parents, teachers, educational counselors, and educational policymakers focused on developing programs and interventions to cultivate and harness creative potential.

Keywords: *creativity, factor structure, high school students, internal consistency.*

STRUCTURA FACTORIALĂ A SCALEI SCURTE A SINELUI CREATIV: UN STUDIU POPULAȚIONAL PE ELEVII DE LICEU DIN ROMÂNIA

Autoeficacitatea creativă a devenit unul dintre cele mai relevante constructe în educație, ea fiind corelată cu automotivarea, creșterea competenței personale a elevilor, performanța creativă și capacitatea generală a acestora de a produce lucrări creative. Sentimentul de autoeficacitate creativă și aplicarea acestuia în diverse circumstanțe poate avea un impact asupra activității elevilor la școală, precum și dincolo de granițele mediului educațional.

Studiul de față a avut ca scop traducerea în limba română a „Scalei scurte a sinelui creativ” (SSCS) și evaluarea proprietăților psihometrice ale acesteia. SCSS este un instrument capabil să evalueze autoeficacitatea creativă a elevilor și evoluția acesteia, demers important în educație, nu doar pentru elevi, ci și pentru părinți, educatori, psihologi, cercetători și factorii de decizie politică implicați în conceperea de programe și intervenții pentru a crește potențialul creativ.

Cuvinte-cheie: *consistență internă, creativitate, elevi, structură factorială.*

Introduction

Creativity is one of the extensively studied concepts in psychology. Initially, research focused on creative individuals and personalities but later shifted towards the broader population. Today, creativity is considered a crucial skill for our century in various fields, such as organizations [2], business [26], sociology [9], psychology [13], and more. In the educational environment, creativity is considered essential and is consistently present in educational programs and policies. Research in the field has demonstrated that creativity is a necessary component for both academic success and beyond the boundaries of the school [1; 15; 16; 35]. Additionally, creativity can contribute to admission into academic institutions, the development of career opportunities, and greater economic benefits [5; 10; 12; 35]. In the sphere of education, creativity is seen as the ability to produce multiple ideas [10] its purpose being to provide a unique, original, correct answer different from the conventional one traditionally taught in classrooms [30]. Although the educational perspective on creativity often focuses on its artistic side [30], creativity is present in all areas and aspects of learning [11]. In this regard, Guilford (1950), for example, states that “a creative act itself is an example of learning ... [and that] a comprehensive theory of learning must consider both understanding and creative activity” [Guilford, apud 30, p. 446].

However, studies have demonstrated that creativity alone is not sufficient. In this regard, Barbot and his colleagues (2016) have shown that creativity emerges from the interaction between creative potential and creative production, requiring motivation to be put into practice [7].

The fact that the transformation of creative potential into creative behavior depends on an individual's intentional action shaped by confidence in creative ability, demonstrates that belief systems play a crucial role developing creativity. This includes creative self-awareness, creative self-image, and beliefs in creative confidence [17]. The latter is an essential trait for creative action, as it reflects an individual's confidence in their ability to think or act creatively in a specific domain, encompassing the concepts of creative self and creative self-efficacy (CSE) [17]. Recent research has highlighted that students' attitudes toward creativity, particularly their beliefs in their creative capacities [18], play a significant role in engaging in creative activities, as well as in explaining successes and failures in being creative in life in general [16].

Creative Self-Efficacy and Creative Personal Identity

Initially studied in an organizational context [16; 35; 28], creative self-efficacy has become a highly researched topic in the field of education [3]. Defined as “the belief one has the ability to produce creative outcomes” [35, p. 1138], creative self-efficacy originates from Bandura's (1997) construct of self-efficacy.

According to Bandura (1997), self-efficacy influences what a person attempts to achieve and how much effort they are willing to invest in the process. Therefore, creative self-efficacy (CSE) reflects the self-assessment of one's own abilities or creative potential, which, in turn, influences the choice of activity and the effort invested in achieving innovative results [33].

In practice, “CSE is more probabilistic, hypothetical, and concerns self-perception of one's potential for creative activity and development” [18, p. 46]. CSE is domain-specific, strongly tied to particular areas of activity [19; 24; 29], or even specific to tasks [31]. On the other hand, previous theorizations have postulated that CSE can also serve as a person's general belief in their abilities for creative thinking or creative problem-solving, meaning it can serve as a general trait-like characteristic rather than a dynamic, state-like CSE, akin to the concept of creative self [18]. Creative Personal Identity (CPI) [20] differs conceptually from Creative Self-Efficacy (CSE). CPI refers to the extent to which creativity is a significant part of an individual's identity [16; 35]. CSE and CPI are similar but not identical, and they mutually influence each other. In youth, creative self-efficacy may have a stronger impact on creative personal identity [18]. Creative Self-Efficacy (CSE) and Creative Personal Identity (CPI) undergo changes with age [20], influenced by the interaction of various factors, including psychological and personality-related factors [18], as well as social factors such as the influence of teachers or peers [18], and educational experiences [28].

The Importance of Creative Self-Efficacy in Education

Educators link creative self-efficacy to academic skills [25]. In this regard, students who perceive themselves as incapable of accomplishing a task (such as mastering a mathematical concept or writing an essay) may underperform due to a lack of creative self-efficacy [34]. Other research has identified the relationship between creative self-efficacy and learning motivation [36] and academic performance [25]. On the flip side, it has been found that creative self-efficacy may play a role in diminishing self-confidence and increasing procrastination [27].

Karwowski (2012) studied the relationship between creative self through its two constructs, namely creative self-efficacy and creative personal identity, and dispositional curiosity, indicating that curiosity tends to lead to increased self-efficacy rather than establishing a relationship between the two concepts. Finally, the relationship between creative self-efficacy and academic performance and improved student grades, has been demonstrated [34].

Structural equation modeling was employed to assess responses for both studies. A satisfactory model fit was found. In Study 1, significant effects were discovered between creative self-efficacy and task accomplishment/self-approach goals, which was investigated as a singular construct. Puente-Diaz and Cavazos-Arroyo (2016) discussed the significance of creative self-efficacy in task accomplishment goals without identifying a significant relationship between the constructs.

A limited number of studies have explored creative self-efficacy in students with disabilities. Since creative self-efficacy is considered a predictor of success in life, it becomes an important construct for these students to prepare them for college and career [34].

Measuring CSE and CPI

Given the crucial role of Creative Self-Efficacy (CSE) in various domains, reliable psychometric tools for measuring this construct are essential. Previous studies have relied on short scales to measure both CSE and Creative Personal Identity (CPI). For example, Beghetto (2006) used three items: “I am good at coming up with new ideas”; “I have lots of good ideas”; “I have a good imagination” (see also Karwowski, 2011). Subsequently, the Short Creative Self Scale (SSCS) was developed in response to the need for a more elaborate measurement of CSE [8; 23]. The statements in the questionnaire were created based on the definitions of creative self-efficacy and creative self-concept (see Beghetto & Karwowski, 2017). Out of the initially developed 20 items, 11 were retained. Initially, it was assumed that six of them measured creative self-efficacy (CSE), four measured creative personal identity (CPI – the belief that creativity is an important element of self-characterization), and one was included with the intention of measuring perceived creativity.

Analyses have demonstrated that SSCS consists of 11 items, with responses on a five-point Likert scale, six of which measure Creative Self-Efficacy (CSE), and five items measure Creative Personal Identity (CPI). CSE is often studied together with CPI, but both subscales, CSE and CPI, can be used as standalone self-report scales [18, p. 48]. Specifically, CSE is described by the following six statements: Item (3) “I know I can efficiently solve even complicated problems”, Item (4) “I have confidence in my creative abilities”, Item (5) “Compared to my friends, I stand out with my imagination and ingenuity”, Item (6) “I have often demonstrated that I can handle difficult situations”, Item (8) “I am sure I can handle problems that require creative thinking”, and Item (9) “I am good at proposing original solutions to problems” [18, p. 48].

In Romania, there is an article where the test was validated on adult Romanian people, [4], but we consider that it is mandatory its adaptation on teenagers as creativity represents an important dimension of personality and during adolescence we can intervene on its development as well as on the self-creative.

Method

Study Objective

The present study sought to translate the Short Scale of Creative Self (SSCS) developed by M. Karwowski (2011) into Romanian and assess its psychometric properties through exploratory and confirmatory factor analysis, as well as internal consistency.

Participants

The study involved 123 high school students from grades IX-XII, aged 15-18 years ($M=16.57$; $SD=1.08$). Among them, 48 (39.03%) were boys, and 75 (60.97%) were girls, belonging to two different high school from urban area, studying in different specializations (mathematics-informatics, natural sciences, philology, social sciences). The psychometric data analyzed were based on responses obtained from 100 subjects.

The research call was made through classroom announcements by homeroom teachers. Participation in the study was voluntary, with no rewards offered, based on informed consent signed by parents. The study was conducted with the approval of the school administration. Twenty-three questionnaires were excluded from the analysis because they recorded responses on the same step of the *Likert* scale.

Instruments

The Short Scale of Creative Self (SSCS) [29] is an instrument consisting of 11 items. The items are distributed into two subscales, namely Creative Self-Efficacy (CSE) and Creative Personal Identity (CPI). Responses to items are recorded on a 5-point *Likert* scale, where 1 - strongly disagree and 5 - strongly agree.

The original version showed good psychometric properties, with internal consistency values ranging from .84 for CSE and .83 for CPI.

Procedure

The questionnaire was generated and administered online through the Google Forms. Each questionnaire was accompanied by a demographic scale.

Participants were asked to complete responses to the statements of the Short Scale of Creative Self

(SSCS), a questionnaire comprising 11 items. The questionnaire items were successfully translated into Romanian and back-translated into English by a university professor.

Results and Discussions

Descriptive statistics were calculated to assess whether the participants' responses follow a Gaussian distribution. Considering that the evaluation scale of the questionnaire is on a five-point scale, with an average as close to the theoretical average of the assertion scale being 3.00, this demonstrates that, overall, in the assessment of an assertion, responses are equally distributed in the acceptance and rejection directions. At the same time, we analyzed the assertions based on Skewness and Kurtosis values (symmetry and kurtosis), aiming for them to have a value as close to 0 as possible, to respect a symmetric distribution and typical kurtosis for the profile of a normal curve (Gaussian curve). The arithmetic mean obtained for the items was 3.24 (ranging from 3.22 to 4.04), with a standard deviation mean of .59 (ranging from .93 to 1.24). The skewness index obtained was -.30 (ranging from -.07 to -1.03), and the kurtosis index was -.68 (ranging from .22 to -1.09), indicating a distribution with slight negative skewness. Considering the nature of the items and that the sample was drawn from the general (nonclinical) population, as expected, a tendency toward high scores could be expected. The distribution indices of the scores obtained on the 11 scale items adhere to the characteristics of a normal distribution, as seen in Table 1.

Table 1. Results of Exploratory Factor Analyses-SSCS.

	Items	CSE	CPI	M	S.D.	Skewness	Kurtosis
i_1	I think I am a creative person		,729	3,65	,936	-,071	-,887
i_2	My creativity is important for who I am		,844	3,33	1,240	-,071	-1,094
i_3	I know I can efficiently solve even complicated problems	,625		3,43	,987	-,380	-,321
i_4	I trust my creative abilities		,665	3,61	1,188	-,488	-,719
i_5	My imagination and ingenuity distinguish me from my friends		,595	3,28	1,190	-,085	-,967
i_6	Many times, I have proved that I can cope with difficult situations	,674		4,04	1,072	-1,034	,224
i_7	Being a creative person is important to me		,828	3,66	1,208	-,332	-1,090
i_8	I am sure I can deal with problems requiring creative thinking	,714		3,48	1,030	-,398	-,242
i_9	I am good at proposing original solutions to problems	,618		3,34	1,121	-,094	-,527
i_10	Creativity is an important part of myself		,813	3,22	1,151	-,079	-,746
i_11	Ingenuity is a characteristic which is important to me		,530	3,64	1,078	-,322	-,768

An exploratory factor analysis was conducted to examine the theoretical validity of the instrument. The adequacy of the sample and the usefulness of factor analysis for data reduction were examined through the Kaiser-Meyer-Olkin (KMO) and Bartlett tests. The KMO test result for sample adequacy was .87, indicating that the data are suitable for factor analysis. Also, the significance of the Bartlett test was .000, suggesting the usefulness of factor analysis [$\chi^2(55) = 500.072, p = 0.000$]. The obtained values indicate the presence of one or more common factors, justifying the application of a factor reduction procedure. The solution based on the Kaiser criterion (eigenvalue > 1) suggested a structure with two factors, accounting for 60.73% of the total variance. The first extracted eigenvalue was 5.16, and the next was 1.51, which can be interpreted as an index of a higher-order factor, with the explanatory power of the first factor being significantly superior to the subsequent factors. The parallel analysis method was used to verify the appropriate selection of the number of factors. Both the Scree plot (Figure 1) and Horn's parallel analysis (Figure 2) suggested retaining two factors.

As the model indicated by the authors is a hierarchical model and the communality ranged between .754 and .443, the analysis continued with studying the original model proposed by the authors.

Figure 1. Scree plot for SSCS.

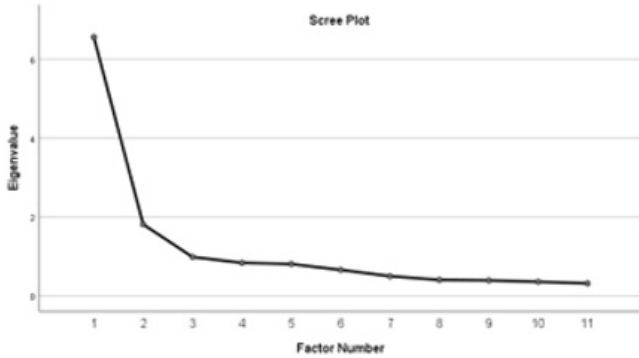
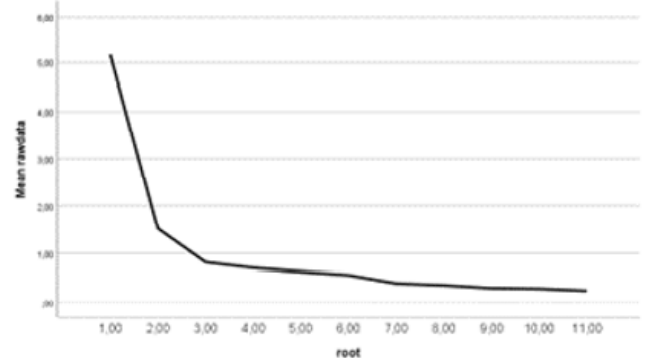
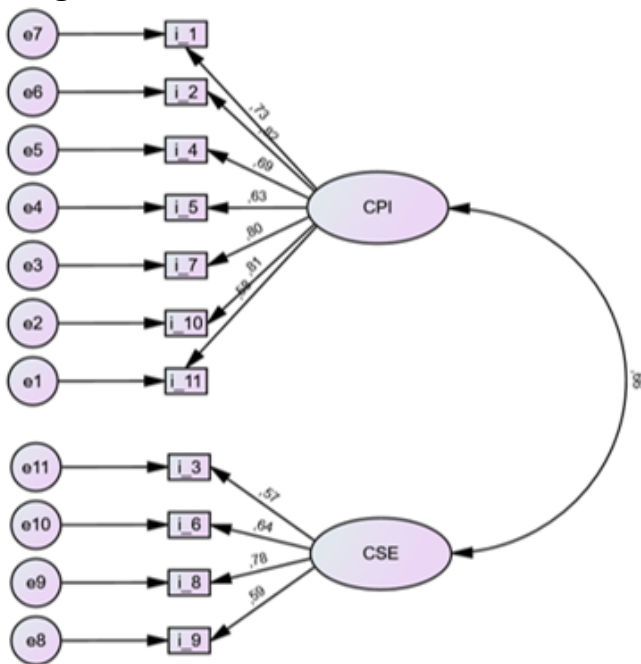


Figure 2. SSCS parallel analysis.



The factorial structure obtained through confirmatory factor analysis (CFA) is presented in Figure 3.

Figure 3. CFA Structure.



The obtained factorial structure loaded all items, distributed on the two subscales, namely CSE and CPI, similar to the original model. Notably, there is a higher loading of items on the CPI subscale compared to the model proposed by Karwowski (2011). Similar to the original model, item 1 (I believe I am a creative person), intended to measure self-perceived creativity, loads on the CPI subscale, as well as items 4 and 5, which, according to the original model, belong to the CSE subscale. This may be due to cultural differences, which need to be investigated in further analyses. Despite these differences with the original conceptualization, the data analysis demonstrates that the two-factor model fits well ($\chi^2/df = 1.98$; CFI = 0.91; NFI = 0.83; RMSEA = 0.08). The scales were characterized by significant internal consistency. Descriptive statistics of the scales, intercorrelations, and reliability indices (Cronbach's α) are presented in Table 2.

Table 2. Descriptive Statistics, Intercorrelations, and Scales Consistencies.

Factor	M	S.D.	Cronbach's Alpha	CSE	CPI
CSE	3,57	-.093	.747	.747	.505***
CPI	3,40	.98	.882		.882

Note: $N = 100$, *** $p < .001$, Cronbach's α on the diagonal.

Indices of internal consistency obtained reveal the fact that a standardized and relevant creativity assessment questionnaire was obtained.

Regarding the discriminant validity, the two subscales of the SSCS showed a positive intercorrelation ($r = .505$, $p = .000$). This result is expected, because each factor describes a specific dimension of the construct, as well as an interrelationship between the factors.

Conclusions

In the educational field, the importance of education is universally recognized. In this regard, there is a need for valid and reliable tools to measure various creative self-beliefs. In the present study, the adaptation and validation of the Creative Self Scale on the sample of Romanian students revealed the development of an instrument with important psychometric qualities. Confirmatory factor analysis supported the original structure of the SSCS scale with two subfactors, according to the original model. Regarding reliability, the results showed significant internal consistency indices for both subfactors. The empirical approach undertaken revealed a valid, reliable, and valuable instrument for assessing self-beliefs about creative self, creative self-efficacy, and creative personal identity in students but we consider that it is mandatory its adaptation on teenagers as creativity represents an important dimension of personality and during adolescence we can intervene on its development as well as on the self-creative. The instrument can successfully complement the battery of creativity assessment tests, a process of interest for parents, educators, educational psychologists, researchers, and policymakers involved in designing programs and interventions to nurture and enhance creative potential.

We consider that the trust in the creative potential of the Romanian school represents a priority, as the teenager must be educated in creation, the identification of which through a test representing the moment when one can intervene with supportive programs and creative actions. For a better utility of SSCS variant for teenagers, we have enclosed the Romanian questionnaire variant, (Annex 1).

Annex 1 SSCS

Mai jos veți găsi mai multe propoziții folosite de oameni pentru a se descrie. Vă rugăm să decideți în ce măsură vă descriu fiecare dintre aceste afirmații. Nu există răspunsuri bune sau greșite.

1 - total dezacord; 2 - oarecum dezacord; 3 - nici da, nici nu; 4 - oarecum acord; 5 - total acord.

1. – Consider ca sunt o persoană creativă.
2. – Creativitatea mea este importantă pentru cine sunt eu.
3. – Știu ca pot rezolva eficient chiar și probleme complicate.
4. – Am încredere în abilitățile mele creative.
5. – Imaginația și inventivitatea mea mă diferențiază de prietenii mei.
6. – De multe ori am demonstrat că pot face față unor situații dificile.
7. – Este important pentru mine să fiu o persoană creativă.
8. – Sunt sigur că pot face față problemelor care necesită gândire creativă.
9. – Găsesc soluții originale la problemele cu care mă confrunt.
10. – Creativitatea este o dimensiune importantă a personalității mele.
11. – Inventivitatea este o caracteristică importantă pentru mine.

Creative Self-Efficacy: se însumează punctajul la afirmațiile 3, 4, 5, 6, 8, 9 și se împarte la 6; Creative Personal Identity: se însumează punctajul la afirmațiile 1, 2, 7, 10, 11 și se împarte la 5.

Autoeficacitatea creativă

>3 – scor redus

Intre 3,1- 4,4 – scor mediu

≤4,5 – scor înalt

Identitate creativă

>3 - scor redus

Intre 3.1- 4,4 – scor mediu

≤4.5 – scor înalt

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CHARACTERISTICS OF A MOTIVATED STUDENT FOR ACADEMIC SUCCESS

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The article presents the results of the theoretical-applicative research of specific behaviors of students determined to achieve high school performance in most academic disciplines, as well as outstanding results in activities oriented towards personal development. These behaviors are generalized in a profile of the student motivated for school success that includes components such as self-discipline, interest and clarity in goal-setting, adaptability in resource management, perseverance in schoolwork, assertive communication, emotional resilience, confidence and self-esteem, objective self-assessment, personal development and professional orientation, autonomy and self-education. Self-discipline is essential to the effective organization of time, and perseverance supports students in achieving long-term goals. Assertive communication and emotional resilience are important for managing emotions and fostering positive relations. Self-confidence and self-assessment support the process of self-education, while autonomy in learning allows students to take control of their educational process. Self-education complements personal and professional development through reflective involvement in setting and achieving goals.

Keywords: *student motivated for academic success, self-discipline, adaptability, perseverance, assertive communication, emotional resilience, self-esteem, objective self-assessment, personal development, career orient.*

CARACTERISTICI ALE ELEVULUI MOTIVAT PENTRU SUCCESUL ȘCOLAR

Articolul prezintă rezultatele cercetării teoretico-aplicative a comportamentelor specifice elevului determinat să obțină performanțe școlare înalte la majoritatea disciplinelor școlare, dar și rezultate deosebite în activitățile orientate spre dezvoltarea personală. Aceste comportamente sunt generalizate într-un Profil al elevului motivat pentru succesul școlar ce include elemente componente precum autodisciplina, interes și claritate în stabilirea obiectivelor, adaptabilitate în gestionarea resurselor, perseverență în activitatea școlară, comunicare asertivă, reziliență emoțională, încredere și stimă de sine, autoevaluare obiectivă, dezvoltare personală și orientare profesională, autonomie și autoeducație. Autodisciplina este esențială pentru organizarea eficientă a timpului, iar perseverența susține elevii în atingerea obiectivelor pe termen lung. Comunicarea asertivă și reziliența emoțională sunt importante pentru gestionarea emoțiilor și relaționarea pozitivă. Încrederea în sine și autoevaluarea sprijină procesul de autoeducație, iar autonomia în învățare facilitează controlul asupra propriului proces educațional. Autoeducația completează dezvoltarea personală și profesională prin implicarea reflexivă în stabilirea și atingerea obiectivelor.

Cuvinte-cheie: *elev motivat pentru succes școlar, autodisciplină, adaptabilitate, perseverență, comunicare asertivă, reziliență emoțională, stimă de sine, autoevaluare obiectivă, dezvoltare personală, orientare profesională.*

Introduction

In the era of rapid change, when the emphasis in education has shifted to increasing the quality of the process, important for teachers, as well as for parents and students, is a clear delimitation of the specific behaviors of a student motivated for academic success, which will guide them in identifying the optimal attitudes and actions to facilitate learning and development. Thus, teachers will be able to adapt teaching methods and provide personalized support, further facilitating a more efficient and attractive learning environment for students.

Success-motivated students are often more autonomous and involved in school activities, serving as an example for their peers and urging them to develop a sense of responsibility, thus promoting a culture of active engagement. Moreover, students motivated for school success can contribute to a positive and productive socio-emotional climate, being sources of inspiration and effective interlocutors for interpersonal communication and long-term personal development.

The results of the teacher survey

Results of teacher questionnaires following theoretical-experimental research, the success-motivated student's profile highlights a number of traits and behaviors that significantly contribute to achieving academic performance. The experimental study involved 79 teachers, who constituted the group of participants. They were invited to answer the question „What are the qualities and character traits specific to the student motivated for success?” The results in Table 1 show the prevalence of values stipulated in the curriculum, demonstrating the knowledge of curricular objectives and contents by teachers.

Table 1. Personal characteristics of the student motivated for success.

Features	Nr.	%
Self-discipline (emotional self-regulation)	61	77,22
Receptiveness	43	54,43
Creativity	39	49,37
Interest and clarity in setting goals	58	73,42
Self-awareness	38	48,10
Adaptability in managing resources (personal and time resources)	56	70,89
Critical thinking	39	49,37
Responsibility	45	56,96
Perseverance in schoolwork	57	72,15
Assertive communication	53	67,09
Patience	22	27,85
Emotional resilience	50	63,29
Behavioral flexibility	39	49,37
Innovativeness	43	54,43
Initiative	42	53,16
Positive relationship building	35	44,30
Self-confidence and self-esteem	62	78,48
Curiosity	38	48,10
Objective self-assessment	49	62,03
Empathy	41	51,90
Reflectiveness	38	48,10
Personal development and career orientation	53	67,09
Autonomy and self-education	51	64,56
Integrity	42	53,16
Courage to experiment	36	45,57
Respect for diversity	38	48,10

Experimental data reflect the perspective of middle school teachers on character traits that contribute to student success in the school environment. The teachers particularly appreciated self-discipline (77.22%), which they consider a result of a positive attitude towards intellectual development.

Students with a growth mindset, openness to learning and interest in new challenges manage to set clear goals and show perseverance in achieving them. Their self-discipline can be observed through an effective time management, a well-structured study program, and the ability to focus on tasks, avoiding distractions in the school environment. Around 73.42% of teachers surveyed considered that students who show interest and clarity in setting goals are better prepared for academic success, which highlights the importance

of intellectual curiosity. This trait is manifested by the desire of students to ask questions and look for appropriate answers.

Adaptability in managing personal resources and time was appreciated by 70.89% of teachers.

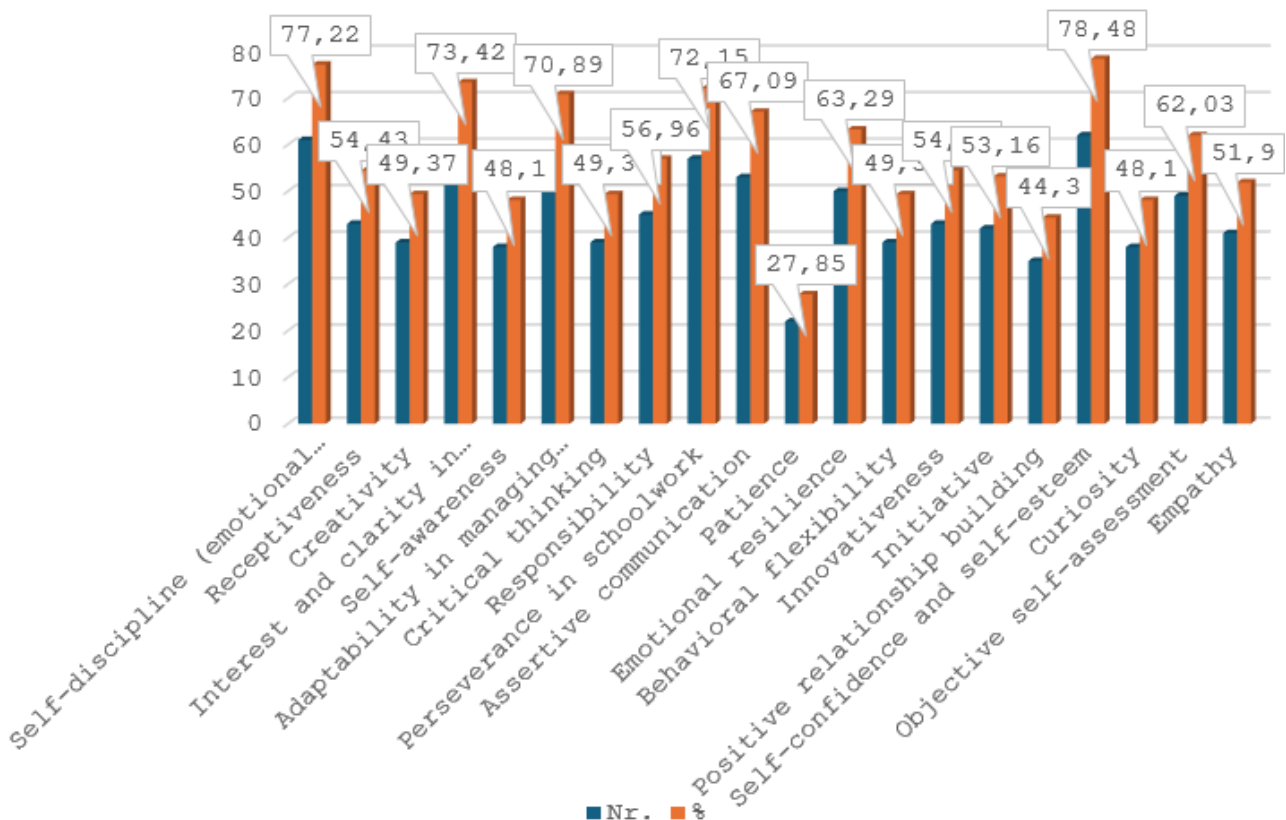
Perseverance in school work, another essential value, was considered important by 72.15% of teachers, being recognized as a key element in achieving school success. Persistent students demonstrate compliance with established deadlines for learning activities and show openness to communication and collaboration.

Assertive communication, considered important by 72.15% of teachers, requires students to collaborate effectively in teams and accept feedback, using constructive criticism for improvement. At the same time, emotional resilience, valued by 63.29% of teachers, is another key indicator of motivation for success. This includes the ability to manage their emotions, stay motivated in the face of obstacles, and continuously seek opportunities for personal development through additional resources such as books or online courses.

Experimental results also emphasize the importance of confidence and self-esteem, aspects appreciated by 78.48% of respondents. Students with a high level of confidence and self-esteem benefit from a support network made up of family, teachers and peers who encourage them, and, thus contributing to their active participation in extracurricular activities and development outside the school framework.

Personal development and professional orientation (67.09%) are interconnected processes that contribute to the formation of a fulfilling career and individual growth. Essential aspects for each of these areas: self-reflection involves assessing your strengths and weaknesses, establishing the values and principles that guide you in life; setting goals (defining short and long term goals), using SMART techniques (specific, measurable, accessible, relevant, time-limited) to formulate your goals. Trust and self-esteem is valued at 78.80 %. Professional orientation involves identifying interests, values, and skills through professional orientation or self-reflection tests.

Figure 1. The value priorities of the student motivated for school success.

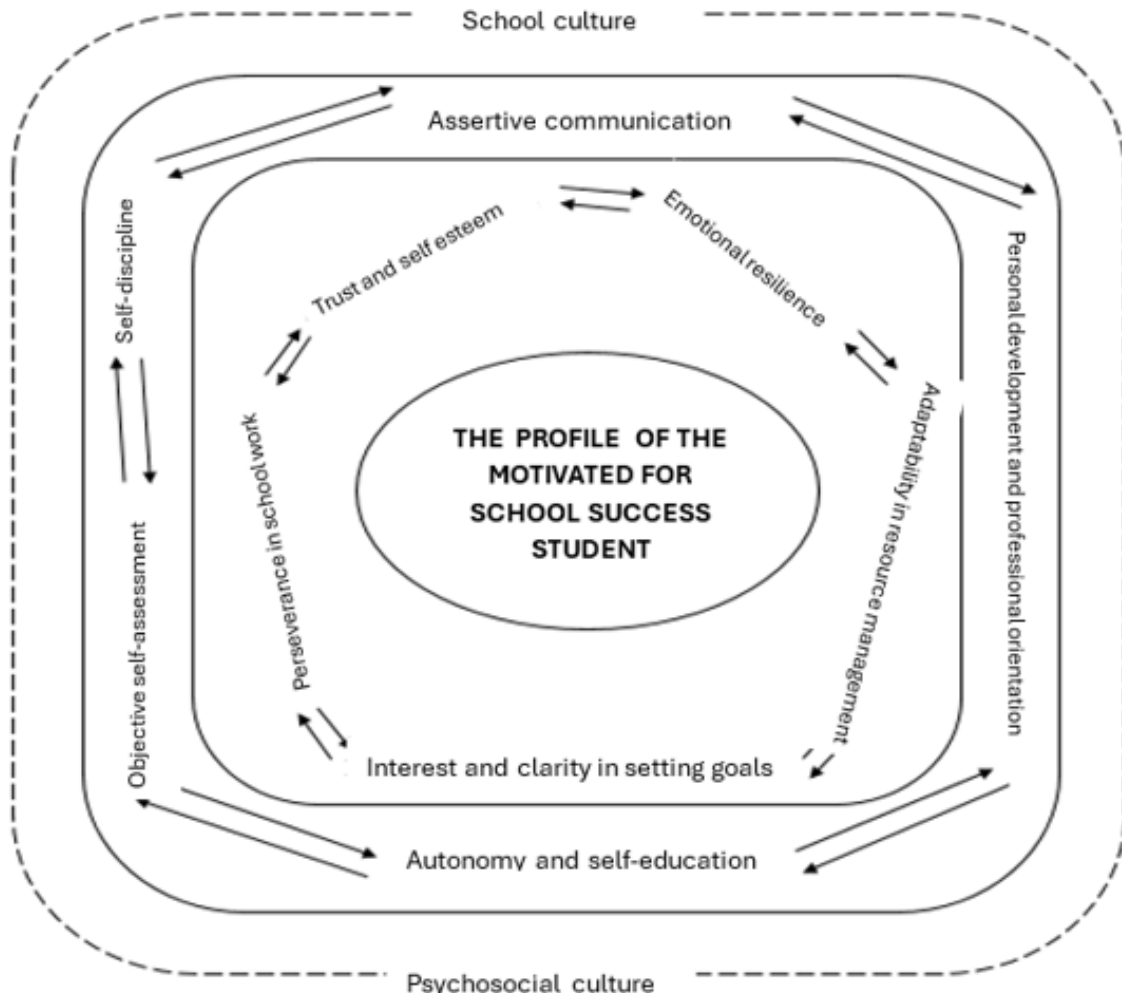


Personal development and professional orientation are processes that complement each other.

Student profile motivated for school success

Good self-knowledge and personal development can help clarify professional goals, and career experiences can provide valuable lessons for personal development. Investing in both areas, students will be able to navigate more easily by providing adequate answers to life's challenges (Figure 2).

Figure 2. Student profile motivated for school success.



In the following, we have detailed the values that define the profile of the student motivated for school success, as illustrated in Fig. 2.

Self-discipline is the ability to complete a task despite changing interests or distractions. This quality is not innate, but is formed by intentional education from parents in childhood or by a systematic process of self-development in later years.

Self-discipline acquired at a more advanced age follows the same principles, but develops without external guidance, which makes it the biggest obstacle for the learner to impose his own rules.

Emotional self-regulation is conceived as the involvement of control and correction of one's own actions on the way to the goal [8, p. 125-135]. Emotional self-regulation influences how we relate to others, conforming to the norms of group coexistence and the way we are perceived and judged by those with whom we interact and can be classified as a defense system, as psychological emotion affects attention, and so on, the ability and speed of reaction of the individual, but also the general behavior. Emotion is in permanent interdependence with the mood, temperament, personality, mood and motivation of the person [12, p. 143-148].

Interest and clarity in setting goals are essential for the student motivated for success, as clear goals are the foundation of perseverance in learning. Studies have shown that students who understand the rationale for studying have more effective learning. Goals provide both direction and motivation and are a bench-

mark of progress. Setting goals helps students prioritize tasks and develop a plan for achieving them, focusing on specific directions.

The goal setting theory, by Edwin Locke and Gary Latham, is based on specific and difficult goals, the relationship between the goal and how it affects, and, mediators intervening in the achievement of objectives, on the relationship between objectives and self-efficacy [11].

According to the Theory of Goal setting, they influence school success by acting on the quality of cognitive self-regulation processes. In learning there are two categories of goals that influence the motivation and success of school learning: learning goals and performance goals.

The benefits of learning objectives are limited to:

(a) promoting the growth mindset and long-term skill development Learning goals encourage the belief that intelligence and skills can be developed through hard work and dedication, which is known as growth mindset [4]. This mindset fosters the development of long-term skills and the continuous pursuit of improvement, ultimately leading to better results over time.

(b) improving adaptability and problem-solving skills Learning goals improve a person's ability to adapt to different situations and develop problem-solving skills by focusing on acquiring new skills and knowledge [19, p. 302-314]. Adaptability enables unforeseen challenges to be addressed and new opportunities to be effectively exploited.

(c) reduce performance anxiety and fear of failure by focusing on improvement and growth rather than fixed results, learning goals help mitigate performance anxiety and fear of failure that are daunting and common to success [7, p. 501-519]. This reduction in anxiety and fear can lead to increased confidence, risk-taking and ultimately better performance.

The benefits of performance targets are:

(1) *Provide clear, measurable results that can stimulate motivation.* Performance targets set well-defined objectives that we can strive for, which can increase motivation and commitment to the task [2]. These clear goals provide a sense of direction and a benchmark for success, helping us stay focused on our goals.

(2) *Encourage concentration and determination for short-term achievements.* Performance goals help us focus on specific, short-term achievements, leading to a sense of accomplishment and progress [10, p. 705-717]. This focus on short-term achievements can provide immediate feedback on performance and help maintain motivation levels.

(3) *Facilitate self-assessment and follow-up of progress.* Setting performance targets allows us to assess our progress, identify areas for improvement and adjust our efforts accordingly [20].

Adaptability in resource management (personal and temporal) lies in the ability to adapt to change and find innovative solutions in new situations. In the educational context, adaptability in resource management involves:

- Adapting to the personalized learning style – identifying the most suitable study methods for each (visual, auditory, kinesthetic).

- Managing emotions – developing strategies to deal with stress, anxiety or boredom, such as relaxation techniques or changing activity.

- Adapting to difficulties – facing obstacles as part of learning and developing a positive attitude towards failure by identifying creative solutions.

Regarding time management, adaptability is manifested by:

- Flexibility of the program – effective planning and adjustment according to tasks and priorities.

- Time management techniques – using daily planning to improve concentration and optimize time.

- Adapting to individual rhythm – personalizing learning to allow for deeper and effective assimilation.

Perseverance in school work is a feature of will, marked by constant and renewed efforts to achieve a goal. Unlike self-control, which is related to short-term goals, perseverance is defined by passion and insistence for long-term achievements [5]. Perseverance involves continuous effort, long-term focus, and facing obstacles even in the absence of immediate reward. Thus, although self-control and perseverance are correlated, they differ in their long-term effects on academic achievement [6].

Studies, such as the one conducted by Ryan and Beamish (2018), show a strong correlation between self-

control and perseverance, demonstrating that helping students maintain short-term attention contributes to developing the resilience and skills necessary for success in more complex long-term tasks [15, p. 43-45].

An important contribution in defining the values of the student's profile motivated for success is the approach of M. Martinez, which identifies four categories of students according to motivation, perseverance and autonomy in learning: transformation-oriented students, performance-oriented pupils, conformist pupils and reluctant pupils [11, p. 1-8].

Table 2. Determining factors of school perseverance.

Factors based on family	Personal factors	Factors based on school	Environmental or social factors
Value given to the education and supervision of parents	Self-control and social and behavioral behavior Association with people Nutrition and physical activity Tobacco, alcohol or drug use Work/s chool balance Depression Self-esteem Notes on reading, writing and math Motivation and involvement Educational and professional aspirations	Student-teacher relationship Pedagogical and educational practices Practices of management Support for disabled students School climate	Residence and surroundings district Community resources

Assertive communication allows for the open expression of feelings and needs while respecting the opinions of others. The student with assertive communication skills interacts effectively, expressing confidence and solving problems in a constructive way.[3, 100-109].

Emotional resilience refers to the ability to cope with stressful situations, supported by optimism, self-efficacy, and hope. These psychological pillars significantly influence student performance and motivation [19, p. 33-39].

Table 3. Structure of the Emotional resilience [19, p. 33-39].

Physical elements	Mental or psychological elements	Social elements
physical strength, energy, good health and vitality	adaptability, attention and concentration, self-esteem, self-confidence, emotional awareness and regulation, self-expression, lack of prejudice, reasoning skills	interpersonal relationships (work, partner, children, parents, friends, community, etc.), group compliance, sympathy, communication, and cooperation

Self-confidence is the foundation of active involvement in the process of learning and personal development, being essential for the positive perception of oneself. Students with self-confidence assume learning experiences with safety and determination. From this point of view U. Schiopu believes that self-confidence can be achieved directly and quickly in simple situations or in connection with the many attempts for which they were previously made [17, p 663].

Objective self-assessment is the ability to reflect on your own performance by relating to educational goals. It supports metacognitive development, allowing the student to identify gaps, set a learning pace and optimize their own study strategies. Self-assessment represents the ability of the student to develop and issue valuing assessments regarding their own competences and school performance, in their own person in general [16, p. 15].

Openness to personal development contributes to individual growth through self-reflection practices, lifelong learning, goal setting, feedback acceptance, mindfulness practices, and acceptance of failure as a learning opportunity.

The cyclical model of the self-assessment process emphasizes data collection, analysis and continuous improvement.

Figure 3. The self-assessment process [1, p. 605–618].



Student autonomy is a pedagogical concept developed at the initiative of the Council of Europe, from the '80s, to increase the quality of learning, especially in language teaching. This is a fundamental human need, which assumes the ability of the student to make decisions and act independently in the learning process. Autonomy is manifested by the ability to organize time, set goals and choose appropriate methods to achieve them, while maintaining, support of teachers and parents. *Student autonomy* requires reflective involvement in planning, implementing, monitoring and evaluating learning. The development of autonomy in learning is governed by three basic pedagogical conditions:

- Student engagement – student engagement to share responsibility for learning (affective and metacognitive dimension).

- Student reflection – by helping the student

think critically when planning, monitoring and evaluating their learning (metacognitive dimensions).

- Appropriate use of vocabulary – use of language as the primary means of learning (communicative and metacognitive dimension) [9].

Student autonomy involves a reflective engagement in planning, implementing, monitoring, and evaluating learning. According to social psychology research, autonomy represents the feeling of freedom and initiative in their own actions, and this proactive attitude, specific to the autonomous student, supports intrinsic motivation and interest in the environment. Autonomous students take responsibility for learning by developing self-management skills and critical reflection, and success enhances their intrinsic motivation and efficiency in learning.

Self-education, seen as a social phenomenon, is a continuous process of self-formation and self-development, having a central role in transforming the student from the object of education into an active subject of his own training. In the educational context, self-education aims at designing, self-realization and personal development throughout life, through a series of activities and strategies adapted to each age. This involves several essential steps: self-information, self-training, self-assessment [13, p. 235 - 248].

Self-assessment requires reflectivity on their own performance, and the student learns to adjust their efforts and strategies to improve their results. Thus, autonomy and self-education are essential pillars for the student motivated for success, by strengthening responsibility, the capacity for reflection and the desire for self-development.

Conclusions

The student motivated for school success is characterized by a set of essential traits – self-discipline, perseverance, adaptability, self-confidence and autonomy in learning – which, overall, is characterized by, contribute to the development of a balanced and responsible personality. These traits allow students to ef-

fectively manage their resources, overcome obstacles, and be actively involved in their own educational process. Through self-education and an open-minded attitude towards development, students outline their ability to set and achieve long-term goals, demonstrating resilience and motivation that support lifelong learning. In this way, the values learned not only increase school performance, but are reflected in the ability of students to apply knowledge and skills to situations outside the educational environment, preparing them for life challenges.

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DIGITAL INTERACTION: THE KEY TO FORMING AND DEVELOPING DIGITAL SKILLS IN HIGH SCHOOL MATHEMATICS

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This article explores the essential role of digital interaction in shaping and developing digital skills in high school mathematics education. By integrating technology into the educational process, students are exposed to a variety of digital tools and resources that help them understand complex mathematical concepts and develop practical skills. From using interactive applications and online learning platforms to simulations and educational games, digital interaction provides students with significant opportunities to experience, practice, and apply mathematical knowledge in a stimulating virtual environment. Through these digital experiences, students acquire not only essential mathematical skills but also valuable digital skills that are indispensable in the modern world.

Keywords: *digital interaction, digital skills, mathematics, high school education.*

INTERACȚIUNEA DIGITALĂ: CHEIA FORMĂRII COMPETENȚELOR DIGITALE LA MATEMATICĂ ÎN LICEU

Acest articol explorează rolul esențial al interacțiunii digitale în formarea și dezvoltarea competențelor digitale la disciplina matematică în cadrul învățământului liceal. Prin integrarea tehnologiei în procesul educațional, elevii sunt expuși la o varietate de instrumente și resurse digitale care îi ajută să înțeleagă concepte matematice complexe și să-și dezvolte abilitățile practice. De la utilizarea aplicațiilor interactive și a platformelor de învățare online până la simulările și jocurile educative, interacțiunea digitală oferă elevilor oportunități semnificative de a experimenta, de a practica și de a aplica cunoștințele matematice într-un mediu virtual stimulat. Prin intermediul acestor experiențe digitale, elevii dobândesc nu doar competențe matematice esențiale, ci și abilități digitale valoroase care sunt indispensabile în lumea modernă.

Cuvinte-cheie: *interacțiune digitală, competențe digitale, matematică, liceu, formare.*

Introduction

With the advancement of technology and the popularization of the Internet, education has entered a new digital era, fundamentally changing how students learn and teachers teach. Technology has brought with it a multitude of digital tools and resources that have revolutionized the learning process. In this context, digital skills are becoming increasingly important for career success and active participation in society. It is evident that we are in a period where technological progress has surpassed developments in the field of pedagogy, having a significant influence. It is necessary to pay attention to and address digital literacy issues, creating conditions for students to develop the skills needed to navigate the increased volume of information and critically evaluate available sources [11].

In education, integrating digital skills into the learning process becomes essential to prepare students for life in an increasingly digital world [9].

The article aims to highlight the importance of developing digital skills in learning mathematics at the high school level. It will explore how integrating digital skills can improve the mathematics learning process and how teachers can use technology to enhance student engagement and performance in this field. Additionally, the article will analyze teachers' rights and responsibilities in promoting digital skills, offering concrete examples and practical tips for effectively integrating technology into high school mathematics education.

Integrating digital skills into the high school mathematics curriculum not only prepares students to meet the demands of society and higher education requirements but also improves academic results.

Several arguments can be made for integrating digital skills in learning mathematics:

1. *Access to Interactive Resources and Tools:* Technology provides access to a wide range of interactive mathematical resources and tools such as mobile applications, specialized software, and online platforms that can enhance understanding and application of mathematical concepts.

2. *Personalization and Differentiation of Learning:* Technology allows the adaptation of materials and learning methodologies according to individual student needs. Thus, teachers can personalize and differentiate instructions to address diverse abilities and learning styles.

3. *Collaboration and Communication:* The use of technology facilitates student-teacher and student-student collaboration and communication in projects and group activities. This promotes the development of essential social and collaborative skills in the modern world.

4. *Simulations and Experimentation:* Technology offers the possibility to conduct virtual simulations and experiments, allowing students to understand complex mathematical concepts in an interactive environment.

5. *Engagement and Motivation:* Using technology in learning mathematics can influence student motivation through interactive activities and immediate feedback provided by digital applications and tools.

Teachers play a crucial role in developing students' digital skills. It is essential for teachers, regardless of the subject they teach, to develop technological competencies to effectively integrate and use digital tools in the learning process. In this context, the teacher becomes not only a provider of knowledge for students but also a guide and mentor in exploring and understanding the digital world [10].

Educational guidelines provide the framework and necessary guidance for this adaptation, establishing learning objectives and standards, while also offering support and resources for implementing effective educational practices. Teachers' rights include academic freedom and autonomy in choosing teaching methods and materials and complementing them with other types of learning activities, depending on the students' preferences and mathematical preparation, while their responsibilities include ensuring that the learning process is relevant, equitable, and effective for all students [1, p. 18].

The math teacher will take into account that competence is demonstrated through action and materializes in products. Through the proposed learning activities and products, the curriculum guides the teacher toward developing specific mathematical competencies in students [1, p. 17].

This recommendation from the High School Math Guide clarifies how to develop and enhance digital skills: Digital competencies will be actively demonstrated through digital interactive actions and will materialize in relevant digital products. This involves not only acquiring technological knowledge but also applying it in practical contexts, focusing on solving mathematical problems and creating digital products that demonstrate the understanding and application of mathematical concepts. Thus, integrating digital skills into the mathematics curriculum encourages the use of technology and promotes the development of specific mathematical skills in an interactive and innovative way.

Researcher F. Santoianni believes that learning largely occurs when a person is involved in various experiences and interactions within their social and cultural environment, and co-creation and innovation activities in the learning process emphasize knowledge creation [11].

Teachers are encouraged to support meaningful learning and provide students with mobile devices as learning tools that can offer learning experiences by combining real-world elements with virtual ones, while also encouraging them to be autonomous and to expand their knowledge in a relevant and meaningful way throughout their lives [3]. The use of mobile devices, such as smartphones or tablets, will provide interactive and immersive learning experiences by accessing applications or provided content [7], [3].

In his research, author D. Agostini highlights that mobile mixed reality technologies represent innovative opportunities in education, allowing the transmission of complex concepts in an interactive and engaging manner [2]. However, their implementation in the educational environment requires adjustments and adaptations.

Additionally, the importance of protecting privacy [13] and data security [6], as well as the ethical use [14] of technology, becomes essential, requiring the assurance of students' well-being and rights. In integrating digital technologies into teaching and learning mathematics at the high school level, issues of

digital equity must be navigated carefully, ensuring that all students have equitable access to devices and connectivity [13].

According to Rodríguez and his colleagues (2017), mobile devices serve as channels to extend access to information and facilitate interaction, thus contributing to creating a favorable environment for learning and collaboration [8].

In the view of Indian researchers A. Mohanty and A. Alam, a student's responsibilities can be divided into four distinct categories through mobile learning: (1) cultivating the ability to express, (2) accessing diverse resources, (3) actively participating in the learning process, (4) collaboration and interaction [4].

It is important to recognize the increasingly important role that technology plays in education and to integrate it appropriately to support students' learning processes.

According to the DEX (Dictionary of the Romanian Language), the word „form” can be interpreted as a way of organizing the elements that make up an object or process. The word „activity” is seen as a set of physical, intellectual, and moral acts performed to achieve a specific result; systematic use of one's forces in a field, active and conscious participation. The meaning of the word „interaction” is interpreted as a form of connection of objects, phenomena, etc., manifested through mutual influence, conditioning, or causal action. „Digital devices” are defined as technical equipment that generates, measures, processes, or stores digital signals.

Digital interaction means using technology to facilitate interaction between students, teachers, and learning content (the so-called didactic triangle). This refers not only to communication via the Internet but also to using digital tools and platforms to create interactive learning experiences.

The form of activity in a lesson refers to how the learning process and interaction between students and teachers are organized and conducted. This can involve different teaching techniques and methods, such as lectures, group discussions, pair work, practical activities, technology use, or educational games. The purpose of these forms of activity is to motivate and engage students in the learning process, facilitate understanding of materials, and stimulate active participation in the lesson.

The question arises: can we consider using digital technologies as a distinct form of activity in learning and education?

Given that digital technologies can be seen as a tool or medium through which students interact with educational content and their peers, and their purpose is to motivate and actively integrate students into activities, an affirmative answer can be given to the above question. Recognizing the potential of digital interaction to transform and enhance how students learn and apply mathematical concepts in the digital age, we propose a definition that, in our opinion, is innovative.

Digital interaction can be defined as the form of activity in which digital elements, such as devices, tools, or systems, are organized in a way that facilitates the connection and exchange of information between users or between users and technology. This interaction involves mutual influence and causal action between digital elements and users to achieve a specific result or satisfy a need. It is an active and conscious process in which individuals systematically use their own forces to communicate, collaborate, or perform various activities in the digital environment. A deeper understanding of this complex phenomenon can be derived from the framework representing the form of digital interaction activity shown in Figure 1, whose basic elements are:

- *Users*: Individuals (single users or groups) interacting in the digital environment.
- *Devices and Technology*: Devices, tools, or systems used to facilitate digital interaction. These can include cobeg graphical user interfaces (GUI), touch interfaces, etc.

Content: Information or data transmitted or accessed during digital interaction. This content can be text, images, videos, multimedia files, documents, etc.

- *Communication and Interaction*: The means and channels through which users communicate and interact with each other or with digital technology. These can include text messaging, video calls, online forums, social networks, collaboration on shared documents, etc.

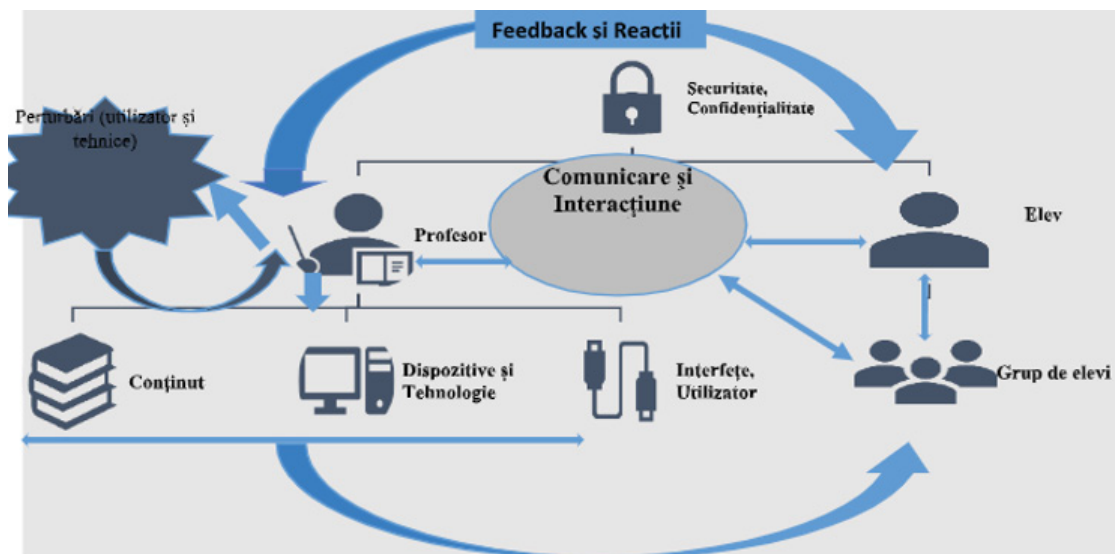
- *Feedback and Reactions*: Users' responses and reactions to their interaction with digital technology. This feedback can be received as likes, comments, etc.

- *Security and Privacy*: Measures and policies to protect user data and privacy during digital interaction.

These elements can be adapted and expanded depending on the specific context or needs of the students.

Of course, there is a risk of situations where the actions or behaviors of some students disrupt the activity or neglect the proposed tasks. To avoid such situations, the teacher can clearly establish and communicate the rules and expectations regarding behavior and participation in the activity (the so-called didactic contract). It is also important for the teacher to provide a safe and inclusive learning environment where all students feel encouraged to participate and respect each other's contributions. Using classroom management strategies and open communication with students can also help prevent and manage interferences or disruptions in educational activities. Choosing relevant and motivating content during math lessons will prevent interferences, misunderstandings, and unwanted student behavior.

Figure 1. The Framework for the Form of Digital Interaction Activity.



The form of activity through digital interactions is a framework or structure that facilitates and promotes the active interaction of students with learning material using digital devices. This may include the use of various educational and digital technologies. Thus, the form of activity through digital interactions refers to the specific way the learning process and interaction are structured and organized in a lesson or educational activity to incorporate interactive activities.

In the context of technological changes and curriculum modernization, teachers may face the risk of confusing the form of activity through digital interactions with interactive activity or computer-assisted instruction methods when adopting innovative methodologies.

Interactive activity refers to an activity where there are reciprocal exchanges or interactions between the learner and the material content, either through technology or through discussions or practical exercises. Essentially, interactive activity involves students' active participation and engagement in the learning process, representing the nature and participatory character of a learning activity, while the form of interactive activity refers to the specific way this interactivity is structured and organized in a lesson or educational activity.

The computer-based instruction method relies on using computers for educational purposes and their peripherals. The computer-based instruction method refers to a specific approach in which computing systems and educational software are used to deliver educational content and guide students' learning process. It is a form of utilizing digital technologies in the learning process.

On the other hand, when we talk about the form of activity through student interactions with digital technologies, we refer more to how students use these technologies in various educational contexts. This may include students using computers, tablets, the Internet, educational software, and other digital devices and applications to access information, work on exercises and projects, and communicate with other students and teachers (see Fig. 2).

Figure 2. Differences Between Computer-Based Instruction Method and Form of Activity Through Digital Interactions.



Computer-Based Instruction Method

It refers to a specific approach in which computers and educational software are used as the primary means of delivering educational content and guiding the learning process. It is a structured and planned method, where the curriculum is designed to be delivered mainly through computers. It involves the use of specialized educational programs, simulations, e-learning platforms, etc.

In general, it is designed and managed by educators or specialists in the field of educational technology.

Form of Activity through Digital Interactions

It refers to the broader way in which students interact with digital technologies in the learning process, without being limited to a specific method. It includes the use of various digital devices and applications for educational purposes, such as accessing information, collaborating with peers, creating projects, communicating, and presenting results.

It is more flexible and can be integrated into various educational activities, including traditional or alternative teaching methods. Digital interaction can take place during face-to-face, individual, pair, or group activities and can be managed by either students or educators.

Thus, although the computer-based instruction method is a specific form of using digital technologies in education, the form of activity through digital interactions is broader and more flexible, covering various ways in which digital technologies can be integrated into the learning process, including within or outside computer-based instruction methods.

When implementing a form of activity through digital interactions in the learning process, it is important to consider several factors and involve all students:

- *Accessibility*: Ensure all students have access to technology and Internet connection to participate in the proposed activities.
- *Appropriate Platforms and Tools*: Choose digital platforms and tools suitable for the learning needs and objectives. These should be interactive, engaging, and offer collaboration and feedback opportunities.
- *Relevant and Quality Educational Content*: Select or create educational content appropriate to students' level, age, and abilities.
- *Training and Support*: Provide appropriate training and support for students in using technology.
- *Evaluation and Monitoring*: Develop appropriate evaluation methods to track students' progress and monitor the effectiveness of the learning form.
- *Data Safety and Privacy*: Ensure the protection of personal data and sensitive information, providing students with knowledge about online safety.
- *Collaboration and Engagement*: Encourage students' active collaboration and involvement in the learning process through technology.
- *Continuous Improvement*: Constantly adjust and improve the learning process based on feedback received.

In the current educational context, digital interaction is becoming increasingly important, offering opportunities for personalization, collaboration, and accessibility that meet the diverse needs of students in the

digital age. Recent research highlights that new innovative approaches to teaching can be integrated into the educational arsenal to improve or complement the traditional teaching method [16]. Innovative pedagogy involves the creative use of teaching methods and appropriate learning materials for the benefit of students [16].

Modern pedagogy promotes initiative and originality in reevaluating and reconstructing every aspect with the aim of improving and modernizing educational methods at all levels. Thus, to enhance the teaching-learning experience of mathematics in high school, an experiment was conducted, and several innovative methods were implemented, focusing on the relevance of content, action, and interaction, with the use of digital technology being an essential element in this process.

The „*Triple Curiosities in Learning and Applying Concepts*” method involves finding and presenting three distinct areas of application for the learned concepts, stimulating students’ interest and the relevance of learning. Using the digital platform Padlet facilitates real-time interaction and collaboration, providing an additional interactive dimension. Using mobile phones, students access the link sent by the teacher and share on the Padlet displayed on the interactive board their curiosities and responses simultaneously.

The „*Interdisciplinary Problem Solving Method*” promotes collaboration and integration of knowledge from various fields, using various digital technologies: *educatieinteractiva.md*, multimedia materials, mobile phones, Padlet, etc., to support interdisciplinary problem solving.

The „*Project-Based Method on Multiple Intelligences in Learning Mathematics*” encourages collaboration and creativity, focusing on enhancing students’ individual strengths. The integration of digital technologies allows the adaptation of projects to the specific needs and interests of each student.

The „*Pictographic Method of Knowledge Generalization*” ensures active student involvement by creating simple and quick drawings to synthesize key concepts learned in the lesson, also using Padlet and mobile phones. The use of the digital tool Mentimeter facilitates the creation and sharing of visual concept maps, thus strengthening the understanding and retention of knowledge.

The „*Digital Exploration and Interactive Engagement Method*” encourages students to research and select relevant content, actively involving them in the learning process through interactive games and activity creation. The use of *educatieinteractiva.md* and other digital resources supports the diversity and attractiveness of interactive activities, contributing to the improvement of understanding and retention of mathematical concepts. Digital interaction can be successfully achieved within any innovative or traditional teaching-learning methods and is aimed at enhancing or complementing them. We will mention that the value brought by digital technologies in the classroom will be enormous, both by extending the limits of space and time in teaching the subject and by presenting content inaccessible to students, which is not described in textbooks. Digital interaction can be integrated at any stage of the mathematics lesson, taking into account the type of lesson, the objectives, and the students’ interests (see Table 1). In this way, students’ motivation will be stimulated, creating a conducive environment for exploring and actively learning mathematical concepts, forming and developing not only mathematics-specific competencies but also digital competencies.

Table 1. Table of Digital Interaction Integration in Lesson Stages.

Lesson Stage	Digital Interaction	Feedback and Evaluation	Digital Resources
Capturing Attention	Interactive Presentation Using Padlet to collect students’ thoughts and ideas in real-time. The interactive board will attract students’ attention to the lesson subject in a more engaging and interactive way.	Feedback is collected through direct interaction with students during interactive presentations. Teachers can evaluate the level of engagement and interest of students and can adjust the presentation accordingly.	Padlet (for collecting thoughts and ideas), interactive board (for presentation), presentation tools (such as PowerPoint or Google Slides, Canvas, multimedia content, etc.).

Provocative Questions	Using Canva or Genially to create attractive visual materials with provocative questions to stimulate critical thinking and reflection. Students can respond to provocative questions through the interactive Padlet or the Educator.io platform.	Teachers can evaluate student responses in real-time through the interactive board and provide additional explanations and guidance during the lesson.	Canva or Genially (for creating visual materials), interactive board (for questions and responses), Padlet (for interactive activities and evaluation).
Online Games	Animations, Simulations, Using online game platforms like Kahoot!, Quizziz, or Educator.io to reinforce knowledge and consolidate understanding in an engaging and fun way. Students can use animations and simulations for a more in-depth exploration of mathematical concepts.	Teachers can evaluate student performance and offer personalized feedback through these game platforms. Feedback can be offered individually or to groups and can include additional guidance.	Kahoot!, Quizziz (for interactive games and quizzes), animations and simulations (for illustrating concepts), Jamboard (for brainstorming and collaboration).
Problem Situations	Using the Educator.io platform or digital tools like Google Forms to present a problem situation and collect students' responses and solutions. Online collaboration tools such as Google Docs or Microsoft Teams can be used to allow students to work in groups and share ideas and solutions.	Feedback can be provided through the Educator.io platform or by collaboratively evaluating the solutions proposed by students. The teacher can give individualized or group feedback and provide additional guidance.	Educator.io, Google Forms (for collecting responses), Google Docs, Microsoft Teams (for group collaboration), and other online resources specific to the lesson topic.
Checking Homework Completing an Independent Assignment	The teacher sends a link to the activity created on educatieinteractiva.md to students on their phones. This interactive activity involves solving tasks similar to the homework. The students' results are recorded on the teacher's computer.	The teacher will provide individual feedback to students regarding their performance, identifying strengths and weaknesses.	Educatieinteractiva.md (digital platform for creating interactive activities), students' phones (for accessing the activity link), teacher's computer.
Discussing Homework Problem Solutions	The teacher organizes real-time discussions using the Jamboard and projector, allowing students to discuss their homework solutions and provide additional explanations.	Feedback is given in real-time by the teacher and peers. Students benefit from clarifications and guidance in solving problems.	Jamboard, projector, teacher's computer.
Collective Analysis of Problem Solutions	The teacher uses the interactive Padlet board to present the students' problem solutions. Students will submit these solutions using their mobile phones.	Feedback is provided in real-time during the discussions and collective analysis of the solutions. Students can actively contribute ideas and solutions during the analysis process.	Interactive Padlet board, projector, teacher's computer, mobile phones.

<p style="text-align: center;">Updating Knowledge and Skills</p>	<p>The teacher sends a link from their computer to the students' phones, allowing them to access the <i>educatieinteractiva.md</i> platform. Students answer questions in the form of quizzes or interactive games on their phones. The results are automatically and centrally recorded on the teacher's computer. The teacher shares an interactive video activity created on <i>educatieinteractiva.md</i> from their computer to the projector board. The video pauses at intervals set by the teacher, and a question appears on the board, which is discussed and answered collectively. Students can interact with the question and respond verbally or through the interactive board.</p>	<p>The teacher can access and analyze the results collected from the <i>educatieinteractiva.md</i> platform to evaluate the students' understanding and progress. Feedback can be provided individually or collectively, and additional instructional needs can be identified to improve students' understanding and skills. The teacher can evaluate students' participation and engagement in the discussion and provide real-time feedback. They can also identify gaps in understanding and offer additional explanations for clarification.</p>	<p><i>educatieinteractiva.md</i> (platform for quizzes and interactive games), students' phones (for accessing the link), teacher's computer (for monitoring and recording results), <i>educatieinteractiva.md</i> (platform for interactive video activities), teacher's computer (for sharing the video activity on the projector board), projector board (for displaying the video activity and questions), verbal interaction and interactive board (for responses and discussions).</p>
<p style="text-align: center;">Teaching and Learning New Material</p>	<p>The teacher uses the <i>educatieinteractiva.md</i> platform to deliver learning materials in the form of interactive presentations, videos, or digital activities. Students can access the content on their mobile devices or computers and interact directly with the presented materials. The teacher encourages student discussions and questions during the presentation.</p>	<p>Feedback can be collected in real-time throughout the presentation via questions and discussions. The teacher can assess students' understanding and provide additional clarifications as needed.</p>	<p><i>educatieinteractiva.md</i> (platform for interactive materials), mobile devices, computers (for accessing content), online collaboration tools (for questions and discussions).</p>
<p style="text-align: center;">Consolidating Knowledge and Skills Reproductive Level</p>	<p>Students access the <i>educatieinteractiva.md</i> platform to solve exercises and problems at a reproductive level, allowing them to apply and consolidate previously acquired knowledge. The teacher can configure the exercises and problems on the platform and monitor students' progress in real-time.</p>	<p>Feedback is automatically provided by the <i>educatieinteractiva.md</i> platform as students work on the exercises and problems. The teacher can analyze the results and progress of each student.</p>	<p><i>educatieinteractiva.md</i> (platform for solving exercises and problems), mobile devices, computers (for accessing the platform), automatic feedback function (for instant evaluation).</p>

Productive Level	Students access the <i>educatieinteractiva.md</i> platform to solve exercises and problems at a productive level, which require applying knowledge in practical contexts and solving complex problems. The teacher can configure the exercises and problems on the platform and monitor students' progress in real-time.	Feedback is automatically provided by the <i>educatieinteractiva.md</i> platform as students work on the exercises and problems. The teacher can analyze the results to offer additional help or clarifications.	<i>educatieinteractiva.md</i> (platform for solving exercises and problems), mobile devices, computers (for accessing the platform), automatic feedback function (for instant evaluation).
Transfer to Other Domains	Students use the <i>educatieinteractiva.md</i> platform to solve exercises and problems that involve applying knowledge in different contexts and situations or in domains other than those previously presented. These exercises encourage critical thinking, problem-solving, and the transfer of knowledge to new situations. The teacher can monitor and evaluate students' progress in real-time.	Feedback is automatically provided by the <i>educatieinteractiva.md</i> platform as students work on the exercises and problems. The teacher can analyze the results and progress of each student and provide individual intervention if necessary.	<i>educatieinteractiva.md</i> (platform for solving exercises and problems), mobile devices, computers (for accessing the platform), automatic feedback function (for instant evaluation).
Creative Level	Using Padlet to organize a problem-creation contest, where students can post problems they have designed themselves. On their mobile phones, students are encouraged to use photo or video editing apps to create visual presentations or document their creative thinking process. Students present interactive activities they have created on the <i>educatieinteractiva.md</i> platform.	Feedback can be provided through comments on Padlet and through direct interaction with the visual presentations or videos created by the students. The teacher can evaluate the creativity and originality of the problems.	Padlet (for organizing the problem-creation contest), photo or video editing apps on mobile phones (for creating visual presentations or videos), mobile devices (for accessing and using the apps), <i>educatieinteractiva.md</i> (for presenting interactive activities).
Generalization	The teacher sends a link to an activity created on <i>educatieinteractiva.md</i> to students' phones. The activity is an interactive quiz in the format of a "wheel of fortune," where students answer questions. The results are recorded on the teacher's computer.	After completing the quiz, the teacher provides individual feedback to students regarding their performance, identifying strengths and weaknesses. The results are recorded in an electronic database for monitoring individual progress and learning needs.	<i>educatieinteractiva.md</i> (digital platform for creating interactive activities and quizzes), students' phones (for accessing the activity link), teacher's computer (for monitoring and recording results).

Generalization	<ul style="list-style-type: none"> - Conduct a quick survey using Google Forms, where students respond to key questions related to the topics covered in the lesson. - Use real-time question and answer platforms like Kahoot or Quizizz to test students' knowledge on the studied materials. - On the interactive Padlet board, students simultaneously respond to proposed questions. - Pictographic Method for Knowledge Generalization: 	Results are stored on the teacher's computer. Strengths and weaknesses are identified. The teacher can evaluate the creativity and originality of the problems and presentations created by students. Students are encouraged to create a conceptual map using Mentimeter.	Google Forms, projector, Padlet board, students' phones, Padlet, interactive activities on educatieinteractiva.md , Kahoot, Quizizz, Jamboard, etc.
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Engaging students in digital interactions throughout the year has brought numerous significant benefits to the learning process and personal development. Following the integration of digital interaction in high school mathematics lessons, a positive impact on academic success was observed, as confirmed by the results obtained from a questionnaire regarding the impact of interactive activities on learning mathematics, applied to the 61 students participating in the pedagogical experiment [15].

Increased Motivation: The majority of students indicated that interactive activities increased their motivation to learn mathematics, either to a great extent (39.3%) or to a moderate extent (44.3%). This suggests that these activities were positively perceived and generated increased interest in the subject.

Motivational Aspects: Students identified several aspects of the interactive activities that motivated them the most, such as the opportunity to work collaboratively with peers (47.5%), the use of technology and digital tools (42.6%), and direct interactivity in problem-solving (29.5%). These elements were considered crucial for increasing motivation in learning mathematics.

Increased Engagement: Interactive activities led to a higher level of engagement during mathematics lessons, according to responses indicating greater involvement in the lesson (21.3%), increased interest and curiosity about topics (42.6%), and opportunities for active participation and contribution to discussions and problem-solving (21.3%).

Overall, the results indicate that interactive activities positively impacted student motivation and engagement in learning mathematics through collaboration, the use of technology, interactivity, and providing opportunities for active participation.

In Conclusion, engaging students in digital interactions had a significant positive impact on their academic and personal development, contributing to increased responsibility, autonomy, and motivation for learning and future success. Digital interactions provided a more dynamic and engaging learning environment, reducing the likelihood of deviant behavior or inattention in class. Students felt more involved and motivated to participate in the proposed activities. Through the use of technology and participation in digital activities, students acquired and applied a range of new skills, including technological skills, critical thinking and problem-solving, effective communication, and collaboration. The positive and engaging experiences provided by digital interactions significantly increased students' motivation to learn and to pursue a career in mathematics or technology. Students felt more inspired and connected to the subject studied, seeing its relevance and applicability in their daily lives and future.

Conclusion

As mobile technologies continue to advance and penetrate educational environments, it is crucial for

teachers and institutions to capitalize on their potential and address the transformative opportunities they bring in shaping the educational landscape of the future.

The integration of digital interaction in high school mathematics lessons has demonstrated a significant positive impact on student motivation and engagement in the learning process, facilitating better understanding and application of concepts. Furthermore, direct involvement in problem-solving, collaboration with peers, and the use of technology were key factors in generating this positive impact. Continuous improvement of the diversity and adaptability of interactive activities, along with greater practical relevance of the content, could contribute to reinforcing these benefits and optimizing the learning process of mathematics in the high school environment.

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THE VALUE OF DEVELOPING THE PRAGMATIC ENGLISH COMMUNICATION SKILLS IN TECHNICAL VOCATIONAL EDUCATION AND TRAINING

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English language remains indispensable in many business sectors and fields of activity, facilitating communication, collaboration and innovation at global level. The present article highlights the importance of the development of the pragmatic English communication skills in technical vocational education and training, ISCED level 4, as well as the students' concern for the development of this skill, considering the increasingly demanding requirements of employers regarding the mastery of the English language. The study carried out within this research confirms the fact that students consider this skill essential for the development of their professional career and to ensure their competitiveness on the labour market.

Keywords: *pragmatic communication skills, English language, technical vocational education and training.*

VALOAREA DEZVOLTĂRII COMPETENȚEI DE COMUNICARE PRAGMATICĂ ÎN LIMBA ENGLEZĂ ÎN ÎNVĂȚĂMÂNTUL PROFESIONAL TEHNIC

Limba engleză rămâne să fie indispensabilă în multe sectoare de afaceri și domenii de activitate, facilitând comunicarea, colaborarea și inovația la nivel global. Articolul de față evidențiază importanța dezvoltării competenței de comunicare pragmatică în limba engleză în învățământul profesional tehnic, nivel ISCED 4, precum și preocuparea elevilor pentru dezvoltarea acestei competențe, având în vedere cerințele tot mai stringente ale angajatorilor privind stăpânirea limbii engleze. Studiul realizat în cadrul acestei cercetări, confirmă faptul că elevii consideră această competență esențială pentru dezvoltarea carierei lor profesionale și pentru a-și asigura competitivitatea pe piața muncii.

Cuvinte cheie: *competențe de comunicare pragmatică, limba engleză, învățământ profesional tehnic.*

Introduction

The pragmatic English communication skills are essential for the professional success of technical vocational education and training (TVET) graduates. The professional training programs of level ISCED 4 in the Republic of Moldova include the module for studying English language applied in the domain, in order to develop the pragmatic English communication skills, an aspect that opens new professional horizons, facilitates the efficient integration of graduates on the labour market. Therefore, graduates can become specialists able to cooperate with other organisations in the professional field, participate in international professional networks and benefit from continuing professional development internships. Moreover, pragmatic English communication skills contribute to their involvement in the life of the community and society, turning them into active actors of social change. In this context, pragmatic English communication skills become a priority for the professional career. From this perspective, it is important and necessary for graduates to hold pragmatic English communication skills, focused on the communicative-functional perspective and the pragmatics of communication, which emphasises social interaction and a pragmatic, action-oriented approach. Thus, students' motivation and interest in studying English are determining factors for the success of this educational endeavour.

The value of developing pragmatic English communication skills to TVET students

Starting from the need to develop students' pragmatic English communication skills in TVET, level

ISCED 4, we identify its particularities in a professional context. Pragmatic communication skills in the context of the professional career refers to the competence to use language specific to the professional field.

The professional skills imply the ability to adequately select, combine and use knowledge, skills, values and attitudes, necessary to successfully solve various work or learning situations, tangential to a certain profession. Professional competence includes a dynamic and integrated body of knowledge (knowing and understanding specific language, explaining and interpreting concepts) and skills (putting into practice, knowledge transfer, problem solving, critical thinking, and creativity) [7, p. 12].

In this context, V. Goraș-Postică mentions that professional communication skills include the action of combining and using knowledge, skills and attitudes in order to achieve the proposed results [4, p. 32].

The researcher N. Bîrnaz defines competence as „a set of knowledge (savoir), skills and abilities (savoir faire) organised to solve a task or a set of tasks corresponding to social requirements (savoir vivre). Moreover, the researcher defines the components of skills and presents a graphical model of competence [1, p. 47-48].

Thus, the skills include the following components:

- the cognitive aspect - the use of theories and definitions, as well as the knowledge acquired through life experience;
- the functional aspect (skills and abilities) - the application of skills and abilities in professional, educational and social activities;
- the ethical aspect - capitalising on personal and professional principles and values.

In the process of studying English applied in the domain, these skills are approached from the perspective of professional training and are manifested as follows:

The cognitive component (Savoir/to know):

- knowledge of terminology in English specific to the professional domain;
- identifying pragmatic English communication situations in professional contexts.

The praxiological component (Savoir faire/be able to do):

- receiving and producing written and oral messages in English in professional communication situations;

- reasoning the ideas in English in the context of professional communication.

The axiological component (Savoir vivre/ to take attitude and behaviour):

- developing motivation for studying English applied in the domain;
- consistent application of acquired terminology in a practical context;
- openness to communicate in English in a professional context;
- orientation towards success in the process of pragmatic English communication.

Likewise, in the professional career context, „savoir vivre” is reflected in the use of English and associated behaviours designed to create a favourable impression, ensure message clarity, and facilitate professional interactions. In this context, the researcher Nina Bîrnaz emphasises that the component “Savoir vivre/take attitude and behaviour” aims to develop students’ attitude and behaviour in the context of well-defined social conditions. „Knowing on how to take an attitude” represents the ethical aspect, which aims at the presence of personal and professional values [apud 1, p. 45-46].

The opinion of TVET students regarding the importance of pragmatic English communication skills

The importance of pragmatic English communication skills represents a central aspect of the research on the development of TVET students’ pragmatic English communication skills. In this context, it was considered relevant to investigate the students’ opinion regarding the importance of the English language by means of a psycho-pedagogical experiment. *The target group in the research* was the TVET students, level ISCED 4, from the College of Ecology, Tourism specialty, the professional training domain: Travel, Tourism and Leisure and the qualification: Travel Agent (average qualification). The aim of the psycho-pedagogical experiment was to evaluate the level of pragmatic English communication skills and

identify the students' perception and opinion regarding the relevance of these skills for their professional career. The psycho-pedagogical experiment was carried out during the academic year 2022-2023 and it took place in three stages: primary research findings, development of pragmatic English communication skills and final findings of control stage. The research instrument applied at the primary findings and control stages was a *Questionnaire on assessment of the pragmatic English communication skills within the subject English applied in the domain of tourism*.

The results of the primary research findings

Most of the students of the target group (77%) are 20 years old (20 students). Besides, 4 students are of 19-year-old (15%), a student of 18-year-old (4%) and a student of 21-year-old (4%)

The results of the survey at the primary findings stage, showed that all students (100%) consider pragmatic English communication skills very important for their professional success in the field of tourism.

The arguments offered by the students were grouped into the following categories:

- *Employment and professional career* – 46%

Most of the students (46%) consider that the English language facilitates employment and success in the chosen professional field. It is considered an essential requirement for the field of tourism, English gives students a competitive advantage, especially in interactions with international tourists and in professions such as travel agents or tour guides.

- *Usefulness of pragmatic English communication skills for travelling* – 42%

Another aspect frequently mentioned by students is the usefulness of the English language in the context of international travel. English, as a global language, gives students the opportunity to communicate effectively while travelling, regardless of the destination country. In addition, tourism frequently involves travelling, and knowledge of the English language is a mandatory requirement to interact effectively in various international environments.

- *Intercultural communication* – 38%

The students emphasized the importance of the English language in facilitating intercultural communication. In the field of tourism, English communication skills facilitate the establishment of effective relationships with tourists from other countries and cultures, thus contributing to the improvement of the tourist experience. The ability to understand and communicate effectively in English with people from different cultures is essential for overcoming language and cultural barriers, thus increasing the efficiency of professional interactions and contributing to the success of activities in the tourism sector.

- *English as an international language* – 23%

Some students pointed out the fact that English is recognized as the most spoken language globally, being used especially in tourism and many other fields. The students recognized that the international status of English makes it indispensable for the field of tourism, where interactions with people of various cultures and nationalities are a constant component.

- *Personal and professional development* – 12%

A smaller but still significant number of students mentioned that pragmatic English communication skills contribute to their personal and professional development.

The stage of the development of the pragmatic English communication skills

During the stage of the development of the pragmatic English communication skills, the 26 students studied the module English language applied in tourism, according to the curriculum, approved in 2016 by the Ministry of Education of the Republic of Moldova, the Ministry of Agriculture and Food Industry of the Republic of Moldova and the Teachers' Councils of the following ISCED 4 institutions from Moldova: ASEM College of Commerce, College of Ecology, International College of Administration and Business and the National College of Winemaking and Viticulture. This module, with a duration of 120 hours, was organised as follows: 30 hours of theoretical lessons (T), 30 hours of practical lessons (P), 60 hours for individual guided study (IGS), and final evaluation (Table 1).

Table 1. Organization of the module English language applied in tourism.

Code	Title	Total no of hours	Number of hours			Semester	Evaluation form	No of credits
			T	LP	SIG			
G.08.O.005	English language applied in tourism	120	30	30	60	VIII	exam (Written test)	4
Professional competence from the qualification description: - Mastering a foreign language and the ability and skills to manage the tourist activity; - Providing translation and presentation of the tourist attractions and travel itinerary.								
Competences specific to the subject English applied in the domain: - Organisation and management of tourist activity. - English language communication skills (Producing and receiving the oral and written messages). - Pragmatic English Communication Skills in the field of tourism, travelling and leisure. - English language for promotion of customs, traditions, historical and cultural personalities. - English language for intercultural contexts, values and attitudes. - English language for promotion and appreciation of national and local heritage in the global context.								

The didactic approach regarding the development of pragmatic English communication skills was built on a solid theoretical framework, based on a set of fundamental theories, which guided the entire educational process. This theoretical framework includes theories such as: constructivist theory, with its two fundamental dimensions – cognitive constructivism, represented by Jean Piaget, and social constructivism, represented by Lev Vygotsky; the theory of multiple intelligences, with an emphasis on interpersonal intelligence, proposed by Howard Gardner; the humanistic theory of personality, developed by Carl Rogers; and relevance theory, established by Dan Sperber and Deirdre Wilson.

Starting from these theories, the essential principles were deduced that substantiated the teaching approach in the process of developing the pragmatic English communication skills. These principles include:

- The principle of the student's active involvement in the learning process;
- The principle of univocal involvement of educational actors (teacher - student) in the learning process;
- The principle of friendly interpersonal relations;
- The principle of student-centred learning;
- The cognitive principle of relevance;
- The communicative principle of relevance.

This system of principles has been applied to ensure an effective dynamic of the teaching approach, stimulating the active involvement of students in an interactive, collaborative and friendly process that favours knowledge, communication and the development of pragmatic English communication skills.

The results of the final findings of the control stage

At the end of the experiment, in the control stage, all students (100%) reconfirmed the importance of pragmatic English communication skills. The results highlight a significant increase in students' awareness of the relevance of this skill.

In the control stage, the students supported the following arguments:

- *Broad employment opportunities in the professional field and professional career development – 76%*

In this stage, 76% of students mentioned that pragmatic English communication skills are essential for career opportunities, a significant increase from 46% in the primary finding stage. This growth suggests an increased awareness of the importance of the English language in the context of tourism as a professional domain. The students also mentioned examples of the specialties where they will apply the pragmatic English communication skills, such as: tour guide, travel agent, hotel receptionist, etc.

- *Usefulness of pragmatic English communication skills for travelling* – 47%

47% of students recognized the usefulness of pragmatic English communication skills in the context of international travel. The 5% increase from the primary finding stage underlines the importance of effective communication in international travel.

- *Intercultural communication* – 12%

Compared to the primary stage, fewer students gave arguments about the importance of pragmatic English communication skills for facilitating intercultural communication. The result can be explained by the fact that most arguments focused on the professional aspect and career in tourism.

- *Study abroad* – 15%

Arguments that were not mentioned at the primary findings stage and highlighted by students at the control stage, refer to the fact that pragmatic English communication skills are a key factor for access to international education programs.

Conclusion

The pragmatic English communication skills are a key element of professional education and training, having a particular value in preparing students for the challenges of a globalised labour market and in continuous technological transformation. Studying the English language applied in TVET contributes significantly to the development of students in this educational segment, offering them practical tools to meet the specific requirements of their chosen professions.

The results of the conducted experiment support the relevance of pragmatic English communication skills for the professional success of students in TVET, level ISCED4. The students realised that having these skills can represent a differentiating factor on the labour market, considerably increasing their opportunities and chances of employment and career progression. At the same time, the results of the research study emphasise the fact that the English language plays a crucial role in strengthening professional skills and facilitating the integration of students on the national and international labour market.

Thus, the inclusion of applied English in the TVET curriculum is not only opportune, but also necessary for the training of competitive and qualified personnel, able to navigate successfully in an intercultural and dynamic professional environment.

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MANIFESTATIONS OF BULLYING-TYPE AGGRESSIVENESS: FORMS, TYPES AND METHODS OF DIAGNOSIS

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Bullying-type aggressiveness is an extremely complex phenomenon, with a diversity of types and forms of manifestation. Bullying, said D. Olweus, is an „extreme” form of manifestation of aggressiveness, a subtype of violent behavior. Bullying is an interaction in which an individual-aggressor manifests several times, repeatedly aggressive behavior. Bullying is premeditated aggression and manifests itself in a great diversity of forms, which makes it difficult to define this phenomenon unanimously accepted. The focus is on approaching bullying-type aggressiveness from the perspective of three types: physical aggression, verbal aggression, relational aggression. These types of manifestation of bullying have a complex of specific forms: physical aggression - hitting, punching, etc.; verbal aggression – sarcasm, nicknaming, teasing, etc.; relational aggression - manipulation, threat, rejection, lies, gossips, etc. The manifestation of bullying-type aggression can be direct and indirect. Some data are also presented regarding the diagnosis of the level of manifestation of bullying-type aggressiveness in lyceum (high school) students.

Keywords: *bullying-type aggressiveness, aggressiveness, violence, physical aggression, verbal aggression, relational aggression.*

MANIFESTĂRI ALE AGRESIVITĂȚII DE TIP BULLYING: FORME, TIPURI ȘI MODALITĂȚI DE DIAGNOSTICARE

Agresivitatea de tip bullying este un fenomen extrem de complex, cu o diversitate de tipuri și forme de manifestare. Bullyingul, spunea D.Olweus, este o formă „extremală” de manifestare a agresivității, un subtip al comportamentului violent. Bullyingul este o interacțiune în care un individ-agresor manifestă mai multe ori, în mod repetat un comportament agresiv. Bullyingul este o agresiune premeditată și se manifestă într-o diversitate mare de forme, ceea ce îngreunează definirea acestui fenomen unanim acceptată. Accentul este pus pe abordarea agresivității de tip bullying din perspectiva a trei tipuri: agresiunea fizică, agresiunea verbală, agresiunea relațională. Aceste tipuri de manifestare a bullyingului are un complex al formelor specifice: agresiunea fizică – loviri, îmbrânciri etc.; agresiunea verbală – sarcasm, poreclire, tachinare etc.; agresiunea relațională - manipulare, amenințarea, respingerea, minciuni, zvonuri etc. Manifestarea agresiunii de tip bullying poate fi directă și indirectă. Se prezintă și unele date privind diagnosticarea nivelului de manifestare a agresivității de tip bullying la elevii liceeni.

Cuvinte-cheie: *agresivitatea de tip bullying, agresivitate, violență, agresiunea fizică, agresiunea verbală, agresiunea relațională.*

Introduction

The retrospective of research on aggressiveness and violence, including in school, allows us to note that several theories and concepts of these phenomena have appeared, and in this case with reference to the reduction and management of aggressiveness in school.

At the same time, contradictory ideas were formulated regarding the definition of notions „aggressiveness” and „violence”. Most researchers define aggressiveness as behavior directly aimed at another individual with the intention of obtaining an advantage or benefit from the suffering caused (Baron & Richardson, 1994; Green, 2001) [2; 12]. In other words, it is conduct that intends to do harm, to cause another person pain, suffering.

The researcher Corina Balan, based on the analysis of different approaches, presented several definitions of the concept of aggression [1].

Table 1. Definitions of Aggressiveness Concept.

Authors	Aggressiveness - Definitions
Jean Laplanche and J.-B. Pontalis (1994)	- „tendency or group of tendencies that are actualized in real or phantasmal behaviors that aim to harm another, destroy him/her, compel, humiliate him/her” [16]
Paul Popescu-Neveanu (1978)	- „destructive and violent behavior directed towards people, objects or oneself” [28]
Constantin Păunescu (1994)	- „a set of hostile behaviors on a conscious, unconscious and phantasmatic level, with the aim of destroying, degrading, coercing, denying or humiliating a being or thing invested with meaning, which the aggressor feels as such and represents for him/her a challenge” [27]
Septimiu Chelcea (1996)	- „form of behavior aimed at harming or offending others” [4]
Ursula Șchiopu (1997)	- „behaviours loaded with brutal, destructive and attacking reactions” [31]
Adrian Neculau (1998)	- „form of destructive behavior aimed at producing certain material, moral-psychological or mixed damages” [21]
N. Mitrofan, V. Zdrenghia & T. Butoi (1997)	- „form of conduct directed with intention towards objects, persons or oneself, in order to cause harm, injury, destruction and damage” [19]
Tuciov-Bogdan, S. Chelcea, M. Golu, P. Golu, Mamali, Pânzaru (1981)	- „a form of offensive behavior of the individual, which is consumed in action or verbally, constituting his/her reaction to an opposition, real or only imaginary, on the part of others” [32]
Baumeister, Smart & Bodea (1996)	- „the individual’s reaction to a series of threats that shook his/her favorable self-image and high self-esteem” [3]
Russell G. Geen (2001)	- „any intentional behavior aimed at causing suffering to another person against his/her will” [12]
Gilles Ferréol and Adrian Neculau (2003)	- „the ability to face one obstacle, face another one and not back down in case of difficulty” [10]
Septimiu Chelcea (2003)	- „offensive verbal or action behavior aimed at humiliating, harming and even suppressing others who are motivated to avoid this treatment” [5]

Aggressiveness as intentional behavior manifests itself in different forms: physical, verbal, social aggression, etc. In this sense, violence is seen as the serious form of aggression. It is noted that many researchers have tried to distinguish between aggressiveness and violence, characterizing aggressiveness as a behavior or provocation, while violence represents the actual realization of aggressive intentions.

As in the case of aggressiveness, the researcher Corina Balan tried to generalize different opinions with reference to the concept of violence.

Table 2. Definitions of Violence Concept [1].

Authors	Aggressiveness - Definitions
H. L. Nieburg (1963)	Violence is „a direct or indirect action intended to limit, injure or destroy persons or property” [23].
Yves Michaud (1978)	„Violence exists when, in an interaction situation, one or more actors act in a direct or indirect, masked or distributed manner, causing harm to others in varying degrees”, in their physical, moral wholeness, in their possessions, in their symbolic and cultural participations [17].
Éric Débarbieux (1996)	„Violence is the brutal or continuous disorganization of a personal, collective or social system, and which results in a loss of integrity, which can be physical, mental or material. This disorganization can operate through aggression,

	through the use of force, consciously or unconsciously, but there can also be violence only from the point of view of the victim, without the aggressor having the intention to do harm” [9].
Krug <i>et al.</i> (2002)	Violence is „the threat or intentional use of physical force or power against one’s own person, against another one, against a group or a community that causes or strongly risks causing trauma, death or psychological damage, improper development or certain deprivations” (WHO report) [15].
Yves Michaud (1978)	„Historically and culturally, violence is a relative notion, dependent on the social, legal and political codes of the society in which it manifests itself” [9].
Jean Claude Chesnais (1981)	„Violence (...) is a direct, corporal injury against people. It has a triple character: brutal, external and painful. What defines it is the material use of force” [6].
Nicolae Mitrofan (1996)	Violence refers to „any behavior whose purpose is to harm or destroy the victim” [19].
Eirick Prairat (2001)	Violence is a „process fairly well identified by the categories of the Criminal Code” [29].
Cristina Neamțu (2003)	„Violence is (...) the most frequent school deviant behavior” [20].
Johan Galtung (1990)	„I understand violence as an avoidable damage to basic human needs or, more generally, a damage to life that reduces the degree to which people are able to fulfill their needs at a certain or potentially possible level” [11].

The research of roblem with reference to violence and aggression has highlighted a specific form of manifestation of aggressiveness – the bullying. This concept was first introduced into psychopedagogical theory and practice by Dan Olweus in 1978. He wrote that a student is bullied when he/she is exposed repeatedly and over time to negative actions by one or more students [26 , p. 10].

For Hazier (1996) [14], *bullying is a premeditated and systematic aggression*, a behavior that occurs spontaneously and is manifested by a student that inspires fear, and the unpleasant experiences of victims are external (physical) and internal (psychological). There are two meanings of aggressive bullying-type behavior: in a broad sense, the systematic abuse of power, and in a narrow sense, the psychological or physical domination of a weaker person by a stronger person or by a group of people (Rigby, 2007) [30]. The complexity of aggressive bullying-type behaviors required researchers to focus on certain components of this process. Thus, among other things, the victim’s behavior is described as his/her inability to defend himself/herself because he/she does not have the necessary resources (Smith et al, 2004). The repetition of each incident of aggression leads to the consolidation of power relations, in the sense that the aggressor increases in power, while the victim loses power (Craig & Pepler, 2007) [7; 13, p.69].

Types and Forms of Bullying-Type Aggressiveness Manifestation

In specialized literature, bullying as a type of aggressiveness is manifested in three situations: verbal aggression, physical aggression, relational/social aggression.

Verbal Bullying-Type Aggression

Repeated verbal abuse has long-term psychological consequences. Verbal aggression occurs when the individual uses specific language to offend another individual. Verbal bullying is most widespread in the school environment, and especially in the high school (lyceum) environment, when in school groups are leader groups, when some students want to gain power and control over others. Recently, a specific form of aggression has appeared - online aggression, through the Internet. This form of aggression is still insufficiently researched. At the same time, its consequences are often dramatic.

From the most widespread forms of verbal aggression, we identify the following: nicknaming, sarcasm, teasing, insults - direct aggression; spreading false rumours, inciting one person to attack another person –

indirect aggression. It should be noted that this form of manifestation of aggression is more prestigious in the eyes of adults (teachers).

Physical Bullying-Type Aggression

This type of aggression is aimed at bodily harm: hitting, punching and kicking, shoving, throwing at with stones - direct aggression; inciting a person to hit another person – indirect aggression. Physical aggression is easily detected due to the obvious actions of aggressor. If this type of aggression was attributed to men, now the tendency is identified that girls also display physical aggression. Although girls, as a rule, are attributed with verbal aggression.

Relational Bullying-Type Aggression

This type of aggression is prevalent in educational settings and is less researched. It includes: manipulating, threatening, instigating, excluding from the group and spreading false rumors about the victim, etc.

There are other classifications of bullying-type aggression, which are based on different indicators. So Olweus (1993) [24] and Rigby (2007) [30] propose such a classification: physical aggression – direct and indirect; verbal aggression – direct and indirect; non-verbal and non-physical aggression – direct and indirect.

These authors distinguish between direct aggression and indirect aggression. The first presents relatively open attacks on the victim. The second presents less overt/hidden attacks in the form of marginalization and intentional social exclusion from a group.

In the special literature, psychological aggression is addressed, which involves behaviors such as verbal violence, excluding students from their favorite activities, aggressive phone calls, etc. Although all types of aggression to a lesser or greater extent have psychological consequences. Also of interest is the classification of bullying-type aggressiveness by Newman (2000) [22]: physical aggression, emotional aggression, relational aggression and witness victimization. The last type refers to students who see the aggression, but feel that they cannot confront it, or are afraid that they too may become the target of aggression.

Curelaru and his colleagues (2009) [6] proposes a classification of bullying-type aggression based on the following indicators: the nature of act – verbal or physical aggression; the distance with the aggressor ratio – direct-indirect aggression; the number of people involved – individual or group aggression; the unpleasant/ unbearable character – mild or severe aggression; the type of reaction – proactive or reactive aggression [Curelaru, 2009]. Therefore, Curelaru generalized different forms of manifestation of bullying-type aggression, structured it into three categories: physical aggression, verbal aggression, relational aggression.

Table 3. Forms of Bullying-Type Aggressiveness [8].

	Direct	Indirect
Physical	physical assault, hitting, spitting, kicking, slapping, obstructing, throwing stones, destroying personal property, stealing personal property, threatening with a weapon, touching or attempted rape	causing a person to assault another person
Verbal	insult, nicknaming, hurting, humiliation, threat, sarcasm	persuading another person to insult someone, slandering, racial slurs, spreading false rumours, gossiping, manipulating friendships
Non - Physical	obscene gestures, chicanery, humiliating, grimacing, teasing, sticking tongue out, winking	moving and hiding personal belongings, intentional exclusion from groups or activities, rejection, social marginalization, discrimination, banishment
Non-Verbal		

This analysis of types and forms of manifesting bullying-type aggressiveness is not exhaustive and leaves room for further study. At the same time, the diversity of forms and types of characterized bullying-type aggressiveness offers opportunities to establish mechanisms to prevent, reduce and manage this phenomenon.

Certain Diagnostic Aspects of Perception of Gravity and Reactions Towards Aggressors and Victims of Bullying-Type Aggression in Three Forms of Manifestation: Physical, Verbal, Relational

This study is part of a more complex research on the problem of bullying-type aggressiveness. We will focus only on diagnosing teachers regarding their perception and reaction to aggressors and victims of aggression.

The study included 2 high schools (lyceums) in Romania. 120 teachers were surveyed. The questionnaire „*Perception of Gravity and Reaction to Bullies and Victims of Bullying-Type Aggressiveness*” was applied.

The respective questionnaire is aimed at obtaining data on the following variables: the perception of physical aggression gravity; the perception of verbal aggression gravity; the perception of relational aggression gravity; the probability of reaction to the aggressor in case of physical aggression; the probability of reaction to the aggressor in case of verbal aggression; the probability of reaction to the aggressor in case of relational aggression; the probability of reaction to the victim in the case of physical aggression; the probability of reaction to the victim in case of verbal aggression; the probability of reaction to the victim in case of relational aggression [13, p. 153].

The frequency of responses regarding the perception of gravity of physical, verbal and relational aggression and the reaction to the aggressor was analyzed and presented in percentages with further processing and through SPSS programs.

Analytical data are presented in Table 4.

Table 4. Data of Perception of Gravity and Reaction of Teaching Staff Towards Aggressors and Victims of Bullying-Type Aggression.

No. d./o	Variables	Answers
1.	Perception of the physical aggression gravity	67% - grave 33% - very grave
2.	Perception of the verbal aggression gravity	43% - grave 57% - very grave
3.	Perception of the relational aggression gravity	75% - grave 15% - very grave
4.	Reaction to the aggressor in case of physical aggression	81% - will react to the aggressor 19% - will probably react
5.	Reaction to the aggressor in case of verbal aggression	78% - will react to the aggressor 22% - will probably react
6.	Reaction to the aggressor in case of relational aggression	69% - very likely will react 31% - will probably react
7.	Reaction to the victim in case of physical aggression	91% - very likely will react 9% - will probably react
8.	Reaction to the victim in case of verbal aggression	80% - very likely will react 31% - will probably react
9.	Reaction to the victim in case of relational aggression	75% - very likely will react 15% - will probably react

The general analysis of these data allows us to find that:

1. There is a positive correlation between the perception of gravity of physical, verbal and relational aggression and the probability of reaction towards the aggressor involved in the aggression.
2. There is a positive correlation between the perception of gravity of physical, verbal, relational aggression and the probability of reaction towards the aggression victim.

General Conclusions

1. The diversity of types and forms of displaying bullying-type aggressiveness, but also the diversity of approaches to this problem, create many obstacles but also opportunities to substantiate some policies to prevent and reduce this phenomenon.

2. The existence of positive and strong relationships between the perception of gravity of bullying-type aggression and the probability of reaction towards the aggressors and victims of aggression (physical, verbal, relational) by the teacher generates a vision and prospects for preventing this phenomenon in the school.

3. Examining the obtained data opens many directions of pedagogical and psychological intervention towards the aggressor and the victims involved in physical, verbal or relational aggression.

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THE VALORIZATION OF INTERCULTURAL EDUCATION IN NATIONAL AND INTERNATIONAL EDUCATIONAL POLICIES

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Intercultural education becomes an essential tool for developing a more tolerant and cohesive society, where diversity is perceived as a valuable resource. The analysis of the intercultural dimension in national and international educational policies highlights not only the necessity of integrating it into the school curriculum but also emphasizes the importance of developing intercultural competencies among all actors involved in the educational process (teachers, students, families, communities). The integration of diverse cultural values and practices into all aspects of the educational process must be carried out with care and responsibility, taking into account the specifics of each cultural environment and avoiding superficial or standardized implementations. Without well-thought-out measures and a deep understanding of diversity, efforts can become counterproductive, leading to stereotypes and inequalities instead of inclusion and mutual respect.

Keywords: *intercultural education, intercultural competences, cultural diversity, educational policies, national and international documents, school curriculum, teaching staff, students.*

VALORIFICAREA EDUCAȚIEI INTERCULTURALE ÎN POLITICILE EDUCAȚIONALE NAȚIONALE ȘI INTERNAȚIONALE

Educația interculturală devine un instrument esențial pentru dezvoltarea unei societăți mai tolerante și mai coezive, în care diversitatea este percepută ca o resursă valoroasă. Analiza dimensiunii educației interculturale în politicile educaționale naționale și internaționale evidențiază nu doar necesitatea de a o valorifica în curricula școlară, ci relevă și importanța dezvoltării competențelor interculturale la toți actanții implicați în procesul educațional (cadre didactice, elevi, familie, comunitate). Integrarea valorilor și practicilor culturale diverse în toate aspectele procesului educațional trebuie realizată cu atenție și responsabilitate, ținând cont de specificul fiecărui mediu cultural, evitând implementările superficiale sau standardizate. Fără măsuri bine gândite și o înțelegere profundă a diversității, eforturile pot deveni contraproductive, conducând la stereotipuri și inegalități în locul incluziunii și respectului reciproc.

Cuvinte-cheie: *educație interculturală, competențe interculturale, diversitate culturală, politici educaționale, documente naționale și internaționale, curricula școlară, cadre didactice, elevi.*

Introduction

Intercultural education is essential in a globalized world where cultural diversity is an everyday reality. It is a fundamental pillar for promoting diversity, mutual respect and peaceful coexistence in an increasingly globalized world.

Through intercultural education, individuals acquire essential skills for navigating in a pluralistic world, including intercultural communication skills, empathy and tolerance. This form of education supports social integration and reduces prejudice and discrimination, facilitating the creation of an inclusive and equitable environment. Furthermore, intercultural education contributes to the development of a global identity, preparing individuals to participate actively and responsibly in diverse and interconnected societies.

Analysis of the national and international framework for addressing intercultural education

Knowledge of national and international regulations is essential to understand and implement effective educational policies that support inclusion and intercultural understanding.

By studying them, policy-makers can better understand evolving concepts of diversity in education and develop educational programs that not only respect but also celebrate cultural diversity.

Documents such as the **Universal Declaration of Human Rights (1948)**, the **Convention on the Rights**

of the Child (1989) and the Convention on the Elimination of All Forms of Racial Discrimination (1965), have laid the foundations for modern principles of intercultural education, promoting fundamental values such as equality, non-discrimination and respect for cultural diversity.

The adoption of the **Council of Europe Charter on Education for Democratic Citizenship and Human Rights Education (2010)** reflects the commitment of member states to promote education that contributes to the development of a democratic culture and respect for human rights. The Charter sets out the principles, objectives and strategic directions necessary for the integration of education for democratic citizenship and human rights education in Europe's education systems [5].

Democratic laws and institutions can only function effectively when they are based on a culture of democracy. The development of the **Competence Reference Framework for a Culture of Democracy (Council of Europe, 2018)** was designed to support member states in integrating democratic values into their education systems, thereby contributing to the strengthening of democracy, human rights and the rule of law [4].

Adopted by the General Conference of UNESCO in 2019, the **Global Convention on the Recognition of Qualifications in Higher Education (UNESCO, 2019)**, encourages international academic and professional mobility, promoting the recognition of academic qualifications and encouraging cultural exchanges [7].

Addressing cultural diversity in all its forms is also reflected in **UNESCO's Global Monitoring Report on Education (2020)**, entitled "Inclusion and Education: All means all", with intercultural education being emphasized as essential for building an inclusive society [26]. This vision is also reinforced by the **EU Strategy for Education and Training (2020)**, which emphasizes inclusive and intercultural education, promoting lifelong learning, mobility, international partnerships and the inclusion of disadvantaged groups in the educational process [31].

The promotion of intercultural dialogue and respect for diversity among young people is also emphasized in the **Council of Europe's Youth Strategy 2030**, adopted in 2020 [32].

And, the **EU Action Plan against Racism 2020-2025**, proposes measures to combat racism and discrimination, including through intercultural education and awareness-raising in schools and other educational institutions [25].

These documents and regulations reflect the commitment of the international community to promote intercultural education as an essential part of modern education systems to ensure a more inclusive society that is respectful of cultural diversity.

This list of policies can be complemented by the **Incheon Declaration Framework for Action - Education 2030 (UNESCO, 2015)** [2], adopted at the Incheon World Education Forum, which focuses on Sustainable Development Goal 4 of the **2030 Agenda for Sustainable Development** [24].

The framework aims to ensure equitable quality education and promote lifelong learning opportunities for all people, regardless of gender, age, race and ethnicity, as well as persons with disabilities, migrants, indigenous people, children and youth, especially those in vulnerable situations.

The Republic of Moldova, being a European country with a shared history and values with the Member States of the European Union, is committed to implement and promote these values through the **Association Agreement between the European Union and the Republic of Moldova (2014)**, thus facilitating gradual economic integration and deepening political association [1].

This Association Agreement seeks to strengthen respect for human rights and fundamental freedoms, including minority rights, democratic principles, the rule of law and good governance. The objectives of the political dialogue re-emphasize the importance of the intercultural dimension, contributing to the consolidation of national political reforms.

Education is considered a national priority in the Republic of Moldova, having a central role in generating and transmitting universal knowledge and values, developing human capital, strengthening national consciousness and promoting European integration.

The strategic vision of educational development is centered on the development objectives of the **National Development Strategy „European Moldova 2030”** [29]. One of the objectives of the strategy refers specifically to - *Raising the level of culture and personal development* - the education system by its

valences must ensure inter- and multicultural education based on values, national traditions, but also cultural diversity, as well as personal development and active citizenship.

The contradictions between the processes of globalization, internationalization, technologization of education and the ability of the education system in the Republic of Moldova to reflect these processes in a relevant and effective way have conditioned the elaboration of **the Education Development Strategy for 2021-2030 „Education 2030”** [28].

The Development Strategy “Education 2030” is focused on providing opportunities for all people to develop, from an early age and throughout their lives, the skills, knowledge, abilities and competences necessary to maximize their potential in both their personal and professional lives.

Provisions on respecting cultural diversity and promoting intercultural education in educational institutions are regulated by **the Education Code of the Republic of Moldova (2014)**. The aims of education must allow openings towards diverse, renewed values that energize both the individual and society [6].

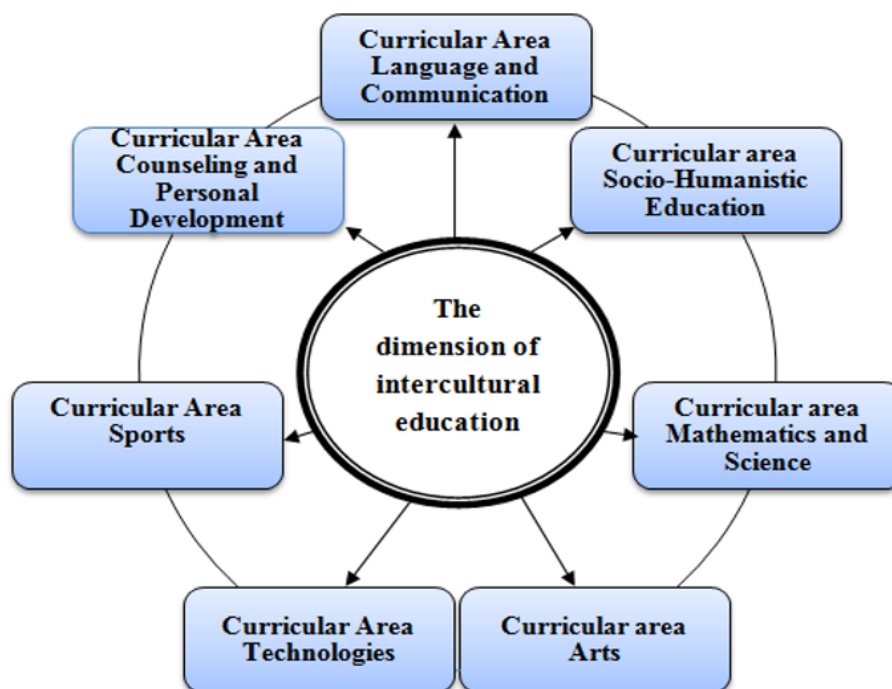
The implementation of changes of essence, provided by the Education Code of the Republic of Moldova, as well as other international documents are ensured by **the National Curriculum Framework of Reference** [3]. In this context, the development of the National Curriculum becomes a strategic direction for ensuring the quality of general education.

The National Curriculum includes competences and objectives related to intercultural education, ensuring that students are exposed to diverse cultures and perspectives through various subjects and educational activities. In fact, the curriculum represents one of the most targeted areas of intercultural development and re-dimensioning, both in terms of the written messages, formally structured to be „transmitted” but also the „hidden”, implicit ones.

In its broad form, the intercultural curriculum is not only interesting in terms of content, what is taught or learned, how it is selected, but also how it is learned, how the specific characteristics of minorities are taken into account and enhanced in teaching. And, this means the realistic and creative integration of diversity in content, materials, methods, forms of assessment, organization of teaching and learning styles etc.

In the following, we will examine how intercultural education is valued in the school curriculum, through the prism of school subjects related to different curricular areas: *Language and Communication, Socio-Humanistic Education, Mathematics and Science, Arts, Technologies, Counseling and Personal Development and Sport*.

Fig. 1. Approaching the intercultural dimension through curricular areas.



Curricular Area Language and Communication

The integrated study of *Romanian Language and Literature* [20] aims, in particular, at the formation and development of communication/linguistic competences, organically combined with the formation of reading and value competences. The intercultural dimension is emphasized in each of the components of these competences:

- Through the study of language and literature, they are centered on the image of the world and the mother tongue, factual knowledge of the country in which the language is spoken: geographical, demographic, economic, political data. *Intercultural awareness* is oriented towards the regional/territorial diversity of the Romanian language, also reflected in some artistic texts.

- *Intercultural skills* and competences consist of the ability to establish links between one's own culture and other cultures, sensitization to the notion of culture, the ability to mediate in situations of cultural misunderstandings and conflicts, the ability to overcome stereotypes.

- *The existential competences* formed through the subject reflect the set of attitudes (situating, in relation to cultural differences; thus cultivating positive otherness towards what enters, as a result of cultural contacts, into our life and our language), motivations (desire and need to communicate; an interest in other languages and in communicating with their speakers), values (ethics and morals; adequate expression of one's own identity through awareness of belonging to the linguistic community of Romanian speakers), beliefs, cognitive styles, personality traits.

The principles of selecting literary texts for study and reading offer openings in particular for the realization of values education, education for citizenship, education for democracy, global education, education for peace and tolerance, etc.

However, sometimes, in the natural and necessary intention of strengthening patriotism and appreciation for one's own culture, clearly ethnocentric attitudes are often brought to the fore, exaggerated self-glorification of our cultural background, using outdated formulas which are not convincing for today's generation.

Studying *Foreign languages* has always been a priority for the educational area of the Republic of Moldova.

The foreign language curriculum [19] is based on four major axes in the formation of the types of competences - good knowledge of the foreign language, familiarization with new cultures, connection with other subjects and acquisition of foreign language learning methods.

The variety and complexity of the subject-specific competences is fully in line with the variety and multiplicity of curricular areas of foreign language exploitation identified by the Common European Framework of Reference for Languages (CEFR): public, private, educational and the American conception of the Massachusetts Foreign Language Curriculum (MFLC): communication, culture, connection, comparison, with easy sensitization in the community.

From the perspective of the intercultural dimension, it becomes essential for our research to notice the competences formed in the field of *foreign language culture*. Thus, the emphasis is placed on the formation of:

- Socio/pluricultural competences which imply the acquisition of knowledge, skills and attitudes indispensable for orientation in the socio-cultural space of the allophone country (traditions, customs, holidays, historical, cultural personalities, etc.). This group of competences brings the learner into contact with the surrounding reality and places him/her in a multidimensional world where different races, nationalities and peoples communicate with each other, thus enhancing the universal heritage of knowledge.

The school curriculum offers a broad opportunity to promote interculturality, but success in harnessing this potential depends to a large extent on the skills and competences of teachers in bringing this content to life.

Curricular area Socio-Humanistic Education

The subject of *History* contributes to the formation and development of European and national key competences, particularly in terms of the qualities of the future democratic citizen [18]. The mission of History as a school subject is primarily oriented towards understanding one's own past and the diversity of cultural and historical traditions of the peoples of the world in order to remove prejudice and encourage tolerance between people. History gives meaning to the notion of time, space and heritage, and it is history that should lead pupils „to know and understand their own culture as well as other cultures” [23, p. 79].

Moreover, „in many countries, national history is the backbone of the entire school curriculum”. The intercultural re-dimensioning of the teaching of history is a matter of purging prejudices, stereotypes, thickened nationalist messages, and the fetishization of certain heroes. The most effective position for reporting historical facts is obviously the balanced one. Balance is also required in the selection of content, because often „history gives more space to conflicts, wars, diplomatic crises than to peace initiatives and various contributions to the legalization and improvement of the framework of international cooperation” [27, p. 41-47].

The ratio in teaching and learning content units is 50% - universal space, 45% - Romanian space and 5% - local space (region, locality, family, school). This significant proportion indicates, on the one hand, the commitment of History to integrating values, traditions and perspectives from all over the world, as studying the global context enables students to understand different cultures, develop intercultural competences and recognize the connections between them.

On the other hand, it emphasizes the importance of national identity and Romanian cultural values. Getting to know the local community, the region, the family and the school contributes to developing a sense of belonging.

By inevitably referring to other areas, populations, communities, **Geography** is a very generous field for intercultural valuing, for getting to know different spaces and cultures, for crossing borders, for discovery. Through its complexity, this discipline educates and informs, develops skills but also attitudes, crystallizes values.

Explaining specific environmental phenomena and processes at local, regional and global levels, as well as appreciating the social, civic and cultural aspects of the geographical space at local, regional and global levels are the aims of study, objectified in *the specific competences* of the Geography subject [17].

Natural phenomena and processes at local, regional and global levels have a direct impact on how different cultures and communities develop and interact with their environment. The geographical environment shapes cultural diversity and how people in different regions adapt their economic, social and civic activities to the natural resources available. This leads pupils to show respect for the ways of life of other cultures and encourages intercultural dialog based on common environmental challenges.

Moral-spiritual education, which is concerned with the formation and nurturing of the ethical and spiritual values of the individual, finds an additional dimension in the context of interculturality, where these values are applied in a global and culturally diverse setting.

The subject *Moral-Spiritual Education* [11] proposes, but does not impose, moral and spiritual values underlying national and European culture, values to which pupils should have free access and which have a formative role. This axiological frame of reference includes: general-human values (life, truth, good, etc.), national values (country, people, state symbolism, etc.); educational values established on the dimensions of education: intellectual, moral, aesthetic, physical, technological, etc; collective values: class, group of pupils, social groups, family, etc; individual values (identity, family, faith, friends, etc.).

Through intercultural education, these values become a point of connection between different cultures and civilizations. Regardless of cultural or ethnic background, moral values can function as a common language, facilitating understanding and cooperation between people from different backgrounds.

Developing students' competences for a democratic culture is also part **of Education for Society** [13], a compulsory subject which covers the curriculum area Socio-Humanistic Education. The curriculum is based on psychocentric (focusing on the pupil with his/her particularities and needs, his/her own pace of learning and development) and sociocentric (focusing on the assumption of the values of democracy, human rights, the rule of law and cultural diversity) approaches.

The Education for Society curriculum aims at a complex process of developing competences for a culture of democracy, using key concepts such as: identity, diversity and pluralism, responsibility, conflict and communication, rules and law, governance, equality, rights and freedoms, media.

The subject *Education for Society* explicitly contributes to the realization of the educational ideal by capitalizing on the European reference framework, consisting of 20 competences for a democratic culture (Council of Europe, 2016/2018), considered as subject-specific competences, conventionally grouped into 4 core components: 1) *values*; 2) *attitudes*; 3) *skills*; 4) *knowledge and critical understanding*.

What we note important for our research is that each of these components reflects and addresses the dimensions of intercultural education directly and not tangentially. Thus, within the subject, emphasis is placed on the following:

At the level of values: valuing human dignity and human rights; appreciating cultural diversity; valuing democracy, justice, equity, equality and the rule of law;

Attitudinal: openness to cultural differences and other beliefs, practices and world views; respect; tolerance of ambiguity etc.

Skills: developing empathy, cooperation skills, conflict resolution etc.

At knowledge level: knowledge and critical understanding of the world; knowledge and critical understanding of self etc.

The content of the curriculum fully promotes interculturality by promoting learning about and with other cultures, helping to reduce prejudices, combat stereotypes and develop empathy and tolerance.

Curricular area Mathematics and Science

If in the case of history or geography, opportunities for an intercultural approach are seen as easier to discover, combining the imperatives of valuing cultural diversity with the profile of subjects such as mathematics, physics or chemistry seems more difficult and certainly more novel. This is because, for example, *Mathematics* is not immediately associated with a cultural background, being universally applicable and applied.

Thus, although mathematics is taught in ethnically diverse schools, the cultural origins of the subject are often ignored, which can leave the impression - as N. White [32, p. 115] remarks - that mathematics „either fell from the sky or was invented by teachers just to complicate the lives of students”. Without clarification from educators, students might conclude that all mathematical knowledge comes from one culture. Such a misperception does not contribute to a positive attitude towards cultural diversity.

Even though *the curriculum for the Mathematics* [21] subject aims to instill values and attitudes in students, such as respecting laws, obligations, and civic responsibilities, as well as national and state-specific values; fostering open, creative thinking and a spirit of objectivity, impartiality, and tolerance, the content that would create favorable contexts for enhancing the intercultural education dimension is not reflected in the curriculum.

In other words, mathematics is rarely viewed through the lens of the cultural contributions that have supported the development of this field, with essential aspects related to the history of mathematical concepts, prominent figures in mathematics, the implicit values of mathematical language, and applications in everyday life being overlooked.

The multicultural re-dimensioning of subjects such as *Science, Biology, Chemistry and Physics* is a constant concern for many educational systems, convinced of the vulnerabilities present in this area and the need for new emphases in their theoretical and practical foundations.

By limiting these fields to certain contexts, students are given a narrow perspective on cultural influences in contemporary developments. As a result, „most students are unaware of the contributions of non-Western civilizations, such as the fact that the following inventions originated in China before being „discovered” by Europeans: the compass, magnetic induction, the steel plow, the suspension bridge, paper, fishing line, the umbrella, porcelain, chess, the mechanical clock, printing, paper money, endocrinology, the seismograph, gunpowder, and Newton’s first law” [apud 23, p. 70].

If we analyze the curriculum for these sciences through the lens of interculturality, the authors of *the Biology* curriculum, for example, emphasize the interaction between the individual and the community through *specific competencies* of the discipline:

- The competence to personally engage in activities that maintain health provides an active and responsible approach to one’s own health and that of others, involving not only individual actions but also contributions to community health. This promotes a healthy lifestyle and collaboration among individuals to create a health-friendly environment, emotional support, tolerance, and respect.

Learning *Chemistry* opens up opportunities for acquiring fundamental knowledge in this field and appreciating national/universal scientific values. Experimental investigation of the properties and production of chemical substances, as well as the study of the effects of certain chemical products and processes on

humans and the environment, highlights the necessity of ensuring personal and social security and promoting a healthy lifestyle. Teachers will create a favorable climate in lessons, open to cooperative relationships based on universal human values, mutual respect, dialogue, tolerance, tact, consensus, and empathy.

However, the scope of the content is limited to specifying the achievements of chemists from the Republic of Moldova at the national level, without extending ‘beyond’ the horizon of scientific discoveries [9].

Curricular Area Arts

The arts, as the ultimate expression of cultural creativity, play a fundamental role in intercultural approaches within schools. Due to their specificity and transnational nature, artistic manifestations contribute to building confidence in one’s own cultural traditions and identity while simultaneously affirming an individual’s belonging to a broader spiritual community.

Musical education, through its objectives and content, aims to achieve artistic education as a component of spiritual culture [12].

The specific competence of the subject - emotional participation in the musical act of interpretation, reception, and promotion of national and universal musical values - reflects interculturality. Music, as a universal form of expression, allows individuals from different cultures to connect emotionally and share common experiences.

Through this goal of *Musical Education*, students can strengthen their own cultural identity while becoming more aware of their place in a global context. This dual perspective - national and universal - is essential in intercultural education, which values both the unique characteristics of each culture and the unity among them.

Visual Arts, another compulsory school subject, serves as a tool for cultural development, sensitization, and the formation of a dialogue between the child and the world of arts. At the same time, it contributes to developing pro-active and creative capacities. Familiarization with the language of the visual arts sensitizes students to both national and universal visual culture and provides an effective opportunity for developing aesthetic feelings and the ability to perceive and express artistic-plastic messages [14].

Through *the specific competencies* of the subject - namely, the artistic perception of visual art from both national and universal cultures - students are exposed to a variety of artistic expressions that reflect different cultural identities. This helps them to understand the richness and diversity of cultures and overcome the limitations of a monocultural perspective.

Curricular Area Technologies

The subject of **Technological Education** reflects the unity of the material and spiritual world by teaching students to develop skills in creating simple and useful objects for daily life. It highlights imagination and critical thinking, offers students multiple opportunities for integration into various socio-cultural environments, and helps shape individuals as promoters of national tradition and culture [15].

The teaching and learning process in *Technological Education* is organized according to the discipline’s specific principles, which include:

- Preserving, conserving, and promoting national traditions through the research and mastery of folk artistic crafts by students, who will become future promoters of national culture.
- Fostering a positive attitude toward fundamental human activities - learning, work, and creation - seen in relation to their social functions: didactic, productive, and innovative.
- Ensuring the interaction of the educational process with external social, economic, and cultural factors.

However, after an in-depth analysis of the curricular content of *Technological Education*, it is evident that it has a strongly national focus, which may limit students’ exposure to international technological perspectives and practices.

The curriculum emphasizes national traditions and innovations, but does not sufficiently include examples or case studies from diverse global cultural and economic contexts. This limitation can reduce students’ understanding of the discipline as a globally interconnected field, potentially affecting the development of essential 21st-century intercultural competencies such as adaptability, critical thinking, and international collaboration.

Curricular Area Counseling and Personal Development

The subject of *Personal Development* is designed to include activities and experiences aimed at supporting students in the process of self-awareness, fostering healthy relationships with family, peers, and their environment. It focuses on developing effective communication skills and emotional management, all geared toward improving the quality of life by embracing contemporary societal values, helping students achieve personal aspirations and dreams in a healthy and safe living environment [10].

Upon a preliminary review of the curriculum for *Personal Development*, it becomes evident that the subject deeply incorporates the intercultural dimension.

This is reflected primarily through the discipline's objectives, especially *the specific competencies* it aims to develop (such as expressing personal identity in constructive relationships with family and others, exploring the self and social resources), *the priorities of the subject* (nurturing the student's tendency to express their identity; leveraging the student's inclination to learn from peers and act in groups) also emphasize this aspect, *the content units* (personal identity and harmonious relationships, focusing on self-awareness and acceptance, exploration, and self-evaluation of personal resources, family as a value: responsibilities, gender roles, stereotypes, assertive, non-confrontational, and non-violent communication, self-education, volunteering, etc.) reflect these values as well.

Teachers are encouraged to use a variety of *teaching methods and procedures*, such as experiential learning, reflective learning, as well as social and communicational learning. These methods promote learning through observing others, structured conversations, collaboration, and cooperation, using diverse communication approaches, thus also addressing interculturality.

In conclusion, the subject of Personal Development is designed to facilitate the understanding and acceptance of cultural diversity. It is a subject that fosters intercultural dialogue, empathy, mutual respect, and collaboration between individuals from different cultural backgrounds. Thus, the curriculum not only includes intercultural references but is also fundamentally structured around them, promoting universal values such as tolerance, social responsibility, and awareness of one's own cultural identity within the context of a multicultural society.

Curricular Area Sports

The subject of *Physical Education* contributes to the development of physical skills, the improvement of general health, and the formation of positive attitudes toward long-term physical activity, facilitating social integration and active participation in the community [16].

However, after analyzing the *Physical Education* curriculum, it is evident that there is a lack of explicit connections to intercultural education. This is reflected at both the level of curricular objectives and the content and teaching strategies employed. The curricular goals do not include objectives related to promoting cultural diversity or fostering the understanding and respect of other cultures through physical activities.

Additionally, the curriculum does not explore the intercultural potential of various sports activities or physical traditions from other cultures, which could enrich students' perspectives on global diversity. The absence of an intercultural approach in teaching and assessment strategies limits opportunities for students to learn through games and sports activities from different parts of the world, and to develop skills in cooperation, respect, and intercultural tolerance.

Conclusions

While interculturalism is not a quick solution that, once implemented, automatically transforms any attitude, school environment, or curriculum into a pluralistic one, the effort to build a school of diversity becomes a serious responsibility for practitioners. With an open and patient attitude, educators have the ability to effectively transform the school into an intercultural environment, acting as a filter that facilitates and supports all necessary changes.

In other words, it is not the differences between people, cultures, values, or lifestyles that create problems, but the wrong ways of approaching and addressing them pedagogically.

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SUSTAINABLE PROJECT BASED LEARNING – A FRAMEWORK TO DEVELOP THE PRAGMATIC ENGLISH COMMUNICATION SKILLS

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Project-based learning represents a complex approach, a sustainable and creative context that, besides benefiting the process of learning, communication and active cooperation, facilitates the development of skills. Taking into account these aspects, project-based learning is a valuable, meaningful and effective method for developing the pragmatic English communication skills of students in vocational education and training both in their professional career and personal life. Appeared at the end of the 19th century, the project-based method is still used today in teaching as a premise for the sustainable development of skills, including the pragmatic English communication skills, which is imperative in preparing students for the complex requirements of the professional career and for the integration in the personal and professional life both at national and global level.

Keywords: *pragmatic communication skills, project-based learning, English language.*

SUSTENABILITATEA ÎNVĂȚĂRII BAZATĂ PE PROIECTE – CADRU PENTRU DEZVOLTAREA COMPETENȚEI DE COMUNICARE PRAGMATICĂ ÎN LIMBA ENGLEZĂ

Învățarea bazată pe proiecte reprezintă o abordare complexă, un context sustenabil și creativ care pe lângă faptul că avantajează procesul de învățare, comunicare și cooperare activă, facilitează dezvoltarea de competențe. Luând în considerare aceste aspecte, învățarea prin proiecte este o metodă valoroasă, semnificativă și eficientă pentru dezvoltarea competenței de comunicare pragmatică în limba engleză, la elevii din învățământul profesional tehnic, atât pentru cariera profesională, cât și pentru viața personală. Apărută la sfârșitul secolului al XIX-lea, metoda proiectului este valorificată și în prezent în demersul didactic drept premisă pentru dezvoltarea sustenabilă a competențelor, inclusiv a competenței de comunicare pragmatică în limba engleză – imperativ în pregătirea elevilor pentru cerințele complexe ale carierei profesionale și pentru integrarea lor în viața personală și profesională atât la nivel național, cât și global.

Cuvinte cheie: *competențe de comunicare pragmatică, învățare bazată pe proiecte, limba engleză.*

Introduction

By definition, project-based learning is a method, an activity, which has a well-defined purpose and organizes learning in a meaningful context around different thematic activities [1, p. 93]. The introduction of project-based learning is not a new idea in education, this model has its origins in the late 19th century, when John Dewey and William Kilpatrick emphasized the importance of acquiring knowledge and developing skills through practical experience. The project-based learning transforms the traditional classroom into a student-centered learning environment, providing both environment and context for collaboration and exploration of real-life or future career-related problems.

Through the project-based method, students acquire knowledge and develop skills during an extended period of time. The students' task in the project is to investigate and answer authentic, engaging and complex questions, problems or challenges. At the end of the projects, under the guidance of teachers, students develop realistic products or presentations.

The project-based learning is an effective method of developing professional skills, involving practical and collaborative activities that allow students to apply their knowledge and skills in a real context [2, pp. 94-95].

This method is essential for the development of pragmatic English communication skills, ensuring a deep and sustainable understanding of the importance of this language. Through projects, students learn

to communicate effectively in English in pragmatic situations, such as by interacting with native speakers, including students from other countries within European projects. They develop skills of clear and coherent expression, of understanding the communicative intentions and of adapting to different professional communication contexts.

This educational approach promotes the effective transfer of knowledge and skills, especially of pragmatic English communication skills, through the active involvement of students in various practical activities. Through projects, students learn to collaborate, solve issues, and adapt to new and challenging situations. These skills are essential in a globalized world, where effective communication in English is becoming increasingly important and indispensable for the professional and personal success.

The role of the didactic approach in the project-based learning method

To develop pragmatic English communication skills for the professional career, project-based learning outlines the aspects related to the design of the didactic approach with activities relevant for the project theme, clearly defined roles for teachers and students, integration of connections in the professional context and continuous reflection on the progress in the development of pragmatic English communication skills.

The researcher Catalina Ulrich emphasizes the importance of project-based learning in the teaching approach, pointing out that „the stake is no longer to support the supremacy of cognition at individual level, but to explain how a community of generating cognitive processes can appear.” C. Ulrich highlights the fact that „in the process of developing a project, the group members exchange ideas, opinions and information, sharing their joys and discoveries. The group members do not focus on individual solutions, but on the results of the collaborative efforts. Thus, the project-based method promotes cooperative learning, where „collaborative learning involves the development of a shared understanding through interactions with others with the participants being engaged in activities dedicated to sharing common goals or solving certain issues” [4, p. 91].

Continuing with this idea, it is worth emphasizing that the project-based method significantly changes the role of the teacher and the student. The teacher no longer leads the courses in the form of traditional lectures, but becomes a flexible and motivating facilitator, interested in the project's topic. The teacher's main role is to guide and observe, helping students to solve tasks on their own. The students involved in thematic projects tend to be more engaged, better understand the content and apply it in a certain context, either professionally or personally. Therefore, it is important for the teacher to focus on the relevant design of the activities and the organization and coordination of the learning process, while the students must demonstrate the ability to use and apply the acquired knowledge and be motivated to study English for their future professional career. Thus, we ascertain that an innovative and motivating didactic approach with activities aimed at achieving this goal is necessary for the development of pragmatic English communication skills. A series of activities can be carried out in a project to support the development of pragmatic English communication skills. Such activities include as follows:

- *Debates*: Organizing debates on various topics in the English language is a great way to develop pragmatic communication skills. Students will learn to express their opinions and arguments in a coherent and persuasive way.

- *Role playing*: Students are divided into groups and assigned specific roles so that they simulate real English communication situations. This will help them understand how language can vary depending on the context and develop negotiation and persuasion skills.

- *Listening and comprehension activities*: Students are exposed to different audio or video materials in English, such as interviews, speeches or dialogues, and are encouraged to identify and interpret the pragmatic elements of communication, such as intonation, gestures or tone of voice.

- *Research projects*: Students are involved in research projects that focus on the pragmatic aspects of the English language, such as the use of the language in business environment or tourism. This will help them develop research skills and improve their ability to use language appropriately and effectively in various situations, for example related to their future professional career.

- *Activities to produce written messages*: Students are encouraged to write formal or informal letters, e-

mails or tourist itineraries in English, in order to develop their writing skills and understand the pragmatic requirements specific to these types of communication.

- *Feedback*: Students seek feedback from teachers, colleagues or native English speakers, or project partners, to identify their strengths and weaknesses in communication, using the feedback to continuously improve their skills.

The didactic approach in the project-based method, aimed at developing the pragmatic English communication skills for the professional career, outlines the following steps:

- *Identifying a relevant thematic project*: The project shall be relevant to the students' area of interest or future professional career and involve practical and collaborative activities.

- *Setting objectives*: The project objectives shall be clear, specific, measurable, accessible, relevant and time-bound.

- *Planning and organization/implementation*: The project plan shall be developed in detail and include the steps and activities required to achieve the project objectives. The teacher shall ensure the necessary resources (time, team, materials, etc.) to carry out the project successfully.

The European project, a sustainable framework for the development of pragmatic English communication of students in vocational education and training

Leveraging on the project-based learning in the context of developing pragmatic English communication skills, it is worth highlighting the essence of the European eTwinning projects implementation to achieve this objective. We consider the European eTwinning projects to be an effective way to develop the pragmatic English communication skills of students in vocational education and training, as these are implemented during a certain period of time, for example, an academic year or a semester. Thus, new horizons and opportunities are opened to students for the sustainable development of pragmatic English communication skills.

eTwinning is a program launched by the European Commission in 2007 and represents a community of teachers from pre-university institutions, including VET schools, from 44 countries. In the Republic of Moldova, the eTwinning program was launched in 2013, offering VET teachers the opportunity to implement the project-based method in light of the eTwinning projects [6].

One of the most important dimensions of eTwinning projects is the international thematic collaboration between teachers and students. Moreover, parents, economic agents, librarians and local authorities can participate in these projects. During the implementation of an eTwinning project, teachers from different disciplines collaborate and plan activities for their students to develop students' transversal and specific skills. They play an active role, interact, analyze, make decisions, respect each other and acquire skills. An eTwinning project offers dynamics to the educational approach, involving students in an interactive and friendly process of learning, international collaboration and communication in a foreign language.

The European eTwinning projects are based on five quality criteria: *pedagogical innovation, curricular integration, collaboration between partner schools, use of technology and results and documentation*.

The *pedagogical innovation* criterion implies the use of various pedagogical methods and techniques, which demonstrate originality in the project topic and active involvement of students. Students have the main role in the project: they interact with partners from abroad, work in collaboration, using different methods such as information gathering, problem solving, documentation and comparative activity. Students play different roles and, in case of vocational education and training, they are focused on the chosen specialty/field and qualification: travel agents, receptionists, technicians, cooks, etc.

The *curricular integration* criterion is based on the integration of the eTwinning project into the didactic process and project-based pedagogical framework is coherently explained and exemplified by the teaching staff. Thus, the thematic activities of the project are carried out during class hours and allow students to develop their skills according to the objectives of the didactic project.

The criterion *collaboration between partner schools* highlights the fact that the activities are performed in collaboration and are not limited to communication only. This criterion also implies that partners are not only receivers of information, as the collaborative activities shall lead to the development of a concrete

product in partnership (for example, the development of an electronic book/magazine by a transnational team of students).

The *use of technology* implies that the technology serves to help the partners achieve their pedagogical goals of the project. ICT tools help the partners collaborate better with each other. The use of ICT increases the interest in the discipline studied, is useful for mastering the material and contributes to the development of students' creative thinking, allows students to develop their digital competence, discover and expand their creative potential.

The *results and documentation quality* criterion requires project results assurance. These are presented online, through the project's virtual space, which is secure and is called TwinSpace. Thus, the students are involved through TwinSpace, in all stages of the project, from planning and implementation to evaluation and feedback. The results are recorded, including by presenting the analysis of the formative and summative evaluations that must justify the achievement of the proposed pedagogical objectives (for example, the development of transversal skills, or the skills of pragmatic communication in English, etc.). At the same time, the impact that the project had on the students and teachers involved in the project is mentioned [7].

The European eTwinning projects represent a viable, functional and sustainable framework for achieving a goal, in particular of developing the pragmatic English communication skills. In the table below, the outline of a European eTwinning project is presented, designed based on the five eTwinning quality criteria.

Table 1. The outline of an European eTwinning project.

Title	TRIP - Travelling Responsibly Inspired and Peacefully
Educational level/Field	Vocational education and Training, Tourism, Hospitality, Business, ICT
Participating countries	Republic of Moldova, Poland, Italy, Turkey, Romania
Project description	The project aims to promote and capitalize the national tourist attractions, culture and traditions. It starts with the creation of the partnership between schools, the students introduce themselves, present their institution, country and hometown. Students play the role of travel agents, exploring the tourist attractions of the participating countries. After discovering them, they promote them to the project partners through discussions, informative presentations, and communication. Also, the students are divided into 5 international mixed teams, and each team makes a tourist itinerary that represents a trip to the five partner countries. Each trip is addressed to one of these five target groups of tourists: students interested in the culture of these countries; retirees (old people); athletes practicing hiking; a family (parents and children); young art enthusiasts.
No. of students involved/age	Total number of students involved from 5 countries: 60 students/ 16-19 years old
Objectives	<ul style="list-style-type: none"> - <i>Creation of the European eTwinning educational partnership</i>: promoting the institution, the country and the hometown. - <i>Research</i>: Studying and identifying ten tourist attractions in the native country. - <i>Analysis</i>: recognizing and presenting/showing ten most important tourist attractions from the Republic of Moldova, Turkey, Poland, Italy, Romania. - <i>Valorization and promotion of tourist attractions and national traditions</i>: developing a tourist itinerary (including offers for accommodation, transport, food services). Each group of mixed students proposes to each target group of tourists, an itinerary for traveling and visiting two tourist attractions in each partner country. - <i>Communication in English and online international collaboration in asynchronous and synchronous manner through online tools</i>. - <i>Collaboration for the creation of the common product</i>: developing the e-guidebook for the five travel itineraries reflecting the visit in five countries participating in the project.

Pedagogical approaches	The project: a) contributes to the achievement of the following objectives of the „Education 2030” strategy: Effective and motivating learning environments, use of modern information and communication technologies to ensure the quality and sustainability of education; b) capitalizes on the project-based learning method; c) develops communication in English and international collaboration - the much-needed competence for professional insertion.
Curriculum integration	English language applied in tourism, semester VIII of the study program at Tourism specialty.
Collaboration	Students collaborate in mixed transnational teams, synchronously through video conferences and asynchronously through TwinSpace and web tools: padlet.com, canva.com, google drive (word, PowerPoint, forms, meet) and calameo.com. Acting as travel agents, they carry out activities and create thematic products in collaboration.
Examples of web tools used in the eTwinning project	
<p>TwinSpace: https://school-education.ec.europa.eu/en/etwinning/projects/trip-travelling-responsibly-inspired-and-peacefully/twinspace/materials,</p> <p>Padlet.com: https://padlet.com/grupa_meteo2017/let-s-get-to-know-each-other-etwinning-project-64ko8wh4k-5wo3gon; https://padlet.com/beetzanna65/my-country-my-city-my-school-czgh3ytdgctdh9ea/slideshow</p> <p>Google applications: Google Meet (online meetings link), Google PowerPoint (performing the presentations: https://docs.google.com/presentation/d/1WWQF08IuxiBL5srkVE5u4ICOpYC2v65u-jnU1u2atwI/edit?usp=sharing https://docs.google.com/presentation/d/1YTWXPBmshpesMj-O5vUzT1hy-V1UWGzBhkjUMpROItO/edit#slide=id.g275b4ff0aac_0_4</p> <p>Google Word (performing the collaborative tasks): https://docs.google.com/document/d/1_6X8Q1QLDgiz2pLH1RlkSp8HtdDO0KAI6X7THOZo9g8/edit?usp=sharing</p> <p>Google Forms and linoit.com (evaluation): https://docs.google.com/forms/d/e/1FAIpQLSfw2Z7H2MJg7yeHaAqGfMN3Fc7Aq7IAwpQ7D2--2AU3UvgLDg/viewform http://linoit.com/users/Ecologie/canvases/Final%20Evaluation_TRIP</p> <p>canva.com (creation of the presentation): https://www.canva.com/design/DAFgeW7REzo/O9RBP0cxoLz-ykuDRA46YA/edit?utm_content=DAFgeW7REzo&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton https://www.canva.com/design/DAFbOx2ta3s/AzixAFm9DR2t7OPsE93MOA/watch?utm_content=DAFbOx2ta3s&utm_campaign=designshare&utm_medium=link&utm_source=publishsharelink</p> <p>calameo.com (creation of final product): https://www.calameo.com/books/005930344b8c2ed3c70b7</p>	
Results, impact and documentation	Capitalizing on the tourist attractions of the five European countries; mastering the competence of pragmatic communication in English and international collaboration, digital and transversal skills; a partnership between VET schools from five European countries; the results are documented in the project’s TwinSpace.

Conclusion

Project-based learning is a complex and relevant method in the didactic approach, which facilitates the development of multiple skills, including the skills of pragmatic communication in English for VET stu-

dents. This approach facilitates both the acquisition of theoretical knowledge and its practical application, preparing students both for their professional careers and personal lives.

Through the development of European eTwinning projects, we highlight the sustainability of project-based learning for the development of pragmatic English communication skills. The European projects offer students a real and relevant framework to develop their pragmatic English communication competence, which will contribute to the diversification of career insertion opportunities, preparing them for the challenges and demands of the global labour market.

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VALORIZING THE INTERACTIONS BETWEEN LITERATURE AND MUSIC FROM A DIDACTIC PERSPECTIVE: A THEORETICAL-METHODOLOGICAL APPROACH

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This article focuses on the interaction between music and literature, which contributes to the formation of the child's personality and aesthetic taste, to the development of the child's aesthetic sense and literary-artistic competence, to the appreciation of beauty and quality in art. The theories of researchers in the field are analyzed, as well as the transdisciplinary approach to these two arts in middle school lessons. At the same time, the interactive teaching of literature and music is capitalized on, through the interaction of the methods used, which leads to the formation of the artistic-aesthetic culture of high school students during lessons.

Keywords: *interdisciplinarity, didactic methods, interaction, methodologies of literary-artistic education, methodologies of music education, artistic reception.*

VALORIZAREA INTERACȚIUNILOR DINTRE LITERATURĂ ȘI MUZICĂ DIN PERSPECTIVĂ DIDACTICĂ: O ABORDARE TEORETICO-METODOLOGICĂ

Acest articol se concentrează pe interacțiunea dintre muzică și literatură, care contribuie la formarea personalității și a gustului estetic al copilului, la dezvoltarea simțului estetic și a competenței literar-artistice ale copilului, la aprecierea frumosului și a calității în artă. Se analizează teoriile cercetătorilor din domeniu, precum și abordarea transdisciplinară a acestor două arte în cadrul lecțiilor din școala gimnazială. Totodată, se valorifică predarea interactivă a literaturii și muzicii, prin interacțiunea metodelor utilizate, care duce la formarea culturii artistico-estetice a elevilor de liceu, în timpul lecțiilor.

Cuvinte cheie: *interdisciplinaritate, metode didactice, interacțiune, metodologii de educație literar-artistică, metodologii de educație muzicală, recepție artistică.*

Introduction

The relationship between literature and music has been studied since ancient times because, these two forms of artistic expression were initially very close. The relationships between the musical and literary fields are complex. Literature has long been a source of legitimization in the field of music, one of the many functions of music is (from the Middle Ages to the present day) to accompany words, compositions, which are poems in every sense. This relationship is also sustained in school from the interdisciplinary perspective between music education and literary-artistic education.

Perception of music education

Music education, before it became a school subject, has evolved over time. As far back as ancient Egypt and ancient Greece, vocal singing was an integral part of certain events and performances.

From the 5th century onwards, centers of musical culture were established in monasteries, schools where children and young people were attracted and where many singers, composers, conductors and many others were trained.

The art of music developed intensively in the 18th century. In the 18th-19th centuries, it was manifested in the appearance of vast works: operas, symphonies, etc. Then, in the 20th century, the development of musical culture facilitated the opening of music schools in Romania, Russia and Ukraine.

A prestigious period of reform and conceptualization of music in the school takes place in the sec. XX. Thus, in Romania, Ana Motora-Ionescu, professor emeritus, a specialist in the field of music teaching meth-

odology, was particularly notable. She is the author of numerous works in this field, including *Music teaching methodology for grades I-VIII*. Eugenia-Maria Pașca is also renowned in the field of music education didactics, in her work she emphasizes playing, stimulating students' creativity, in her work Music education from an interdisciplinary perspective.

In Russia, Dimitry Borisovich Kabalevsky, a renowned composer, has succeeded in developing a pedagogical concept of classifying musical skills in school and perceiving music as a living art, he developed a pilot program of teaching music education in more than twenty-five schools in Russia, himself a teacher, teaching children to connect with music. Also prominent in music education in Russia is Boris Asafiev, who believes that the specifics of teaching music education are “integrative musical knowledge” and “specific musical knowledge” [3, p. 10].

In the Republic of Moldova, Ion Gagim is the one who developed the psycho-pedagogical and musicological foundations of music education. According to him, there are three stages in the formation of musical knowledge: „feeling-feeling”, „practical application in various forms (performance, audition, creation, artistic characterization)”; „theoretical awareness” [6.p. 200]. The researcher's theory includes an original system of principles, goals, contents and methodologies of music education:

- the principle of passion or affection;
- the principle of intuition (direct, living contact with the work);
- the principle of linking music education to life;
- the principle of the unity of the musical instruction, education and development of the educable;
- the principle of the pedagogical reinterpretation of music;
- principle of accessibility;
- the principle of systematization, continuity and gradualness prescribes the activity of gradual dynamic MS;
- the principle of conscious and active appropriation - prescribes unity of appropriation and comprehension [5, p. 72-84].

In the field of music education in other countries, Hungary: Z. Kodaly, who put a lot of emphasis on children's folk songs, on autochthonous, national music; Germany: K. Orff, opens the Schulwerk school of music education, at the basis of which the idea of musical, vocal-instrumental [8. p. 32].

Thus, the concept of music education has undergone a real evolution over time, and nowadays this field is prioritized, with music didactics focusing on specific principles and methods.

Didactics of the approach to music and literature from an interdisciplinary perspective

For a perfect symbiosis between literature and music it is necessary to modernize the teaching process through essential transformations both in the thinking of teachers and in teaching technology. We are therefore talking about rigorously elaborated aims and objectives, carefully chosen content and strategies, with a view to achieving a quality education system.

The development of pupils' aptitudes, interests and inclinations is an important objective of the school. As far as artistic aptitudes are concerned, aesthetic education aims both to identify them at an early age and to provide the necessary conditions and means for their development. All children, with minor exceptions, are able to listen to music, recite, draw or dance, but not all of them perform these activities to the same degree, and there are obvious qualitative differences between them. It is the role of the teacher to recognize these differences and to provide the right framework for the development of all kinds of aptitudes: musical, literary, choreographic, artistic, etc., and, in the case of pupils who show particular talent, they should be guided towards special art schools, towards a future artistic career. Knowledge of these differences and of the pupils' artistic potential is indispensable for the development of aesthetic education in schools.

The whole range of interdisciplinary activities has numerous formative values. We can thus ensure the harmonious intellectual, social, emotional, physical and aesthetic development of the child, cultivate self-confidence, but also develop a spirit of competition. Given that the teaching subjects do not deal with a closed subject area, but that certain interactions can be established between them, we can talk of interdisciplinarity in the teaching-learning process. The promotion of interdisciplinary teaching can be addressed at curriculum, syllabus, textbook and teaching activity level.

The concept of interdisciplinarity has been defined in the Explanatory Dictionary as „the transfer of concepts and methodology from one discipline to another in order to allow research problems to be adequately addressed” [4, p. 498]. In the Dictionary of Neologisms by F. Marcu and C. Manea the term interdisciplinarity is defined as „the establishment of relationships between several disciplines or sciences” [17, p. 2], and Sorin Cristea is of the opinion that interdisciplinarity is the set of relationships and interactions between different contents and messages employed at the level of a didactic approach with a relevant purpose in the development of the student’s personality” [2, p. 240].

In such a complex approach, interdisciplinarity presupposes a rich culture in many areas of the teacher; but also a serious and faithful team work

An interdisciplinary approach to content requires a SWOT analysis in which the strengths or advantages are multiple:

- enables the pupil to assimilate information that can be fixed and developed in later years;
- uncovers unfamiliar elements of the topic proposed to be learned;
- the languages of the different subjects can be correlated;
- the knowledge acquired is applied in practice;
- the amount of knowledge learned and the amount of learning can lead to time savings.

In addition to these, there are the advantages of shaping the learner’s personality at various levels: intellectual, emotional, social, aesthetic and physical. Interdisciplinary teaching can be designed and linked into the National Curriculum at school; in practice, an interdisciplinary teaching pathway can also be developed within the curriculum at the school’s discretion, through the teaching projects and educational projects proposed.

The didactic activities that each teacher proposes and chooses carefully and painstakingly and are emphasized by didactic videos, worksheets, games, boards that lead to the learning of the lesson addressing several areas. In secondary school, aesthetic education can be realized through all school subjects, but their contribution is different. It depends on the specifics and content of the subject matter, as well as the teacher’s willingness to capitalize on the beautiful in any content taught.

Making the most of the interaction between literature and music in school is achieved through an interdisciplinary approach to these two areas. It is the Romanian language and literature as well as music education teachers who can pass on certain knowledge to their pupils in the classroom so that it can be applied in the practice of receiving - interpreting - evaluating works of art and in specific practical activities: singing, music, reading, storytelling, etc.

Elementary knowledge of music or literature has its place in order to be able to receive the message conveyed by the work itself. Between the language of literature and the language of music there are many common components with mutual significance. There are common elements such as: theme, subject, artistic idea, character, phrase, rhyme, rhyme, stress, intensity, artistic content, image, motif, etc..

An important place is given to Vladimir Babi’s conception in the context of the efficiency of the student’s musical behavior [1. p. 19]. Among the most important aspects of the problem of artistic-aesthetic education of contemporary man is the interaction of the arts in general and the interaction of literature and the arts in particular, the educational effectiveness of which can be increased in the conditions of a scientifically grounded methodological approach in such a way that artistic sensitivity does not degenerate into the decibels of concerts in the big squares of the cities and the refusal to read, but to provide each receiver of music and each reader of literature with the aesthetic state of well-being - the state of singing, as I. Gagim [6, p. 56] and the state of reading, as Vl. Pâslaru [12, p. 46].

Vl. Pâslaru mentions that, in fact, the artistic-aesthetic culture is not obtained only through the influence of educational contents on the educable (literary and musical works, elements of literary theory and musicology). It implies an effort to change the object of knowledge and, in connection with this activity, the subject of cultural action, which is why the action of cultivation is accompanied by „the triggering of the mechanism of needs and necessities: the educable cannot effectively cultivate himself artistically-aesthetically without the need for this type of culture, and the latter can only be formed and developed out of the need (the conscious need) to carry out in a certain way, that is, through a methodology, the activity of cultivation” [13, p. 54].

The concern of teachers and researchers has always revolved around the methodologies of instruction/education and not by chance, but due to the fact that methodologies are the only components of the curriculum that realize a practical link between all its components, on the one hand, and due to the central role of the teacher in the effective realization of the instructional-educational process. In recent decades, theoretical and applied research has been carried out on the definition, classification and optimization of general pedagogical methodologies, interactive teaching methods and techniques. From the perspective of formative education, centered on the person of the educated, special attention is paid to interactive methods of teaching-learning-evaluation, including literature and music, active-interactive-creative methods do not present a solution for modernization of education, but the very methodological essence of artistic-aesthetic education, because, by their very nature (the principles of artistic creation-reception), literature and the arts cannot be approached in any other way than by active-interactive-creative methods, since artistic knowledge is by definition a knowledge of recreating the object of research and of the concomitant formation-development of the subject of research. In the case of literature and music, we can say that the definition-structuring of methodologies specific to literature and the arts is part of the didactics of the arts and not a reorientation of these disciplines towards interactive methods.

When designing-applying methods specific to literature and music, no new methods are examined, but combinations of known methods (methodologies), traditional and modern, or even interactive teaching-learning strategies of literature and music. Since things are given to human cognition by their form, literature-music interactions in the educational process should be centered on preparing students to know, understand, apply and integrate the elements of musical language - literary-artistic language. Designing the realization of this objective requires the application of a strategy focused on the system of communicative actions (because literature and art are artistic-aesthetic communication), such as:

- teleology-methodology strategic component: correlation of the objectives of musical and literary communication competence training with the methods and communicative procedures/techniques general and specific to musical-artistic and literary-artistic activities;
- the educational process component: establishing the way and sequences of application of musical-literary-artistic communication methods;
- School evaluation component: validation of the indicators of the effectiveness of the benchmarks of the musical-literary-artistic communication methodology in the ELA-EM process. The active-creative methods used are not aimed at separating students into groups and applying such methods, but start from:
 - specific skills;
 - the specifics of the literary work or musical work);
 - the age of the pupils;
 - the personality of the teacher
 - means of learning;
 - other pedagogical conditions (social environment, educational environment, outside time, etc.) [5].

The problem of the methods applied in the process of literary-artistic education, that of the interaction between music and literature, has been studied by several researchers. Thus, C. Parfene, [10, p. 24-27] insisted, in particular, on communication, conversation (heuristic and kathietic), linguistic analysis, learning by discovery, problematization, demonstration, demonstration, exercise, programmed instruction, textbook work, literary analysis, exposition, school lecture, storytelling, brainstorming.

C. Șchiopu also calls for a series of semiotic, hermeneutic, praxeological methods, such as linguistic analysis, learning through discovery, problematization, demonstration, role-playing, literary commentary, simulated encounters with the characters of the work [15. p. 28-35]. According to T. Gînju, the methods that can be applied in the case of the interaction of the two disciplines are: reading the literary text, narration, exposition, conversation, oral communication, written communication, exploration, didactic observation, questionnaire, case study, cube method, etc. [8].

Researchers M. Tetelea, V. Crișciuc, [16, p. 14-16] consider the Lotus method, stimulation, modeling, role-playing, emotional-affective strategies quite appropriate for music education. In this context, we also mention vocal-choral/instrumental interpretation, improvisation/composition, musical games, rhythmic movements,

demonstration, systematization, description, learning through research, which Vl. Babii [1, p. 95-103], the method of emotional action, the method of emotional dramaturgy, the method of stimulating the imagination, the method of artistic reinterpretation of music, the method of poetic characterization of music, the method of likening and contrasting, the method of musical play, stipulated in the disciplinary curriculum, as well as music listening (reception), vocal (choral), instrumental performance, music characterization, elementary musical creation, musical-didactic play, exercise, working with the textbook, comparison.

In M. Morari's opinion, in music education lessons, objective-direct methods (questioning, interview, discussion, extemporal, control work), intuitive-indirect (observation, investigation, project, portfolio), composing, improvisation, music making, interpretation, creation, verbal characterization, music listening, reading game-musical writing, solfege dramatization can be used [9, p. 58].

Of all these methods, only the dramaturgical development of artistic discourse is a specific method of artistic-aesthetic education, the others can be applied, on certain sequences of the instructional-educational process, depending on the proposed operational objectives. In the specialized literature there are no delimited methodological concepts of teaching-learning-assessment as an act of communication centered on teacher-pupil interaction. In teaching music education the most effective are communication-based technologies (procedures) represented by active teaching methods. Thus, most students' expressions contain metaphors and other figures of speech, and these, as artistic images, are easily modifiable, which is why they are subject to musicological and artistic analysis.

In order to develop literary-artistic-musical competences, it is necessary that pupils who come into contact with the literary text and the melody receive and understand their message. This is the only way for them to express their feelings and emotional experiences. Any song with a literary text requires careful reading, explanation and interpretation. The lyrics, set to music, awaken artistic sensitivity. In both literature and music classes, all skills and abilities are formed through repeated practice.

It takes a lot of practice to be able to formulate statements, to analyze words, to develop the ability to interpret, receive and use elements of musical language. As with literature and music, reading about composers, musical periods and artistic trends is used.

In music education lessons, heuristic strategies are often used, through which students discover new meanings, find answers to questions, to some problems (discovery learning, heuristic conversation, case study, interactive listening. It should also be emphasized the strategies based on action methods, such as role-playing, dramatization, didactic games, etc. All these methods are common to both the subject of Romanian language and literature and music education.

Guided by all the above aspects, I realized a music education lesson in 5th grade. The learning unit was „Elements of folklore and the relation of music to the cultural context”, for the theme Music and the history of Romanians. For this theme we studied the song „Romanian language”, lyrics by George Sion, music by Ioan Cartu. For this lesson we followed at music education course:

General skills:

1. Expressing ideas, feelings, attitudes through the performance of musical works
2. Working with elements of writing-reading and musical language
3. Appreciation of musical works, including their emotional, attitudinal and ideational content

4. Specific skills:

- 1.1. Vocal interpretation of monodic pieces
- 2.1. Use pitch notation in reading and writing fragments of pieces in C major and A minor
- 2.2. Use durations (notes and rests) notation in simple musical fragments
- 3.1. Describe the moods and ideas generated by listening to musical works.

Analyzing the specific competences to be pursued in a Romanian language class, we considered the following appropriate for this lesson:

a) Oral presentation, based on cues given by the teacher, of information and ideas, expressing opinions, emotions and feelings by participating in discussions on familiar topics, topics of interest or starting from the texts listened to /read;

b) Identify important information in literary and non-literary, continuous, discontinuous and multimodal texts;

c) Use language competence in relation to logical/analogical thinking in lifelong learning;

d) Identifying cultural values promoted in the texts of Romanian authors from different historical periods.

The methods used in this lesson are ones that apply to both the Romanian and music education classes:

- Conversation: they discuss the authors, the historical context in which the lyrics were written, what the lyrics convey when they read them, what they feel when they sing them, they emphasize that in the Republic of Moldova, this song is the national anthem of the country;

- Explanatory reading and linguistic analysis: reading the lines of the poem, explaining some expressions, their meaning (metaphors, comparisons);

- Exercises: exercises in diction, rhythmic pronunciation of words, warming up the voice;

- Memorization: it is necessary to memorize the lyrics of the song in order to perform it on other occasions;

- Expressing their own opinions: pupils are asked to express their opinion, whether they think the music suits the lyrics, whether they think another genre would have been suitable etc.

In **conclusion**, the interaction between music and literature contributes to the formation of the child's personality and aesthetic taste, to the development of the child's aesthetic sense and literary-artistic competence, appreciation of beauty and quality in art.

The interactive teaching of literature and music, through the interaction of the methods used, leads to the formation of the artistic-aesthetic culture of secondary school pupils.

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DEFINING ASPECTS OF ADULT MOTIVATION FOR LEARNING IN THE CONTEXT OF LIFELONG LEARNING

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Motivation has been considered from the perspective of psychodynamic orientation as a stimulation and discharge of energy; associated from the behaviourist approach to a stimulus, as a learned reaction; seen as a psychological factor influencing behaviour. Motivation as an influencing factor in lifelong learning tendencies and as a landmark in the lifelong learning process is gaining momentum in today's society, becoming increasingly common among both researchers and educational institutions.

While the education of school pupils has long been the main focus of educational institutions, the importance of adult education is now becoming increasingly apparent. It is widely recognized that adult education plays a crucial role in promoting a prosperous society. Consequently, the relevance of adult education and the factors that motivate adults to learn are increasingly important.

Keywords: *motivation, adult motivation, adult motivation, adult motivation for learning, learning.*

ASPECTE DEFINITORII ALE MOTIVAȚIEI ADULȚILOR PENTRU ÎNVĂȚARE ÎN CONTEXTUL ÎNVĂȚĂRII PE TOT PĂRCURSUȘUL VIEȚII

Motivația a fost considerată din perspectiva orientării psihodinamice ca o stimulare și descărcare de energie; asociată prin prisma abordării behavioriste unui stimul, ca o reacție învățată; văzută ca un factor psihologic ce influențează comportamentul. Motivația ca factor de influență în tendințele învățării pe tot parcursul vieții fiind un punct de reper în procesul de formare continuă capătă amploare în societatea actuală, devenind tot mai des întâlnit în rândul atât a cercetătorilor cât și a instituțiilor de învățământ.

În timp ce educația elevilor a fost mult timp obiectivul principal al instituțiilor de învățământ, importanța educației adulților devine acum tot mai evidentă. Este larg recunoscut faptul că educația adulților joacă un rol crucial în promovarea unei societăți prospere. În consecință, relevanța educației adulților și factorii care îi motivează pe adulți să învețe sunt tot mai importante.

Cuvinte-cheie: *motivație, motivația adultului, motivația adulților pentru învățare, învățare.*

Introduction

Motivation has been considered from the perspective of psychodynamic orientation as a stimulation and discharge of energy; associated from the behaviourist approach to a stimulus, as a learned reaction; seen as a psychological factor influencing behaviour; interpreted as a spontaneous activity that energizes the organism and explains the transition from a state of rest to a state of action. Motivation has been studied within the Darwinian model of adaptation, the homeostasis model, the physical model of energy discharge promulgated by Freud, cognitive models that substitute motivation for cognitive anticipation processes (human behaviours being determined by expected outcomes).

Basic content

Golu M. mentions in his book „Fundamentele psihologiei” that motivation „appears as an external causality transposed internally: if the object corresponding to the satisfaction of a need is missing and, therefore, has no way to trigger the corresponding behaviour, its place is taken by the state of need in relation to it, spontaneously actualized, following physiological or psychological changes [1].

Sillamy, in turn, considers motivation to be „the assembly of dynamic factors that determine an individual's conduct, or the totality of the internal motives of conduct, whether innate or acquired, conscious or unconscious, simple physiological urges or abstract ideals” [2].

Motivation plays a crucial role in supporting and promoting learning. However, it is essential to understand that motivation can be positive or negative. Negative incentives, such as exploiting the fear of failure, can have long-term effects on motivation due to their association with stress and prevention of negative outcomes. This is true for both children and adults, where negative stimuli should be avoided to promote effective learning. In addition, it is important to recognize that not all types of motivation work for everyone. Different people respond to different motivations. By understanding what motivates us, we can train our thinking to be more productive.

Motivation can be conceptualized as encompassing three key dimensions: direction, intensity and persistence.

1. The direction of motivation refers to the individual's achievement of a specific goal. In general, it is of interest how individuals approach a task, whether or not the task is ultimately accomplished. Some individuals may inadvertently direct their efforts, expending energy without achieving the desired results. Conversely, some individuals may direct their energy in exactly the desired direction with minimal effort.

2. The term 'motivational intensity' is used to describe the level of effort that an individual is willing to exert to achieve a particular goal. Some goals require a lower level of motivation, while others require more effort.

3. The term 'persistence' is used to describe the duration of motivation. Some individuals are capable of self-motivation for relatively short periods, while others can maintain motivation for long periods.

The studies on the topic of motivation are involving understanding individual needs and interests. Needs, which are biologically determined, play a major role in determining behaviour, according to authors such as A. Maslow. Interests, on the other hand, are more refined and represent specific orientations towards areas of knowledge. Interests, on the other hand, have a strong emotional component and greatly influence human activity and knowledge acquisition. For example, an interest in a discipline may be driven by curiosity and a desire for theoretical knowledge. Alternatively, when emotions are more involved, there may even be a desire to pursue a particular profession related to the expressed interests. In summary, *needs* and *interests* are key components in understanding motivation, with needs being the main determinants of behaviour and interests shaping the direction of human activity and knowledge acquisition.

Motivation for learning is a vital aspect of human motivation and encompasses the factors that motivate individuals to engage in learning. In the context of education, motivation can be viewed in three different ways. First, it acts as a catalyst or influencing factor that pushes learners towards the act of learning. Secondly, motivation serves as a means of engagement and support during the learning process. Finally, it can also be seen as an outcome or product of learning, reflecting a state of harmony with educational goals. These different dimensions of motivation interact and create a dynamic process of motivating learning. Motivation facilitates learning by helping learners to focus their attention and achieve a state of intellectual readiness, as well as to sustain their energy and maintain an optimal level of activation for effective learning. In addition, motivation may also be influenced by the act of learning itself, emphasizing the importance of understanding the effects and outcomes of learning in inspiring further learning. This dual role of motivation underlines the need for teachers to be aware of the diversity of motivational factors at play in learners' activities.

In 1954, the American psychologist Abraham Maslow (1908-1970) developed a theory that equated motivation with needs. Maslow's theory, which he called the hierarchy of needs, is based on the premise that human motivation is determined by a hierarchy of needs, with lower-level needs being the primary motivators. The fundamental premise of this theory is that every human being progresses along a motivational ladder as he or she satisfies needs, from the lowest to the highest level. The hierarchy is described as follows:

1. The primary objective is to meet the physiological needs of the human organism, including the basic requirements for food, shelter and warmth.

2. Security needs (the need to have a family, a home).

3. Emotional and social needs related to belonging to various social groups and maintaining social relationships with people.

4. The need for social esteem and recognition, which is satisfied by acquiring skills and obtaining a certain social position.

5. Intellectual, knowledge and understanding needs, which arise as a result of satisfying the esteem of others;

6. Aesthetic needs, which concern the need for beauty and order;

7. Needs for self-actualization and personal achievement, the individual potential, the last level of Maslow's hierarchy, the last level of the ladder, the one most people reach.

Maslow's theory postulates an order of satisfaction of these needs, according to which the individual will act to satisfy physiological needs before seeking security, security needs before affective and belonging needs, and so on. In addition, the higher a need is in the pyramid, the more specific it is to human nature and the greater the fulfilment derived from its satisfaction. However, it should be noted that not all individuals are able to satisfy their intellectual needs or needs for fulfilment and self-actualization.

According to this theory, we can assume that the trainer must ensure that higher-order needs are not activated at the expense of the trainees' basic needs and desires, including those related to intellectual and cognitive development, performance and emotional well-being. These basic needs and wants, which are essential for optimal functioning, include physical comfort, physical security and emotional needs such as love, appreciation and high self-esteem. The learning environment should be characterized by a feeling of friendship and mutual respect, free from any intimidation or undue pressure. In addition, the trainer can help the trainee to develop confidence in his or her own abilities, thus promoting high self-esteem.

Motivation in adult learning

The concept of lifelong learning is based on the notion of a synthetic model for motivating adults to engage in learning activities. This model is developed based on a synthesis of the general principles of learning, the distinctive physiological and psychosocial characteristics of the adult, social requirements and managerial perspectives on work.

The learning process is a lifelong effort that takes place throughout an individual's life. It involves interacting with the environment and assimilating knowledge from it. Learning comes naturally to humans; the desire to explore and assimilate new information is a fundamental aspect of human nature. One of the most recent leading theories in motivation studies, self-determination theory, is based on the assumption that the inclination to be curious about the environment and to be interested in learning and expanding one's knowledge are intrinsic characteristics of human nature. However, in most learning contexts, particularly those involving groups, external control mechanisms are introduced which have the potential to undermine the psychological processes involved in deep and quality learning. Findings from numerous studies support the idea that circumstances that favour individuals' experiences of autonomy, competence (performance), and interpersonal relationships lead to the highest levels of motivation and sustained engagement in learning, including self-directed learning, academic performance improvement efforts, sustained learning, creativity, and well-being.

The learning process in adulthood reflects a situation of restructuring and reorganization, its motivation being much more complex than that of the schoolchild. This process leads to a continuous transformation of ideas, accumulation of new knowledge, independence in the process of structured, logic-based thinking.

The adult has well-formed psychological processes and makes more complex emotional associations with facts, assumes responsibility for the quality of knowledge acquisition and knows exactly what he/she wants to learn or know. It is motivated by intrinsic needs or desires. In general, the adult learner participates in training programs because he or she wants or needs the information content in order to do his or her job or to develop personally.

Adult learning is defined as a process that is:

- directed by the adult learner;
- responsive to newly identified needs;
- participatory;
- experiential;
- reflective;
- provides feedback.

Effective adult learning processes are characterized by

- individualization of the learning process;
- a psychological climate of mutual trust;
- expression of points of view;
- associating new knowledge with previous experiences;
- sharing experiences.

Adult learning is often perceived as a painful and challenging experience, both mentally and physically. Many adults resist learning because of the difficulties and changes involved. However, it is beneficial to place adults in supportive learning groups where they can collaborate and work at their own pace. This approach allows them to gain confidence in their abilities and develop an appetite for learning. The key to understanding how adults learn is to consider their roles, tasks and circumstances. Viviane de Landsheere suggests combining work and learning to create a unified approach. Adults should take responsibility for their own learning and be willing to plan and extend their knowledge. They should also be able to overcome obstacles, assess their skills and strive to progress. By creating a stimulating learning environment, adults can successfully engage in research and discovery.

A survey of 12,000 subjects in different countries, conducted by Boshier and Collins in 1983, led to the identification of six motivating factors for lifelong learning:

1. The need to establish new social contacts, to enter into relationships with others, to secure favourable status, to shine socially.
2. The desire to progress professionally.
3. The aspiration to escape from routine, to exchange ideas, to have fun, to enter interesting occupations.
4. Eagerness to increase one's qualifications, to perform useful activities for the community.
5. The desire to respond favourably to social expectations formulated by hierarchical superiors, counselors, friends, professional associations.
6. Personal interest, curiosity, the need to broaden spiritual horizons.

In his paper „Cum învață adulții”, Kidd [3] states that adult learning is a „struggle”, emphasizing the active role of the individual in the learning process. Rather than passively receiving knowledge or skills, the adult learner actively seeks, discovers, establishes, and acquires these skills. They are driven by the desire to achieve a specific outcome, which they pursue through a process of action and acquisition. The above verbs indicate an active approach to learning. Consequently, adult learning cannot be defined as the mere accumulation of knowledge; rather, it involves a process of reorganizing or restructuring (in some cases, just reorganizing) existing knowledge.

Conclusions

Thus, we can **conclude** that motivation is a complex force that affects human behaviour, especially in learning. It has dimensions like direction, intensity, and persistence, which are influenced by individual needs and interests. Maslow's hierarchy of needs shows that motivation evolves as basic needs are fulfilled, leading to higher-level needs. Understanding the factors behind motivation is crucial for creating effective learning environments. For adults, motivation to learn is often intrinsic, driven by personal development goals and practical needs. Adult learning differs from children's learning, as adults are more independent and self-directed, with a deeper emotional connection to the material. Adults approach learning with a clear purpose, balancing personal, professional, and social demands. However, if lower-level needs are not met, motivation can be hindered. Therefore, it is important to create supportive and emotionally safe learning environments that address the full range of needs.

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THE ADVANTAGES OF THE DIFFERENT LECTURE APPROACH OPTIONS

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The lecture is part of the group of methods of communication and acquisition of socio-human values, which includes two subgroups: a. expository methods (where the school lecture and the university lecture are included) and b. interactive-interrogative, conversational, dialogue methods (the seminar, the debates, the seminar-debate, „round table-type” debate, discussion-dialogue etc.). Depending on certain criteria, such as the teaching period, the specifics of the specialized discipline, etc., the lecture can be carried out in different forms: master lecture, dialogue/debate or discussion lecture, lecture with demonstrations and applications, etc.

The paper presents the advantages of the following types of lecturing: lecturing using discussion scales, Curran-type lecturing, lecturing using discussion groups, and lecturing based on key words and phrases.

The results of a questionnaire on the advantages of the lecture will be presented, a questionnaire applied to master's students from psycho-pedagogical training courses (Level II).

Keywords: *the lecture, university lecture variants, lecture, expository methods, interactive methods.*

AVANTAJELE DIFERITELOR OPTIUNI DE ABORDARE A PRELELOR

Prelegerea se înscrie în grupul de metode de comunicare și însușire a valorilor socio-umane, care cuprinde două subgrupe: a. metode expozitive (unde sunt incluse prelegerea școlară și prelegerea universitară) și b. metode interactiv-interogative, conversaționale, de dialog (seminarul, dezbaterile, seminarul-dezbateri, dezbateri „de tip masă rotundă”, discuție-dialog etc.) În funcție de anumite criterii, precum perioada de predare, specificul cursului, disciplina de specialitate etc., prelegerea se poate desfășura sub diferite forme: prelegere magistrală, prelegere dialog/dezbateri sau discuție, prelegere cu demonstrații și aplicații etc.

Lucrarea prezintă avantajele următoarelor tipuri de prelegeri: prelegeri folosind scale de discuție, cursuri de tip Curran, prelegeri folosind grupuri de discuții și prelegeri bazate pe cuvinte și fraze cheie.

Se vor prezenta rezultatele unui chestionar cu privire la avantajele prelegerii, un chestionar aplicat masteranzilor de la cursurile de formare psihopedagogică (Nivel II).

Cuvinte-cheie: *cursul, variantele cursului universitar, prelegere, metode expozitive, metode interactive.*

Some general considerations regarding the advantages of different approaches to the lecture

Lecture (lb. latin *lege – ere* = to read, *pre* = in front of someone), originally meaning to read in front of an audience. It is an established form of exposure, especially in higher education.

The lecture is a way of pre-elaborated exposition of information from a certain field (ideas, theories, concepts) through:

- the logical chaining of reasonings;
- detailed confrontations and arguments;
- the systematization of factual material around a theme or main idea;
- multilateral analyzes and re-evaluation of the complex links between objects and phenomena.

Method efficiency requirements:

- the content of the presentation must be well systematized, structured, have a logical construction, address the students' thinking and imagination;

- be interesting and attractive, accompanied by examples, rhetorical or non-rhetorical questions, and form an active reception, use the means of non-verbal and paraverbal communication, with variations in the intensity of the rhythm and tonality of speech and the use of the possibilities offered by mimicry and gestures [1; 11].

Table 1. The advantages of some lecture options [3; 8; 14].

Some lecture options	Advantages
1	2
<i>Lecture using discussion scales</i>	<ul style="list-style-type: none"> - the beginning stage focuses students' attention on course topics, giving them the opportunity to review their information and opinions on a certain topic; - the lecture will be followed much more relaxed, the students being already familiar with the ideas that will be presented; - the tickets given to the students remain in their possession, they having the possibility to use them as a starting point for the recapitulation of the respective course; - debates are a sure source of student motivation.
<i>Curran type lecture</i>	<ul style="list-style-type: none"> - students participate in a double exposure of information; - attention to students is maintained; - an immediate feed-back is made for the teacher, knowing where to insist and explain again.
<i>Lecture using discussion groups</i>	<ul style="list-style-type: none"> - offers the possibility of a better understanding of the content; - forming a creative interaction within the student group.
<i>Lecture starting from key words and phrases</i>	<ul style="list-style-type: none"> - emphasis is placed on activating students through involvement in the learning process; - familiarization with key concepts and phrases to be presented; - during the course, the degree of involvement and attention of the students increases.

The results of a questionnaire regarding the advantages of different approaches to the lecture

We will present the results of a questionnaire administered to master's students from the Psycho-pedagogical Training Courses (Level II) from the University of Oradea (Romania), from the Faculty of Sciences, the Faculty of Medicine and Pharmacy and the Faculty of Environmental Protection. The questionnaire aimed to capture the opinion of the master's students from these faculties regarding their own opinion of the different lecture options used in the teaching of university courses.

The indirect survey/ in writing/ by self-completion (self-administration) of the questionnaire was used. After the necessity of applying the questionnaire was motivated to the subjects, the necessary clarifications and recommendations were made regarding the way to complete the questionnaire, insisting on the importance of sincerity and honesty with which the answers are given. Their honest opinion can contribute to a conclusive research on the efficiency of the instructional-educational process in higher education.

The main objective is to x-ray the existing situation at the level of the educational reality regarding the possession of some information regarding the advantages of different approaches to the lecture in the teaching of university courses.

The sample of subjects was represented by a batch of 60 master's students.

Table 2. Composition of the sample to which the questionnaire was administered.

The sample (no. master's students)	Faculty
1	2
1. 30 master students	Faculty of Medicine and Pharmacy - UO
2. 18 master students	Faculty of Sciences - UO
3. 12 master students	Faculty of Environmental Protection - UO

Acronym: UO – University of Oradea

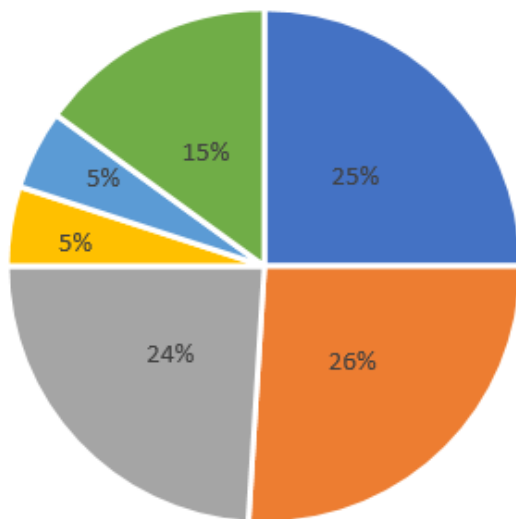
The wording of the questions was in accordance with the topic we addressed. The questionnaire has a number of 5 questions, being administered in a single meeting, the time allocated being approximately 1 hour. The reason why these items predominate is to offer open answers and freedom of expression regarding the probing of some aspects with open answers in the issue related to the different approaches to the lecture in the teaching of university courses.

Interpretation of answers

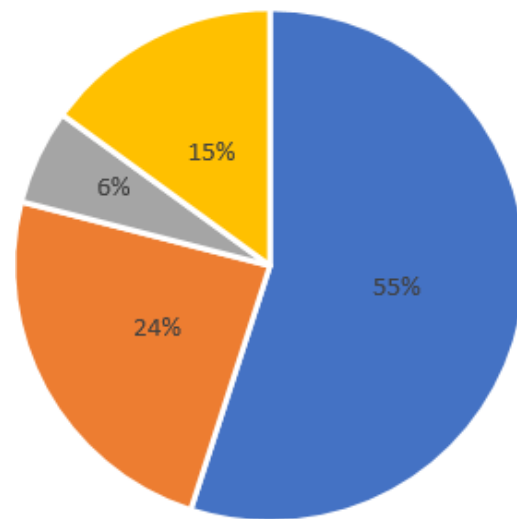
Item 1, where the respondents answered as follows:

- in courses: roughly similar percentages for the debate-lecture variants (25%), lecture combined with conversation (26%), lecture combined with problem solving (24%); monologue lecture (5%), transmission of ready-made and dictated information (5%); the remaining 15% refers to the use of other types of lecture: Curran lecture, lecture starting from key words and phrases, lecture using discussion scales.

- at seminars, the percentage order is: providing examples, emphasizing the practical applicability of knowledge (55%); encouraging students to ask questions (24%); bibliography recommendation (6%); 15% other ways, Curran lecture, lecture starting from key words and phrases, lecture using discussion scales and non-formal activities are suggested.



- ▣ debate lecture
- ▣ lecture with conversation
- ▣ lecture with problem solving
- ▣ ready made and dictated info
- ▣ monologue lecture
- ▣ other types of lecture



- ▣ emphasizing practical applicability of knowledge
- ▣ encouraging students to ask questions
- ▣ bibliography recommendation
- ▣ other ways

The second item regarding the ranking of the approach to different lecture variations in university courses, using a scale from 1 to 5 (where 1 – the most frequent situation to 5 – the least frequent situation), the students' opinions are presented as follows:

In ascending order, respondents' answers are listed below.

1. lecture using focus groups
2. the lecture starting from key words and phrases
3. lecture using discussion scales
4. the Curran lecture
5. others (specify which)

Courses: teaching in teams of teachers, special guests from various fields, courses also held outside the classrooms (library, museums, other school units outside universities etc.), participation in book launches, symposia, conferences, dinners - round.

The third item, which refers to the expression on a scale from 1 to 5 (where 1 represents the minimum value and 5 the maximum value) of the consistency and quality of the exchange of ideas between students

and teachers: 10% of respondents answered with a value of 3, and 45% respondents chose value 4 and 35% value 5. Non-responses were 10%.

1/ 2/ 10% 3/ 45% 4/ 35% 5

In item four, the respondents appreciate the diversification of different lecture options used in the teaching of courses in the field of Educational Sciences, appreciate the use of computerization, a recent bibliography. The practical-applicative character of the courses and seminars, the teaching from an interdisciplinary and transdisciplinary perspective, the provision of course materials, the launching of challenges in the field of education, the themes of reflection and self-reflection are other appreciations of the students.

Item 5. As topics of the Didactics course and developments in the didactics of the specialty, we note the concern of some topics regarding university Didactics (Trends and orientations in Didactics in general, in university Didactics in particular, lecture options etc.); the „new educations” related to the field (health education, nutritional education, ecological education; non-formal activities; teaching in teacher teams; methods of activating pupils/students, etc.

Conclusions

Currently, within a modern university education, the emphasis is on the use of methods centered on learning and not on teaching. Active learning emphasizes engagement, encouraging students to take greater responsibility for their own learning and progress.

The priorities and modernization directions of the university lecture should be customized according to the specialized discipline, according to the course and seminar. Here are a few: ensuring the dynamic and open nature of lecture types in accordance with the modern vision of teaching activities; diversifying the use of various types of lectures, in order to build diversified learning situations; emphasizing the formative character of the lecture, its contribution to shaping the entire personality of the students, promoting some types of active and interactive lectures that will transform the students into co-participants in the construction of their own knowledge, in their own training and education; imparting a heuristic character to the lecture, so that students are trained in search, investigation, research activities and achieve heuristic learning through discovery and problematization, to deepen learning through the use of an extensive bibliography; training students, but also teaching staff, by participating in research projects, symposia, scientific sessions and conferences and various non-formal activities.

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ANNEX

Name and surname:

Faculty:

QUESTIONNAIRE

This questionnaire aims to capture the opinion of students from the University of Oradea, Level II, regarding the course and seminar activities. In this regard, please read the following questions and answer each question honestly.

Your open opinion can contribute to a conclusive research on the efficiency of the instructional-educational process in higher education.

Thank you for your cooperation!

1. In most cases, in courses and seminars it is used (rank the answers below, by numbers from 1 – the most frequent situation to 6 – the least frequent situation):

Courses

- transmission of ready made and dictated information
- monologue lecture
- debate lecture
- lecture combined with conversation
- lecture combined with problematization
- other (specify which)

Seminars

- encouraging students to ask questions
- providing examples
- bibliography recommendation
- insisting on more difficult parts
- emphasizing the practical applicability of knowledge
- other (specify which)

Courses _____

Seminars _____

2. In most cases, the following approaches to the lecture are used in the courses (rank the answers below, by numbers from 1 – the most frequent situation to 5 – the least frequent situation):

Courses

- lecture using discussion scales
- the Curran lecture
- lecture using discussion groups
- the lecture starting from key words and phrases
- other (specify which)

Courses _____

3. Please express yourself on a scale from 1 to 5 (where 1 represents the minimum value and 5 the maximum value), how you rate the consistency and quality of the exchange of ideas between students and teachers:

- 1 2 3 4 5

4. Present your own opinion regarding the use of lecture forms in the courses of the subjects taught at the faculties you graduated from.

5. What issues in the field of Educational Sciences do you find challenging, interesting and do you want to be debated within the D.P.P.D. courses?

THE DEMOCRATIC PRINCIPLE OF FREEDOM OF EDUCATION IN THE PEDAGOGICAL CONCEPTION OF J. H. PESTALOZZI

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In this scientific article, we elucidate the premises of J.H. Pestalozzi's thought and pedagogical conception transposed into the actuality of the democratic need for education. The purpose of the research aims at a retrospective analysis of the conception of pedagogy by J. H. Pestalozzi with directions for implementing the democratic principle of the freedoms of European education. As a constant of this scientific research, we argue that the Swiss pedagogue sought to develop a theory of education in which the principles of education are brought into line with the course of human nature; according to the conception of J.H. Pestalozzi, through instruction/training, the accumulation of knowledge must be ensured, as well as the development of the child/learner's psychic powers; the function of the school is twofold, to inform and train the students. The scientific results of the research are relevant by documenting international educational reports, specialized scientific literature on the democratic principle of educational freedom in the pedagogical conception of J.H. Pestalozzi with practical themes for the formation of the competence of democratic education at the level of initial and continuous training of adults.

Keywords: principle, democratic, freedom, education, pedagogy of J.H. Pestalozzi.

PRINCIPIUL DEMOCRATIC AL LIBERTĂȚII ÎNVĂȚĂMÂNTULUI ÎN CONCEPȚIA PEDAGOGICĂ A LUI J. H. PESTALOZZI

În prezentul articol științific elucidăm premise ale gândirii și concepției pedagogice a lui J. H. Pestalozzi transpusă în actualitatea necesității învățământului democratic. Scopul cercetării vizează o analiză retrospectivă a concepției pedagogice lui J. H. Pestalozzi cu direcții de implementare a principiului democratic al libertății învățământului European. Drept constante ale acestei cercetări științifice, argumentăm că pedagogul elvețian a urmărit să elaboreze o teorie a educației în care principiile învățământului să fie puse în concordanță cu mersul naturii umane; potrivit concepției lui J.H. Pestalozzi, prin instrucție/formare trebuie să se asigure atât acumularea cunoștințelor, cât și dezvoltarea forțelor psihice ale copilului/celui ce învață; funcția școlii este dublă, de a informa și a forma elevii. Rezultatele științifice ale cercetării sunt relevante prin documentarea rapoartelor educaționale internaționale, literaturii științifice de specialitate privind principiul democratic al libertății învățământului în concepția pedagogică a lui J.H. Pestalozzi cu tematici practice pentru formarea competenței educației democratice la nivel de formare inițială și continuă a adulților.

Cuvinte-cheie: principiu, democratic, libertate, învățământ, pedagogia lui J.H. Pestalozzi.

Introduction

In the democratic thinking of the pedagogue J.H. Pestalozzi, as for J.A. Comenius, the leitmotif „Man becomes man only through education” becomes brilliant for a European education, starting from the 19th century. Through the directed influence of society, J.H. Pestalozzi, the negative tendencies of human nature are annihilated, developing the positive ones. The fundamental principle of his pedagogical theory is the conformity of education with nature, with the laws of human nature. The Swiss pedagogue sought to develop a theory of education in which the principles of education are brought into line with the course of human nature. According to the conception of J.H. Pestalozzi, through instruction, both the accumulation of knowledge and the development of the child's/young person's psychic powers must be ensured. The function of the school is twofold: to inform and to train the students, especially to train them: We believe above all that the education of the youth must be, in its entirety, more formative of powers, than imparting knowledge. Thus he makes the two functions of instruction become more distinct. Sensing the limits of an informative education, he insisted on the formative function of knowledge in the educational process. Thus, in his theory, the means are provided to the school to ensure the unity of the two functions. The Swiss pedagogue remains one of the great theoreticians of intuition, whose content he enriched.

In the 21st century, the democratic principle of freedom of education is applied in the pedagogical conception of J.H. Pestalozzi through the functionality of the PESTALOZZI Program - a Program developed by the Council of Europe - intended for teaching staff in general and higher education, trainers and other actors in the field of education, who intend to achieve the quality of a training program. Therefore, both at international and national level, current topics are addressed [5]:

- Democratic citizenship and participation;
- Respect for human rights;
- Cultural and linguistic diversity;
- Development of democracy in schools;
- Access, quality and equity in education;
- Average etc.

Next, we retrospectively approach the pedagogical conception of J.H. Pestalozzi from the democratic perspective of the freedom of education.

The educational context of the first half of the 19th century in Western Europe

The end of the 18th century and the beginning of the 19th century were an era of the development of science and the flourishing of education. Cultural and political thinkers have demonstrated that the state has a duty to establish and finance schools, to manage and supervise them. Thus, as a result of the ideas promoted by the French revolution of 1789 about the equality of people in rights, girls' schools were established, in order to ensure women an instruction appropriate to the place occupied in the new society, as a mother and a citizen.

In this context, the idea that only specially trained teachers can work in schools is increasingly being promoted. Therefore, more attention was paid to general schools, preparatory schools, as teacher training institutions.

Thus, the practical achievements in the field of education only partially corresponded to democratic ideas, the democratic principle of freedom of education and free education being realized only partially, due to the lack of material conditions. Therefore, a dualistic education system developed: schools of all levels accessible mostly to the sons of the wealthy and others – elementary – for the sons of the popular masses; not all educational subjects were scientific in nature, nor did they sufficiently prepare for life. The Romanian pedagogic historian, St. Bârsănescu, states that „the bourgeois school constitutes an appreciable progress compared to the one in the feudal system, through the much wider access of children to education, through the realistic orientation of the content of education and through the application of new, more effective methods” [1, p. 89] .

Pedagogy also knows an assault, so:

- pedagogical theories are formulated that are based on a good knowledge and understanding of the child's nature, the need to make instruction more attractive in order to provide the child with a greater volume of knowledge and skills necessary for subsequent practical activity;
- a harmonious development on several dimensions, methods of instruction and education with greater effectiveness;
- professional teaching staff, with specialized and pedagogical training.

The new pedagogical imperatives imposed by the realities of the changing world, as well as the preface of the coordinates of a pedagogy in formation, supported by educational theory and practice, would manifest themselves through the work of some illustrious pedagogues, such as: J.H. Pestalozzi, J.F. Herbart, A.W. Diesterweg, F.W. Froebel, H. Spencer, K.D. Usinski, L.N. Tolstoy etc.

The founders of pedagogical science, in this sense, often advance from practice, from the needs of the development of the instructional-educational process, they synthesize and theorize first of all their own experience.

Under these conditions, the process of establishing pedagogy as an autonomous science, with its own object of study, with a separate conceptual and methodological system, is stimulated and systematized during this period.

The foundation of the science of education on human nature in the vision of J. H. Pestalozzi according to the democratic principle

The Swiss pedagogue, J. H. Pestalozzi (1746-1827), was one of the most valuable successors of the theoretical conception of J.-J. Rousseau on child education - focused on the freedom of the learner's personality. Through his teaching activity and his pedagogical conception, he is one of the most prominent practitioners and theorists in the history of universal pedagogy.

J. H. Pestalozzi has a pedagogical conception with a social and democratic character. However, a brief analysis of his pedagogical works will give us the opportunity to remember some doctrines regarding the contribution he brings to the development of educational theory and practice:

a) *Man, by his nature, is not perfect* - as such, he can only become so by exercising an appropriate educational influence from society. By influencing the way education is conducted throughout society, it is possible for the negative tendencies of human nature to be diminished and the positive ones to be amplified.

b) *The purpose of education is the development of the internal forces specific to human nature* - these can only be developed if the educational activity is based on love and faith.

c) *The internal forces with which nature has endowed man are developed through exercise* - this will be achieved through a continuous gradation of the tasks that need to be performed.

d) *Physical education plays an important role in the development of students' physical qualities* - free exercises are based on the natural movements of the body, but they contribute, to a large extent, to preparing young people for work.

e) *The instruction will ensure the accumulation of as much knowledge as possible, as well as the development of the child's psychic powers* - in this sense, the school will have to act both in the direction of informing young people, and above all, in their training. In this process, intuition plays, in his view, a decisive role, especially in younger children. For example, the teaching-learning of the alphabet was preceded by the intuitive knowledge of things. On this basis the child was taught to use a certain language before learning to read. At the same time, learning to write had to be preceded by drawing exercises that would have completed the children's knowledge of the things that surround them.

f) *Moral education based on the affective life of the child* - such a conclusion was not entirely original, it had been expressed, in a similar form, by J.-J. Rousseau. But, if at J.-J. Rousseau could talk about the possibility of a moral education only after the age of 15, for J.H. Pestalozzi this fact became possible at an early age. The simplest element that could stimulate the development of the child's moral forces was the feeling of love towards his mother. Later, this feeling will extend to the other members of the family, and once the child enters school, he will feel closeness and appreciation to his peers as well. Extending still further, this feeling will form the foundation upon which the consciousness of his belonging to humanity will be built. The feeling of love, once developed, will also be the basis for the development of the child's tendency towards moral actions. By exercising such actions, the child develops discipline, self-control, the feeling of helpfulness, etc. Only with the formation of moral skills can moral maxims, notions and moral rules be acquired.

g) *The works of J.H. Pestalozzi with a social and pedagogical character* are built on the conviction that education through work is fundamental to the formation of the child for life. Learning a trade was the main mission of the teacher who would necessarily combine theoretical training with practical training: „any theory about the profession is insufficient if it is not related to actual practice” [4], said J.H. Pestalozzi in the pedagogical novel „How Gerturda teaches her children” [3].

h) *The teacher, as a guide/facilitator and trainer of the child* - needs to be a guide for people, to raise their level of culture. For this, J.H. Pestalozzi proposed that rural teachers be recruited from among the poor in order to know their needs and be able to address them more easily.

The democratic pedagogical system of J. H. Pestalozzi

J. H. Pestalozzi is the author of a system of pedagogical ideas through which he gives answers to the main problems of pedagogy. He tried to show how the harmonious development of children's native dispositions can be ensured, and how a society can be created with the help of education in which the school facilitates the development of physical, intellectual and moral forces for all children.

The purpose and essence of education in the pedagogical conception of J.H. Pestalozzi is focused on human nature and consists of three categories of forces or powers: intellectual, moral and physical - these exist in man only as germs, as dispositions that must be developed harmoniously - a process that is achieved through education.

The importance given by J. H. Pestalozzi's application of intuition in education - an idea that becomes one of the central theses of his pedagogical system. Thus, he concluded that „Only intuitions, observations give man the strength to resist prejudices. To see and hear well, here is the first step towards the wisdom of life” [apud 1, p. 92-93]. At the same time, J. H. Pestalozzi proposed that three elements should be established by intuition: the number, the form and the word (name). For the knowledge of each object, he required the determination of the dimensions or quantity, the determination of the shape and the specification of the name by word. Also, through the three aspects - number, form and word - J.H. Pestalozzi believed that obtaining the necessary data to move from a confused perception to a clear, precise notion. This way of knowing constitutes an advancement compared to the conception of J.A. Comenius, who made intuition a means of acquiring representations.

Starting from the general means of education - number, form and word – J.H. Pestalozzi establishes its content as follows [apud 1, p. 93]:

- the number - the teaching of arithmetic corresponds to it;
- form - corresponds to the teaching of geometry, drawing, writing and manual work;
- the word - corresponds to the teaching of the mother tongue, the natural sciences and the humanities;
- gymnastics is added to all these contents.

The great pedagogue, J. H. Pestalozzi, has the merit of having laid *the foundations of elementary school methods*, formulating interesting guidelines for the method of reading-writing, arithmetic, history, geography, natural sciences and gymnastics.

The role of the family and especially the mother in the education of children - emphasized in the pedagogical conception of J. H. Pestalozzi. In the family, the mother begins the educational work, especially ensuring the education of the heart and the cultivation of moral virtues, which form the beauty of the person, the citizen, the patriot. Therefore, the work of the family is continued by the school, which is one of the main levers of social transformations.

The role of work in educating children and combining education with work - this activity develops both physical strength and mind and prepares for morality.

J. H. Pestalozzi mentioned that the formation of man is slow; nature must be helped; for each child to develop all his dispositions it is necessary for him to acquire the necessary elements of all sciences and trades, as a factor in stimulating his innate powers.

The pedagogue J. H. Pestalozzi, formulating *the theory of elementary/primary education*, aims to provide the teaching staff with a simple method of education and instruction, thus [ibidem, p. 94]:

- education has the task of ordering and clarifying students' perceptions and generalizations and raising them to the level of clear notions and obvious ideas;
- education cultivates and intellectual skills - provided by a volume of knowledge - as the philosopher-pedagogue wrote increases the powers of the mind;
- education requires to develop the student's thinking more (formal culture), than to endow it with knowledge (material culture) - the author did not make an explanation, but overestimating the role of verbal exercises, with a mechanical character, for the development of thinking.

The theory of elementary/primary education covers three important areas of training: intellectual education, moral education and physical education. J. H. Pestalozzi is a follower of formative culture, a principle according to which instruction is considered a means of intellectual education, the goal being the exercise and development of soul valences.

J. H. Pestalozzi made a special contribution in *the field of elementary school methods* - the teaching of reading and writing proposes the phonetic method, in the teaching of mathematics he imposes the box or crate of specific didactic material, in the teaching of natural sciences I consider it necessary to observe the studied plants and animals. All these acquisitive elements will settle down based on the observance of certain methodical principles, states C. Cucuș [2, p. 171]:

- to gradually increase the circle of intuitions;
- to plant in children's consciousness, clearly and distinctly, knowledge that they can assimilate and mean;
- to teach him a language which embraces all the representations which nature and art have procured or are about to procure.

Therefore, the ideas of J. H. Pestalozzi about the education and learning of all children, the theory of elementary education, intuition in the education process, etc., influenced the development of pedagogical theory and practice, which is still currently being implemented in the educational system.

Democratic activity in the didactic context of the great neo-humanist pedagogue, J. H. Pestalozzi, was carried out in several stages and in different localities [1, p. 90-91]:

Neuhof School (1774 – 1779) - J.H. Pestalozzi procured an agricultural land, where he built a house, which he called the „New Court” (Neuhof). Here he collected a few dozen children - orphans, vagabonds - whom he began to teach to work, giving them the first elements of instruction at the same time. Not having ensured material conditions, the educational establishment at Neuhof lasted only a few years, which remained in the history of pedagogy as a first attempt to combine physical work with instruction in practice.

The Stanz School (1798 – 1799) - the passage of the French armies through Switzerland and the founding of the Swiss Republic gave J.H. Pestalozzi new business opportunities. He opened a school for orphans in Stanz, where he gathered about 80 of them. The activity carried out in this school by the great pedagogue was led by the idea that it is possible to educate children, providing them with the conditions and an atmosphere typical of family education. He showed great love to the students, sitting among them from morning till night and treating them as his own children. But after 8 months of pedagogical activity, the school was closed.

Pedagogical experiences at Burgdorf and Münchenbuchsee (1799 – 1804) - J. H. Pestalozzi continues his work as a teacher at Burgdorf. Here he applies his pedagogical ideas regarding the training of children and achieves appreciable success. Thus, in 1801, the great pedagogue publishes the famous work „How does Gertrude teach her children” [4], in which she presents her theory on elementary education. Then the Burgdorf school was taken from him by the authorities, J. H. Pestalozzi retires to the Münchenbuchsee school which will not last long.

The activity carried out at Yverdon (1805 – 1825) – here, J. H. Pestalozzi is the central personality of the school, rightly considered the „Pestalozzian Institute”. Thus, the fact that the models and applied principles were associated with his name, and the works he had created had created fame throughout Europe, also contributed to this. Governments, politicians and scholars are interested in the methods of J.H. Pestalozzi and send commissions to study them, to apply them in their countries.

After a long period of progress, the institute in Yverdon entered a phase of disintegration due to the discord between the collaborators of the great pedagogue. The institute closes in 1825, and he returns to Neuhof to start writing again.

Therefore, his pedagogical thinking system is based on observation, pedagogical reflection and practical, direct experimentation of his hypotheses. Dealing with the organization of elementary/primary education, he promoted the harmonious combination of productive work and actual instruction. He campaigned for a new teaching methodology, based on the laws of intellectual development.

Table 1. Humanity goes through three ages, in the view of J. H. Pestalozzi.

Age criteria	Particular characteristics
<i>natural age</i>	- when honest, innocent relationships are dominant;
<i>social age</i>	- relationships between people being based on coercion;
<i>moral age</i>	- which is based on moral strength and self-determination.

Thus, in his conception, three forces are at the foundation of human nature: intellectual, moral and physical power. Intellectual power causes man to find out truth and possess science; moral strength causes him to be worthy; physical strength enables him to work and act.

Conclusions

In the context of the research of the history of pedagogy, J. H. Pestalozzi obviously contributed to laying the foundations of modern pedagogy through the originality of the theses issued and the clairvoyance of the recommendations made. He is the founder of the theory of elementary/primary education. At the same time, confident in the functions of education and propagator of a popular, general education, the Swiss pedagogue campaigned for the formation of a harmonious personality in which intellect, morality and skills form a unified whole. It grounds and applies the principle of intuition, of continuity between theory and practice, of phonetic learning to read.

C. Cuciș attests to the historical-pedagogical analysis of G. Compayré, which describes that Morf, a contemporary and disciple of J. H. Pestalozzi, compresses the thinking of the great pedagogue in the following rules or maxims [apud 2, p. 172]:

- intuition is the foundation of training;
- language will rely on intuition;
- learning time is separated from critical evaluation time;
- in each field of learning, one must start with the simplest elements, continuing gradually, following the child's development, through interwoven psychological series;
- insist on each sequence of training until the child assimilates all the data;
- education will follow the stages of natural development, and not those established based on an arbitrary decision;
- the child's individuality is sacred;
- the main purpose of elementary education is not to acquire knowledge, but to develop the valences of the student's intelligence;
- instead of intelligence, will is preferred, instead of theoretical knowledge, practical skills;
- relations between student and teacher must be based on affection;
- the actual instruction will be subordinated to the higher purpose of education.

The philosophy of education of J. H. Pestalozzi subscribes to the principle of „Learning with minds, hearts and hands” which is present in the realization of the various educational programs organized by the PESTALOZZI Foundation with the focus of ensuring children/young people from all over the world with free access to high quality education. Finally, within the PESTALOZZI Program [6] of the European Council, the pedagogical conception of J. H. is relevant. Pestalozzi, which promotes the application of the democratic principle of freedom of education through various current topics, for the formation of the competence of democratic education at the level of initial and continuous training of adults, such as:

- Pedagogy for Democracy and Human Rights;
- Multiperspectivity in history teaching;
- Career advancement of teachers based on school activities;
- School-based professional development;
- Developing democratic and intercultural competences in the classroom;
- Towards an inclusive school: addressing respect and celebrating diversity;
- Providing opportunities for the holistic development of students and teachers;
- Physical education and sport for democracy and human rights (SPORT);
- Dialog intercultural și educație pentru media;
- Intercultural dialogue and media education etc.

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APPLYING THE FLIPPED CLASSROOM METHOD IN STUDYING ROTATIONAL EQUILIBRIUM IN 7TH GRADE PHYSICS

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This paper analyzes the results of applying the Flipped Classroom method to teaching the „Rotational Equilibrium” unit in 7th-grade physics. It characterizes several research-based constructivist methods and demonstrates that the Flipped Classroom is fundamentally constructivist but differs in lesson structure, with students’ cognitive effort exceeding and anticipating the lesson timeframe. The method features pre-class preparation, high interaction between students and teachers, personalized learning, critical thinking development, and digital technology use. The alternative hypothesis was that significant differences exist between the Flipped Classroom and conventional methods, showing a 20% higher average score in the experimental class. The calculated impact factor is 0.48, aligning with visible learning theory.

Keywords: *flipped classroom, constructivist learning, formative feedback, video presentations.*

APLICAREA METODEI CLASA INVERSATĂ ÎN STUDIUL ECHILIBRULUI DE rotație LA FIZICĂ ÎN CLASA A VII-A

În lucrarea de față se analizează rezultatele aplicării metodei Clasa Inversată la predarea capitolului Echilibrul de rotație din cursul de fizică de cl. a 7-a. Este caracterizată o serie de metode constructiviste bazate pe cercetare și este arătat că metoda Clasei Inversate este eminentamente constructivistă dar diferă de aceste metode prin structura lecției, efortul cognitiv al elevului depășind și anticipând cadrul temporal al lecției. Este arătat că metoda Clasei Inversate se caracterizează prin: pregătirea elevilor înainte de lecție; un grad înalt de interacțiune între elevi și între elevi și profesor; învățare personalizată; dezvoltarea gândirii critice; utilizarea tehnologiei digitale. Ipoteza de alternativă a fost „Există diferențe semnificative în rezultatele testelor de după experiment între metoda Clasei Inversată și metoda convențională”. S-a obținut că în clasa experimentală nota medie la evaluarea sumativă este cu 20% mai mare decât în clasa de control. De asemenea, procentul calității s-a dublat în clasa unde s-a aplicat metoda Clasa Inversată față de clasa unde s-a aplicat metoda frontală de predare. Factorul de impact calculat este de 0,48 – în corespundere cu factorul de impact calculat în cadrul teoriei învățării și predării vizibile.

Cuvinte-cheie: *clasa inversată, învățare constructivistă, feedback formativ, lecții video.*

Introduction

Traditional approaches to teaching physics, based on the one-way transmission of information from teacher to student, have often proven ineffective in facilitating a deep understanding of scientific concepts. In contrast, constructivist teaching and learning methods, which emphasize the active role of the student in building knowledge through direct experience and reflection, have gained recognition as being more effective in promoting a profound understanding of physics. There is a whole range of constructivist methods that we will list and briefly characterize below.

Inquiry-based learning is one of the most fundamental constructivist methods, which emphasize the role of student’s direct experimentation and observation. According to Piaget, students construct their knowledge through active interaction with their environment, within activities that allow them to observe, experiment, and draw their own conclusions [23]. In the context of teaching physics, exploratory learning can manifest through experimental activities that allow students to directly observe and test physical laws. For example, studies show that the use of hands-on experiments, such as simulations of motion or forces, helps students better understand the basic concepts of physics and apply these concepts in new situations [19].

Problem-based learning (PBL) method proves to be extremely effective in learning physics because it emphasizes the promotion of critical thinking and the practical application of concepts. For example, a

study conducted by Hmelo-Silver suggests that PBL helps students develop problem-solving skills and apply concepts in authentic contexts, thus improving a deep understanding of physics [12]. This method is an active learning approach, where students work in groups to analyze and solve real problems, thereby acquiring valuable skills such as collaboration and communication. Additionally, PBL helps students understand the practical applicability of physical concepts, thus strengthening their theoretical knowledge.

Project-based learning is another constructivist method that integrates physical concepts with other disciplines and allows students to tackle complex problems in an interdisciplinary manner. Projects provide opportunities for exploring and applying knowledge in a practical and creative setting. Studies suggest that project-based approaches not only enhance the understanding of physical concepts but also contribute to the development of general problem-solving skills and critical thinking [27]. For example, in a project, students may be required to design and test a device that uses physical principles to solve a specific problem. This type of activity not only allows them to apply concepts in a real-world context but also to develop project management and teamwork skills.

Discussions and reflection are constructivist methods that allow students to analyze and integrate accumulated knowledge. In group discussions, students have the opportunity to share ideas, debate concepts, and clarify their understanding. According to Vygotsky, this promotes a collaborative learning process [29].

Reflective journals are another constructivist method that helps students analyze their own learning processes and identify areas needing improvement. Through reflection, students can better understand how they reached certain conclusions and how they can apply these lessons in the future [22].

Simulations and Models. The use of computer simulations and physical models provides students with a way to explore abstract concepts in a visual and interactive manner. Simulations allow students to visualize complex physical phenomena and experience their effects in a controlled environment [31]. Physical and visual models are useful for representing abstract concepts, providing students with a concrete framework for understanding and applying them. This type of visual learning is particularly effective in physics, where many concepts are abstract and difficult to understand without visual representations.

Formative assessment and permanent feedback are crucial components of the constructivist methodology. Continuous feedback helps students adjust and improve their understanding, while self-assessment allows students to reflect on their own learning processes [3].

In conclusion, these practices contribute to creating a learning environment where students are actively engaged in their educational process, developing critical and reflective skills that are essential for academic and professional success long time after school graduation.

A method that differs from the constructivist methods presented here, primarily in the structure of the lesson, is the Flipped Classroom, which offers students the opportunity to explore physical concepts at home and apply these concepts in class. In this method, students study the basic material (e.g., video lessons or text) outside of class hours, and classroom time is dedicated to practical activities, discussions, and practical applications of the concepts [1].

It is worth mentioning that teaching physics in school is a constant challenge, as students often have difficulties understanding complex concepts [9]. An approach that has gained popularity in recent years is the constructivist approach, which emphasizes the active involvement of students in the learning process. The Flipped Classroom (Flipped Classroom) fits within this approach. Thus, this article will focus on examining the flipped classroom model, assessing its effectiveness on student learning compared to traditional teaching methods [8], based on the pedagogical experiment conducted in the 7th grade at Hyperion High School in Chișinău, Moldova.

The flipped classroom model is essentially a constructivist approach, as it allows students to interact with content outside of class hours, freeing up valuable class time for active learning and problem-solving [14]. By working on materials, mostly recorded video lectures, before class, teachers can dedicate class time to guiding students through practical activities, discussions, and collaborative analysis of problem situations [10]. This shift in the traditional structure and conduct of the classroom has proven effective in learning physics, as it allows students to better prepare for class activities and develop a deeper understanding of the material [16-18, 21, 30].

The flipped classroom is in full alignment with the constructivist philosophy, which emphasizes the active construction of knowledge by students through meaningful interactions and problem-solving [15]. The flipped classroom model promotes a learning environment where students take a more active role in their own learning, engaging in inquiry-based and personalized activities that deepen their understanding of physics concepts [2].

In a study examining the implementation of the Flipped Classroom method in an introductory physics course, researchers from the University of British Columbia in Vancouver found that students in the experimental group, where the flipped classroom method was applied, scored significantly higher on conceptual understanding assessments compared to those in the control group based on traditional teaching [7]. Additionally, the flipped classroom method was associated with higher attendance and interest, as students were more actively engaged in the learning process [24].

Other constructivist teaching methods similar to the Flipped Classroom, such as Engaged Pedagogy, have also demonstrated positive outcomes in learning physics. Engaged Pedagogy emphasizes the use of interactive and collaborative learning activities, which can help students develop critical thinking and problem-solving skills. Studies have found that, alongside the Flipped Classroom, Engaged Pedagogy can lead to improved student performance and a more positive attitude toward physics [25].

Although the constructivist approach, including the Flipped Classroom method, has demonstrated its effectiveness in teaching physics, it is important to note that the success of these methods depends on both the level of student engagement and the teacher's mastery of the method. Thus, teachers must continually ensure that their students are adequately prepared for class activities and that the materials and resources provided for pre-class preparation are engaging and relevant.

Theoretical Framework

In this paper, we will analyze the application of the Flipped Classroom method to the teaching of middle school physics, a method that was proposed relatively recently, in the early 2000s, by American educators Jonathan Bergmann and Aaron Sams [1].

The Flipped Classroom method is based on the following constructivist principles:

1. Pre-class preparation of students: Students review material prepared by the teacher (e.g., textbook, video, presentation) or engage in exploratory preparatory activities before the lesson. It should be noted that other teaching methods also assume that students come to class with a basic level of knowledge, such as Peer Instruction developed by American educator Eric Mazur [20].

2. High degree of students – students and students – teacher interaction: With students already familiar with the subject, most of the lesson time is dedicated to analyzing problem situations, discussions, practical activities, and problem-solving, all in a group work format facilitated by the teacher. Thus, the Flipped Classroom is also a form of Inquiry-Based Science Education [13].

3. Personalized learning: Students study at home at their own pace, according to their needs and abilities. Therefore, cognitive effort in the Flipped Classroom is not just a declarative title but emphasizes the true constructivist nature of the method. By focusing on student learning effort, the Flipped Classroom shares many aspects with Problem-Based Learning, which, when systematically applied, develops critical thinking, metacognition, and lifelong learning skills [5].

4. Development of critical thinking: Through active interaction and practical application of theoretical concepts learned at home, the Flipped Classroom fosters critical thinking and analysis skills. This approach aligns with Reflective Learning, which is based on continuous self-assessment by the student [26].

5. Use of digital technology: For both preparing and delivering content in advance, as well as facilitating classroom interactions. The Flipped Classroom can be implemented in any learning environment: physical classroom or online (synchronous or asynchronous). This requires collaboration tools, online platforms, digital resources, short videos, and offline and online assessment systems to ensure both instant feedback on formative assessments and processing of final assessment results. It should be noted that digital teaching tools themselves have minimal impact on students' academic success [28].

It is important to highlight an interesting point: compared to the aforementioned constructivist methods,

the Flipped Classroom has a smaller impact on students' academic success. For example, according to the Visible Teaching and Learning theory developed by New Zealand educator John Hattie [11], the Flipped Classroom has an impact factor of 0.5, Reflective Learning has 1.29, Problem-Based Learning has 0.68, Peer Instruction has 0.74, and the use of digital or online resources has 0.29. To put these numbers into context, it should be noted that if an experienced teacher uses the conventional method - frontally teaching - for two years in the same class, the impact factor is about 0.40, meaning that students' academic success increases by 40%.

Research Questions and Objectives

The aim of this research is to assess the effect of applying the Flipped Classroom method during the study of a chapter in the 7th-grade physics course on a range of parameters related to students' academic success.

The main objectives of the research are:

- To compare the effectiveness of the Flipped Classroom method with that of the conventional method in terms of impact on students' academic success.
- To compare the research findings with results obtained previously by other researchers.
- To implement the Flipped Classroom method and determine how to plan a lesson or a series of lessons in this style to achieve maximum effectiveness.
- For further research, to familiarize students with constructivist teaching methods that emphasize cognitive effort.

The research question is: „Would the implementation of the Flipped Classroom method improve students' results in physics compared to the conventional method?”

Hypotheses of the experiment:

- Null Hypothesis (H₀): There are no significant differences in post-experiment test results between the Flipped Classroom method and the conventional method.
- Alternative Hypothesis (H₁): There are significant differences in post-experiment test results between the Flipped Classroom method and the conventional method.

Methodology

The experiment took place during the 2022–2023 academic year at the “Hyperion” Theoretical High School in Durlești, Chișinău, Republic of Moldova. The experimental group consisted of 35 students (21 girls, 14 boys) from Class VII B, while the control group comprised 36 students (18 girls, 18 boys) from Class VII C. In the experimental class, 33 students participated in the pre-test, and 32 students participated in the post-test. In the control class, 32 students participated in the pre-test, and 34 students participated in the post-test. The experimental class was taught using the Flipped Classroom method, whereas the control class followed traditional frontal teaching.

The experiment covered the entire study period of Chapter V, Rotational Equilibrium, in the 7th-grade physics course [4]. According to the curriculum [6], this chapter involves studying simple mechanisms such as levers, pulleys, and inclined planes, and conducting a laboratory work titled Determining the Work of the Applied Force, the Work of the Resistive Force, Comparing the Obtained Values. This chapter is allocated 9 academic hours or 4.5 weeks of study.

Since the Flipped Classroom method emphasizes collaborative learning, the experimental class was divided into 6 groups of 5-6 students each. The control class was not divided into groups.

Before the lesson, students studied the theoretical part of the topic from the textbook and watched a video lesson on the educationonline.md platform. The video lasted about 15 minutes and included two solved problems that students analyzed at home and transcribed into their notebooks. Additionally, students answered questions from the Check Your Knowledge section at the end of each topic.

In the control class, the lesson followed the usual teaching stages: recall, sense-making, reflection, and expansion. In the experimental class, sense-making was conducted through problem situations analyzed by students with guidance from the teacher.

At the end of the chapter, a summative assessment was conducted in the form of a test with six items, allocated 45 minutes. The results of this test represent the post-experiment test results. The pre-experiment test results were taken from the final test of Chapter III, Fluid Statics, which was allocated approximately 13 hours. In the Tab.1 the results of pre- and post-test in experimental and control classes are presented.

Tab. 1 The results of pre-test and post-test in experimental and control classes.

	Experimental class		Control class	
Mark „5”	1	2	3	1
Mark „6”	10	6	6	10
Mark „7”	12	5	15	9
Mark „8”	2	9	5	9
Mark „9”	6	7	2	1
Mark „10”	2	3	1	4
Mean	7,24	7,69	7,0	7,35
Std deviation	1,324	1,424	1,136	1,342
Skewness	0,642	-0,192	0,423	0,641
Shapiro-Wilk	0,874	0,933	0,908	0,889
p-value	0,001	0,004	0,01	0,002
Median	7	8	7	7
Mode	7	8	7	6
Academic quality	30.3%	59.38%	25.0%	41.18%

Discussion of Results

According to Table 1, the average grade in the experimental class increased from 7.24 to 7.69, or by 6.22%, while in the control class it rose from 7.0 to 7.35, or by 5.0%. The median grade in the experimental class increased from „7” to „8”, remaining “7” in the control. The mode shifted from „7” to „8” in the experimental class, while in the control it dropped from „7” to „8”. Academic quality, or the percentage of grades ≥ 8 , nearly doubled in the experimental class, increasing from 30.3% to 59.38%, and rose from 25.0% to 41.18% in the control.

The impact of the Flipped Classroom method also is given by skewness analysis. Thus, pre-test skewness of 0.642 in the experimental class - this positive value indicates a slight left skew, meaning most students had scores below the mean, with a few higher scores raising the average. Post-test skewness of -0.192 in the experimental class - this slightly negative value, close to zero, indicates an almost symmetric distribution. This suggests an overall improvement, as most students achieved results around the mean, reducing the extremes and indicating uniform progress in performance. For the control class, a skewness value of 0.423 in the pre-test indicates moderate positive skewness, showing that most students scored below the mean, although there are a few students with higher scores. A skewness of 0.641 in the post-test indicates a more pronounced asymmetry, suggesting that despite improvements, the scores are still distributed such that many students perform below the overall average.

This is also confirmed by the Shapiro-Wilk test: both values from the experimental class, 0.874 in the pre-test and 0.933 in the post-test, indicate a normal distribution of the data, which allows for statistical analysis. Additionally, the reference p-values suggest an improvement in the distribution of grades around the mean in the experimental class. Regarding the experimental class, both p-value reference values are below 0.05, meaning that despite improvements, the distribution of grades remains asymmetric, with a significant number of students scoring below the overall average

Thus, in the experimental class, academic quality increased by 96%, and in the control class, it rose

by 65%. Therefore, the effect of the applied method on academic quality is 48% higher than conventional teaching, and 20% higher on the average grade compared to conventional teaching.

Conclusions

The null hypothesis (H0) was not confirmed. The alternative hypothesis (H1) was confirmed, as significant differences were found in the post-test results between the experimental and control classes. The effect of the applied method on the average mark was found to be 20% higher than conventional teaching. If we consider that conventional teaching has an impact factor of 0.4 and Flipped Classroom has an impact factor of 0.5 according to the Visible Learning and Teaching theory [11], then our results show that the Flipped Classroom method has an impact factor of 0.48. Thus, the results of our research are confirmed by the results obtained previously by other researchers.

The application of the Flipped Classroom method resulted in an increase in the number of students with marks ≥ 8 from 10 to 19, effectively doubling the percentage of high-quality marks. Additionally, in the experimental class, the mark „8” was the most frequently occurring grade (9 students), whereas in the control class, the mark „6” was the most frequent (10 students).

To implement the Flipped Classroom method, only the lesson plans need to be adjusted, focusing on the new topic. For the chapter „Rotational Equilibrium” the structure of the lesson was modified for three out of nine hours.

However, the effective application of this constructivist teaching method can be influenced by various institutional constraints, such as limited time, availability of resources, and technological infrastructure.

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THE INFLUENCE OF THE PHYSICAL EDUCATION LESSON WITH RUGBY CONTENT ON THE MOTIVATION OF HIGH SCHOOL STUDENTS TO PRACTICE MOTOR ACTIVITIES

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This article represents, in general, the purpose of our research that followed the influence of the physical education lesson with rugby content on the motivation of the practice of curricular and extracurricular motor activities by high school students. From the analysis of the monitoring documents (the record book and the physical education teacher's notebook) it resulted that the students in the experimental group, by including the means specific to rugby in the physical education lessons, increased their participation in classes. This fact is confirmed by the reduction in the number of absences recorded by the class in physical education lessons during the school year, compared to both the previous year of studies and the students in the control group. Also, the reduction in the number of absences from physical education classes highlights a significant increase in the interest of students in the experimental group in practicing sports, either individually or within sports groups outside the school, compared to students in the control group.

Keywords: *physical education, rugby means, motivation, extracurricular activities, high school students.*

INFLUENȚA LECȚIEI DE EDUCAȚIE FIZICĂ CU CONȚINUT DIN RUGBY ASUPRA MOTIVĂRII ELEVILOR DIN LICEU PENTRU PRACTICAREA ACTIVITĂȚILOR MOTRICE

Acest articol reprezintă, în general, finalitatea cercetării noastre care a urmărit influența lecției de educație fizică cu conținut din rugby asupra motivării practicării activităților motrice curriculare și extracurriculare de elevii din liceu. Din analiza documentelor de monitorizare (registrul de evidență și caietul profesorului de educație fizică) a rezultat că elevii din grupa experimentală, prin includerea mijloacelor specifice rugby-ului în lecțiile de educație fizică, și-au crescut gradul de participare la ore. Acest fapt este confirmat de reducerea numărului de absențe înregistrate de clasă la lecțiile de educație fizică pe parcursul anului școlar, comparativ atât cu anul precedent de studii, cât și cu elevii din grupa de control. De asemenea, reducerea numărului de absențe la orele de educație fizică evidențiază o creștere semnificativă a interesului elevilor din grupa experimentală pentru practicarea unor sporturi, fie individual, fie în cadrul colectivelor sportive din afara școlii, comparativ cu elevii din grupa de control.

Cuvinte-cheie: *educație fizică, mijloace din rugby, motivație, activități extracurriculare, elevi de liceu.*

Introduction

From the results obtained during our research, which experimentally demonstrated the influence of rugby means applied in the physical education lesson on the development of general motor skills in high school students, a special interest was to highlight the motivational factor of high school girls for practicing motor activities [1, 2].

It is well known the purpose of physical education lessons in general educational institutions, through which, in addition to the formation of motor skills, general and discipline-specific skills, school discipline also has the function of orienting/ motivating students to practice a sport throughout their lives in order to maintain optimal health [1, 3, 4, 5].

The purpose of the research is to monitor high school students regarding the motivation for practicing curricular and extracurricular motor activities, as a result of practicing the means of rugby in the physical education lesson.

In order to achieve the goal, the following objectives were formulated and proposed: analysis of the monitoring documents of high school students regarding the practice of curricular and extracurricular motor activities; processing of data from the monitoring registers of high school students regarding the practice

of curricular and extracurricular motor activities, before and after the pedagogical experiment; graphic and tabular interpretation of the results obtained from the analysis and the processing of data on the practice of curricular and extracurricular motor activities by high school students.

Concept and methodology

With the development of the pedagogical experiment, it was necessary to see how the means of rugby can motivate students towards motor activities, for this purpose the monitoring of students regarding participation in physical education lessons but also in activities specific to the field in specialized clubs was carried out. For efficient monitoring and analysis of the corresponding data, the record book and the physical education teacher's notebook were used, both for the students in the experimental group and for the students in the control group.

To begin with, data/absences from lessons were collected for the lower year of study (ninth grade) and compared with the number of absences for the year of study in which the research was organized (tenth grade). In order to highlight the interest in certain sports, these absences were distributed over 5 modules (according to the annual staggering of the areas of competence and thematic units). The designed modules correspond to the areas of competence that also reflect the practice of motor activities specific to sports events.

We mention the fact that in the experimental group, in the tenth grade, we intervened with the program developed by us, which provides for the practice of rugby means during all lessons. The results obtained are presented in Table 1 and Figure 1.

Another important indicator regarding the observation of the level of motivation for motor activities in high school students is that of involvement in extracurricular activities specific to the field. For the monitoring of students who practice sports outside of physical education lessons, as mentioned above, the physical education teacher's notebook was analyzed. In contrast to participatory monitoring in physical education lessons, data on the students' enrollment in extracurricular activities at the beginning and end of the school year of both those in the experimental group and those in the control group were analyzed, Table 2 and Figure 2.

Results and discussions

According to the data from the centralizing table of absences, we observe that at the beginning of the semester, in the first module, the physical education lessons were oriented towards the practice of a sports game (football) and specific means for the development of strength, We observe that in the ninth grade, the researched groups accumulated approximately the same number of absences, the experimental group a number of 8 absences and the control group a number of 9 absences. Unlike the previous year, in the tenth grade (the year in which the research was carried out), it is observed that in the experimental group the number of participations in the lesson increased, on average, during the completion of the first module there were 7 absences, with one absence less than in the previous year, while in the control group, in the ninth and tenth grades, the same number of absences are noted.

Table 1. Monitoring the frequency of the physical education lesson of the students in the tenth grade included in the pedagogical experiment. (GE: n=29; GM: n=28).

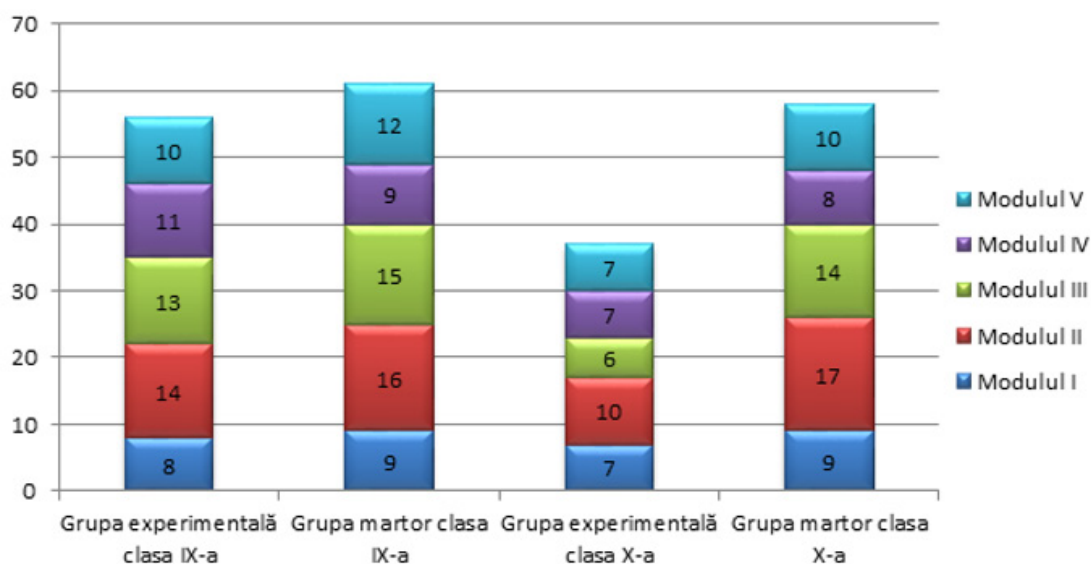
Crt. No.	Modules according to didactic design	Groups	No. of absences from cl. a IX-a	No. of absences from cl. a X-a	The difference in absences cl. IX-a – X-a
1.	Module I (motor skills: strength; sports game: football)	GE	8	7	1
		GM	9	9	0
		<i>GE - GM Difference</i>	-1	- 2	1
2.	Module II (gymnastics: jumping, acrobatics)	GE	14	10	4
		GM	16	17	1
		<i>GE - GM Difference</i>	-2	-7	5

3.	Module III (combined motor skills; sports game: basketball)	GE	13	6	7
		GM	15	14	1
		<i>GE - GM Difference</i>	-2	-8	6
4.	Module IV (athletics: throwing, jumping; sports game: football)	GE	11	7	4
		GM	9	8	1
		<i>GE - GM Difference</i>	2	-1	1
5.	Module V (athletics: running; sports game: football)	GE	10	7	3
		GM	12	10	2
		<i>GE - GM Difference</i>	-2	-1	1
6.	Total absences for the school year	GE	56	37	19
		GM	61	58	3
		<i>GE - GM Difference</i>	5	21	12

In module 2, in which areas of competence are projected that are achieved through gymnastics tests (acrobatic gymnastics and jumping), the researched groups registered the most absences compared to the other modules. The students in the experimental group, in the previous year of studies (in the ninth grade) were absent 14 times and those in the control group 16 times, with a difference of two absences between the investigated groups. Another picture can be seen in the groups researched in the experimental year (in the tenth grade) where the students who combined the means of rugby with those of gymnastics accumulated fewer absences, 10 absences found, compared to the students who followed the traditional program, which accumulated 17 absences.

From the analysis of the dynamics of absences from the ninth grade to the tenth grade, we find that the experimental group increased its attendance at classes, decreasing the number of absences from 14 to 10 and the experimental group increased its number of absences, from 16 to 17 absences.

Figure 1. Absences from the physical education class of the students included in the pedagogical experiment.



The next module, in which students develop their combined motor skills and practice a sports game (basketball) to develop skills specific to the discipline, highlights the fact that the two groups researched in the previous year (in the ninth grade) accumulated an approximately equal number of absences. experimental group 13 and control group 15. In the year of the start of the formative experiment it is found that the experimental group considerably reduced the number of absences, with 7 absences less, and the control group accumulated approximately the same number of absences, with only 1 absence less.

The presence and active participation in the lessons by the experienced group is also due to the fact that for the development of combined motor skills the students practiced means specific to the game of rugby and the control group the traditional methods, which in fact to a large extent are boring.

The fourth module, in which athletics content is projected with topics from throwing and jumping but also practicing a sports game (continuation for the football game), finds that the students of the followed groups, in the ninth grade, were absent without reason from classes as well as in the previous modules, the students of the experimental group in total accumulated 11 absences and those in the control group accumulated 9 absences.

From the analysis of the registers for the tenth grade, for the same groups, it is found that in the fourth mode, the students have different participatory attitudes from one group to another, the experienced group reduced its number of absences by 4 and the control group by only 1, having projected for training the same areas of competence only that the experimental group was proposed to practice the means of rugby.

For the last module, in which the same sports as in the previous module were designed, and only the contents of athletics are oriented to the running events, after analyzing the registers of the ninth grade, it is found that the experimental group accumulated 10 absences and the control group 12. In the same groups, in the tenth grade, the students in the experimental group accumulated 7 absences and the control group 10, with an increase in the frequency of physical education classes for the students who practiced the game of rugby during the lessons.

So, from the analysis of the participatory records in the physical education classes of the ninth and tenth grades for the same groups, it is found that in the experimental group, during the period in which the means of rugby were applied, the number of absences was considerably reduced (from 56 absences to 37 absences) compared to the control group (from 61 absences to 58 absences), which allows us to affirm that the means of rugby, Through diversification, it streamlines the educational process of the discipline which in turn motivates students to participate in curricular classes.

Next, we will analyze the data on the number of students who practice sports individually or in sports clubs, but also which of the sports branches are the most attractive for high school students. The results are presented in Table 2 and Figure 2.

From table 2 we can see that at the beginning of the school year the students in the experimental group were motivated to practice only 5 branches of sports (Athletics, Basketball, Football, Handball and Wrestling), as well as those in the control group (Basketball, Dance, football, Handball and Wrestling). At the end of the school year, a diversification of the requested sports branches is observed, in the experimental group as well as in the control group, it increases from 5 to 8 sports branches, complementing the requested sports with Fitness, Swimming and Rugby.

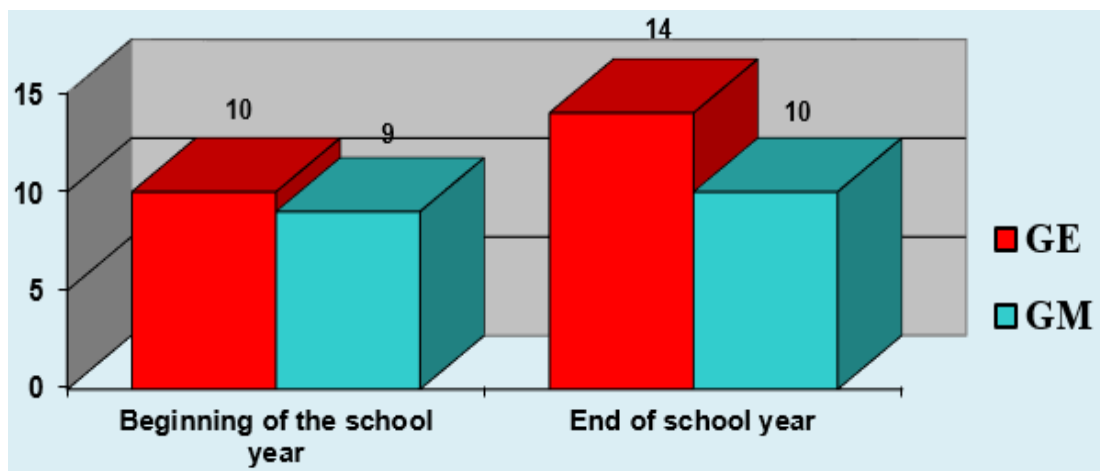
Table 2. The number of students in the tenth grade included in the pedagogical experiment include sports clubs. (GE: n=29; GM: n=28).

Crt. No.	Sports branches	Start of the school year		End of school year	
		GE (no. of students)	GM (no. of students)	GE (no. of students)	GM (no. of students)
1.	Athletics	1	-	1	-
2.	Basketball	1	2	1	2
3.	Dance	-	1	-	1
4.	Fitness	-	-	2	1
5.	Football	4	2	4	2
6.	Handball	2	1	2	1
7.	Fight	1	3	1	2
8.	Swimming	-	-	-	1
9.	Rugby	-	-	2	-
10.	Old	1	-	1	1
11.	TOTAL	10	9	14	10

At the same time, from the same table, it can be seen that two students from the experimental group and 1 student from the control group started practicing fitness during the year, one student from the control group practiced swimming tests and 2 students from the experimental group in the game of rugby.

Analyzing from another point of view the centralizing table of sports activities in which the students in the tenth grade are enrolled, we notice that the same number of students enrolled in sports training at the beginning of the school year continued to practice the same sport throughout the entire school year, except for one student in the control group who abandoned the practice of wrestling.

Figure 2. Tenth grade students involved in sports training activities.



The same table and figure 3.19 reflect the total number of students practicing sports in extracurricular activities in the experimental and control group. In the experimental group, at the beginning of the school year only 10 students practiced sports, which constitutes 34.5% of the students, and at the end of the school year 14 students, 48.3%, with an increase of 4 participants, 13.8%. Although in the control group, with an approximately equal number of students to the control group, at the beginning of the year there were 9 students enrolled in sports, which is 32.1% of the total number of students in the group, at the end of the year the number of students enrolled in sports increased by only one student, constituting 35.7% of the total number of students in the class.

Conclusions

Therefore, following the analysis of the record documents of the students in the tenth grade included in the experiment, we can mention that in the physical education activities, before the implementation of the program that provides for the application of rugby means, in the experimental group and in the control group, it is observed that the students have a high number of absences from classes but also a low rate of involvement in sports training activities outside school.

In the same group, after the application of the experimental program, it is observed that the motivation to participate in classes has increased in the students in the experimental group, this is confirmed by decreasing the number of absences accumulated by the class during the school year compared to the previous year of studies but also compared to the students in the control group.

Also, with the decrease in the number of absences from physical education classes, it is observed that the motivation to practice certain sports individually or in sports groups outside school increased considerably compared to the students in the control group.

According to the recorded data, we say with certainty that the means of rugby and the proposed experimental program, which also aims to develop general motor skills, has considerably influenced the motivation to practice motor activities in high school students, a fact demonstrated by the comparative data presented in this chapter.

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ANALYSIS OF POSTURAL CONTROL DISORDERS IN PEOPLE WITH ORTHOPEDIC FOOT DISORDERS

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The integration of fascial techniques into kinesiotherapy programs for patients with low back pain has shown superior efficacy compared to standard rehabilitation protocols. This study evaluated the effects of combining these techniques on mobility and lumbar pain relief in a sample of 24 participants, divided into two groups: an experimental group receiving a combined program of physiotherapy and fascial mobilizations, and a control group undergoing standard physiotherapy. Assessments were conducted using the Visual Analog Scale (VAS) for pain intensity, the Schober test for mobility, and the Roland & Morris questionnaires for motor dysfunction. Results showed significant improvements in the experimental group regarding pain reduction and increased lumbar mobility. These findings suggest that fascial mobilizations could enhance physiotherapy outcomes, providing an effective strategy for treating low back pain. This approach not only offers rapid symptom relief but also shows potential for reducing recurrences and improving long-term patient quality of life.

Keywords: *postural control, orthopedic foot disorders, physiotherapy, recovery process, computerized stabilography, stability, balance, motor action, posture.*

IMPACTUL EXERCIȚIILOR FIZICE ASUPRA ÎMBUNĂȚĂRII POSTURII ȘI REDUCERII SUPRAPONDEREI LA COPII

Conform datelor raportate în literatură, rata supraponderalității și obezității la copii este în continuă creștere. O tendință similară este observată în prevalența defectelor posturale. În studiile anterioare, numeroși autori au investigat factorii care contribuie la obezitate sau defecte posturale, deși de obicei se concentrează asupra acestor probleme separat. Defectele posturale reprezintă o altă problemă majoră de sănătate, afectând 30–69% dintre copii și adolescenți în Republica Moldova. Scopul studiului este evaluarea impactului exercițiilor fizice asupra corectării posturii și îmbunătățirii sănătății generale la copiii supraponderali. Obiectivul studiului a fost de a determina eficiența exercițiilor fizice în corectarea posturii incorecte și reducerea masei corporale la copiii supraponderali. Exercițiile fizice au avut un impact semnificativ asupra copiilor cu exces de greutate și postură deficitară, reducând greutatea și IMC-ul, precum și corectând unghiurile hiperkifozei toracice și hiperlordozei. Aceste rezultate demonstrează eficiența programului în reducerea greutății excesive și îmbunătățirea posturii.

Cuvinte-cheie: *control postural, afecțiuni ortopedice ale piciorului, kinetoterapie, proces de recuperare, stabilografie computerizată, stabilitate, echilibru, acțiune motorie, postură.*

Introduction

Obesity is defined as the excessive accumulation of body fat, associated with an increased risk of morbidity and premature mortality. Overweight and childhood obesity have become global issues and major challenges for public health [10, p. 2]. According to COSI data, the prevalence of overweight (including obesity) among children aged 7-9 years was 29% for boys and 27% for girls, while the prevalence of obesity was 13% for boys and 9% for girls. Overweight negatively affects multiple body systems, increasing the risk of developing conditions such as musculoskeletal, cardiovascular, metabolic, gastrointestinal, and respiratory disorders [7, p. 3].

The relationship between overweight and musculoskeletal problems, including poor posture, is well-documented, with overweight serving as a causal factor in the emergence of postural deficiencies, degeneration of bone processes, and back pain. The position of the body, defined by the alignment of body segments, is an essential determinant for maintaining musculoskeletal health. The prevention and early elimination of excess fat are crucial not only to avoid cardiovascular and metabolic diseases but also to prevent poor posture and its associated complications [2, p. 4].

Regular physical exercise plays an essential role in healthy growth and development and should be integrated as a natural component of a healthy lifestyle from childhood [3, p. 6]. Physical exercise is considered an effective non-pharmacological intervention for reducing health risks associated with excess weight, as well as a valuable tool for alleviating postural and musculoskeletal issues. It improves proprioception and body alignment, which can lead to better posture in daily activities, thereby contributing to the maintenance of spinal health and joint integrity [8, p. 10].

The combination of educational and therapeutic interventions has proven effective in preventing weight gain and the development of poor posture [1, p.5]. Body position is subject to significant variations influenced by factors such as sex, somatic type, age, ethnicity, psychophysical state, and environment, serving as a good predictor of current and future musculoskeletal health. According to some authors, optimal posture involves a neutral position of the pelvis, with slight lumbar lordosis and thoracic kyphosis, the head well-balanced, and the alignment of the ear, shoulder, hip, knee, and talus should be perfectly vertical [8, p. 13].

Correct posture in childhood promotes harmonious growth of the body, contributes to the normal development of internal organs, and optimizes motor activity efficiency, thereby stimulating the development of muscles, joints, and ligaments, and favoring skeletal growth [9, p. 87]. Postural disorders are among the most common yet underestimated health issues during school years, caused either by rapid growth or pathological conditions. If left untreated, these disorders can lead to decreased cardiorespiratory efficiency, worsening bone and back pain, displacement of internal organs, bone degeneration, and other musculoskeletal complications [5, p. 124].

Excess body mass can reduce body stability, leading to compensatory postural mechanisms such as increased lumbar lordosis and pelvic anteversion, which raises the risk of falling. A sedentary lifestyle contributes to weight gain by reducing regular physical activity, including participation in physical education classes, which further limits the recommended physical activity and amplifies the symptoms associated with obesity [4, p. 328]. Premature fatigue and respiratory difficulties often lead to reduced participation in physical and sports activities among obese children. Hypokinesia negatively impacts body posture, affecting its development according to the stages of osteogenesis, regardless of the presence of comorbidities. Moreover, the threats posed by the modern era of electronic devices contribute to decreased physical activity and the development of musculoskeletal disorders, creating a vicious cycle [1, p. 10].

Given the increasing significance of obesity and postural abnormalities as global public health concerns, it is essential to investigate the impact of body posture on obese children, taking into account their levels of physical activity.

Research materials and methods

The aim of this study was to evaluate the impact of physical exercise on correcting posture and improving overall health in overweight children.

The objective of the study was to determine the effectiveness of physical exercise in correcting poor posture and reducing body mass in overweight children.

The study hypothesizes that a structured exercise program will have a significant impact on reducing overweight and correcting poor posture in children, thereby contributing to an improvement in body mass index (BMI) and alleviating postural problems, ultimately promoting optimal physical health.

The study was conducted during physical education classes, with active involvement from teachers, who occasionally participated directly in the examination process. The screening program employed a clinical method for assessing the students. In addition to visual inspection in various positions, spinal functions were evaluated using techniques such as visual diagnosis, superficial and deep muscle palpation, examination of intervertebral joints through the „fork” method, palpation of spinous processes, and manual assessment of passive movements in the spinal joints.

The subjects of the study were boys aged between 10 and 13 years, a period characterized by significant

instability in physical and psychological development, making it conducive to the development of certain pathologies, particularly those affecting the musculoskeletal system. Special attention was given to students with musculoskeletal disorders, particularly those with orthopedic conditions of the pelvic limbs, especially unilateral ones, considering that the imbalance between the lower limbs inevitably affects the spine.

The study was conducted between February 2, 2024, and April 3, 2024, and included a posture correction exercise program with sessions lasting 20 minutes each, three times per week, over the course of 8 weeks. Given the known pathogenic mechanisms of postural disorders in children and adolescents, the following measures were recommended for comprehensive treatment: body position self-correction, therapeutic gymnastics, massage, and back muscle electrostimulation.

Analysis and interpretation of results

The posture characterized by pronounced lordosis was defined by abdominal protrusion and a pelvic tilt angle exceeding 60° . The inclusion of kinesitherapy in the rehabilitation treatment complex is justified by its ability to develop and improve the functional state of the muscular corset, strengthen muscles, and enhance the entire musculoskeletal system. The primary approach in the prevention of postural disorders is the regular practice of physical exercise. Kinesitherapy sessions were conducted under the supervision of a physiotherapist, with active involvement from parents in their child's physical education and the correction of problematic posture.

The corrective exercises designed to address postural disorders were symmetrical in nature. For children with spinal hypermobility, isometric exercises were recommended to stabilize the spine and strengthen the muscles forming the muscular corset. Dynamic and isometric exercises were combined with breathing exercises to train the muscles involved in respiration, including elements of self-extension on an inclined surface or with the use of a fitness ball. Individual correction programs were developed in accordance with general kinesitherapy recommendations for adolescents, alongside a set of specific recommendations for performing specialized corrective exercises.

These interventions were implemented in a complex manner, tailored to the nature of the identified functional disorders, with the differentiated application of kinesitherapeutic methods and tools forming the core of individual programs. The effectiveness of corrective measures was evaluated after a period of 3 to 4 months or longer of kinesitherapy. For this purpose, repeated clinical and instrumental investigations were conducted, and a comparative analysis of the data obtained with the initial data was performed. In the observation groups, as a result of the comprehensive posture correction, a trend toward stabilization of the vertical position was observed, and the orthostatic correction of the shortened extremity, identified in adolescents, significantly improved the stability of the vertical position.

The table presents the results of an initial and final assessment of a group of 6 subjects, where physical parameters were measured before and after a physical exercise program. The subjects' height increased slightly from 149.16 ± 2.7 cm to 150.16 ± 2.5 cm, but without statistical significance ($t=0.27$, $P > 0.5$) (Tab. 1, Fig. 1).

Table 1. Analysis of somatometric indices of the subjects included in the study.

Parameters	Initial assessment (n=6)	Final assessment (n=6)	t-student	P
Height (cm)	$149,16 \pm 2,7$	$150,16 \pm 2,5$	0,27	$>0,5$
Weight (kg)	$56,1 \pm 1,9$	$51,5 \pm 1,5$	1,91	$<0,5$
BMI	$25,3 \pm 2,2$	$22,81 \pm 2,1$	0,82	$>0,5$
Thoracic hyperkyphosis (degrees)	$44 \pm 1,5$	$38,3 \pm 1,3$	2,87	$<0,01$
Lumbar hyperlordosis (degrees)	$35,5 \pm 1,7$	$30,5 \pm 1,5$	2,23	$<0,01$

Note: $n = 6$; $f = 5$; $t: 2,01; 3,36; 4,03$.

$P: 0,05; 0,01; 0,001$.

Fig. 1. Interpretation of comparative data of Height parameters.

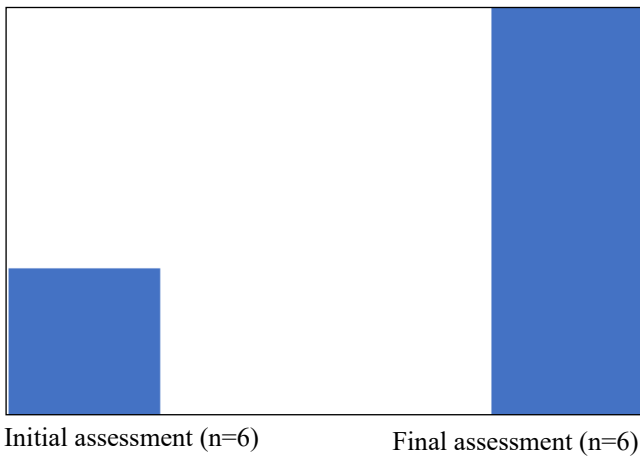


Fig. 2. Interpretation of comparative Weight data.

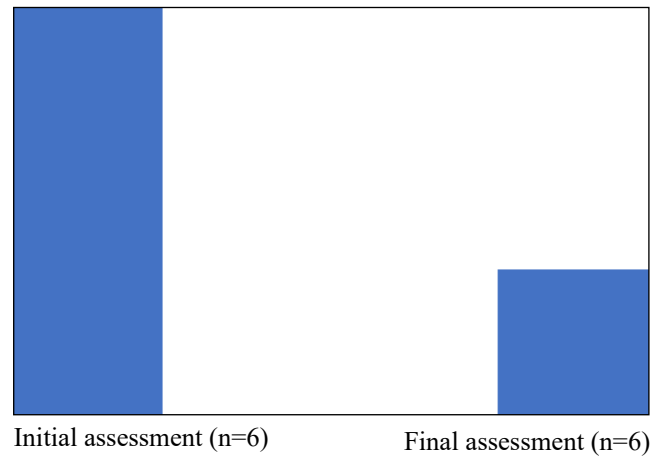


Fig. 3. Interpretation of comparative data of thoracic hypercyphosis (degrees).

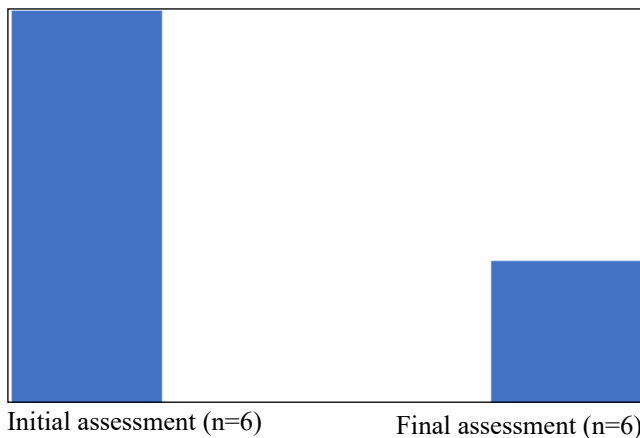
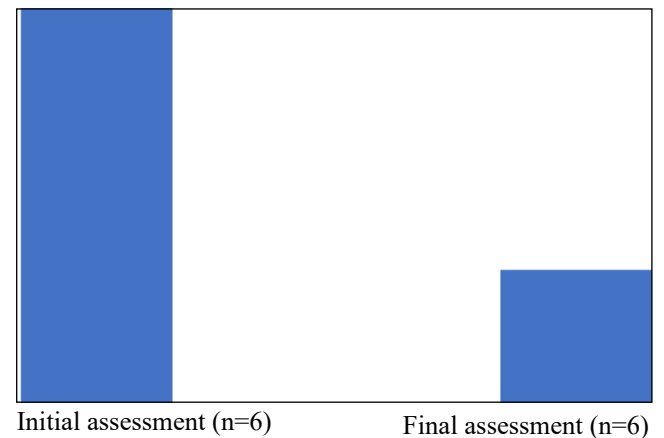


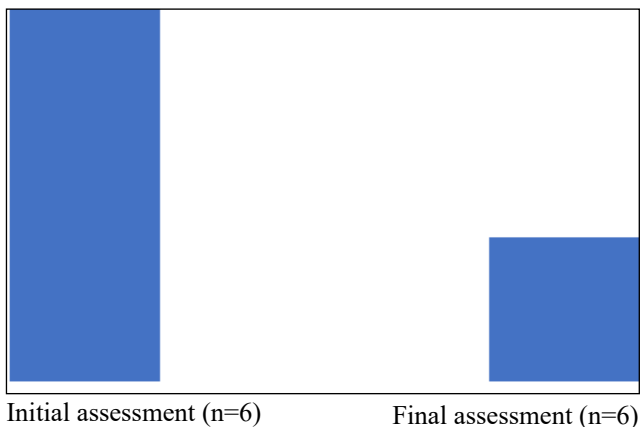
Fig. 4. Interpretation of BMI comparative data.



The subjects' weight decreased significantly from 56.1 ± 1.9 kg to 51.5 ± 1.5 kg (Fig. 2), which was also reflected in a decrease in body mass index (BMI) from 25.3 ± 2.2 to 22.81 ± 2.1 , although this change was not statistically significant ($t=0.82$, $P < 0.5$).

However, the reduction in thoracic hyperkyphosis from 44 ± 1.5 degrees to 38.3 ± 1.3 degrees and hyperlordosis from 35.5 ± 1.7 degrees to 30.5 ± 1.5 degrees was statistically significant ($t=2.87$ and $t=2.23$, respectively, $P < 0.01$), indicating a clear improvement in posture (Tab. 1, Fig. 3).

Fig. 5. Interpretation of comparative data on lumbar hyperlordosis (degrees).



The impact of physical exercises on overweight children with poor posture was evident through the reduction in weight from 56.1 kg to 51.5 kg and in BMI from 25.3 to 22.81, suggesting a reduction in overweight (Tab. 1, Fig. 4).

Additionally, the exercises had a significant impact on posture correction, as demonstrated by the substantial decrease in the angles of thoracic hyperkyphosis from 44 to 38.3 degrees and lumbar hyperlordosis from 35.5 to 30.5 degrees, indicating an improvement in spinal alignment (Tab. 1, Fig. 5).

These results underscore the effectiveness of the physical exercise program in alleviating both excess weight and poor posture in children.

Conclusions

Corrective physical exercises, combined with specialized supervision and active parental involvement, have proven to be highly effective in correcting poor posture and reducing overweight in children, significantly contributing to the improvement of spinal alignment and overall body stability.

The implementation of a personalized kinesiotherapy program, tailored to the individual needs of children, has demonstrated high efficacy in alleviating functional disorders and enhancing overall functional health, with results supported by repeated long-term clinical and instrumental evaluations.

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FASCIAL MOBILIZATION TECHNIQUES AS A COMPLEMENTARY STRATEGY IN PHYSIOTHERAPY TO INCREASE MOBILITY AND DECREASE LOW BACK PAIN

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The integration of fascial techniques into kinesiotherapy for patients with low back pain has proven more effective than standard rehabilitation protocols. This study aimed to evaluate the effects of combining these techniques on mobility and pain relief in 24 participants, divided into two groups: an experimental group receiving both physiotherapy and fascial mobilizations, and a control group undergoing standard physiotherapy. Assessments included the Visual Analog Scale (VAS) for pain, the Schober test for mobility, and the Roland & Morris questionnaires. Results showed significant improvements in the experimental group for both pain reduction and increased lumbar mobility. These findings suggest that adding fascial mobilizations to physiotherapy enhances treatment outcomes, offering faster pain relief and potential for reducing recurrences. This approach may improve patients' long-term quality of life. However, further large-scale studies are needed to confirm these results and guide the development of structured physiotherapeutic programs integrating fascial techniques.

Keywords: *physiotherapy, facial mobilizations, lumbar pain, rehabilitation process, motor capacity, physiotherapeutic strategy, recovery program.*

TEHNICI DE MOBILIZARE FASCIALĂ CA STRATEGIE COMPLEMENTARĂ ÎN FIZIOTERAPIE PENTRU CREȘTEREA MOBILITĂȚII ȘI SCĂDEREA DURERILOR LOMBARE

Organizația Mondială a Sănătății (OMS) a lansat primele linii directoare pentru gestionarea durerii cronice de spate în îngrijirea primară, indicând intervenții recomandate și nerecomandate. Durerea lombară este principala cauză a dizabilității la nivel global, afectând în 2020 aproximativ 619 milioane de persoane, o creștere de 60% față de 1990. Se estimează că numărul va ajunge la 843 milioane până în 2050, cu cele mai mari creșteri în Africa și Asia. Scopul studiului este de a evalua eficiența manipulării fasciei în combinație cu intervențiile kinetoterapeutice pentru gestionarea durerii cronice de spate. Ipoteza sugerează că această combinație este mai eficientă decât tratamentele convenționale, reducând durerea și disfuncțiile mecanice. Rezultatele arată o scădere semnificativă a durerii în grupul experimental (de la $7,5 \pm 0,9$ la $3,0 \pm 1,1$, $P < 0,01$) și îmbunătățirea mobilității, comparativ cu o reducere modestă în grupul de control.

Cuvinte-cheie: *kinetoterapie, mobilizări fasciale, durere lombară, proces de reabilitare, capacitate motorie, strategie kinetoterapeutică, program de recuperare.*

Introduction

Chronic pain is a complex condition characterized by the persistence of symptoms for over three months, frequently associated with significant physical and psychosocial dysfunctions. It affects a considerable portion of the global population, significantly impacting individuals' quality of life and functional capacity. Chronic pain also poses challenges for healthcare professionals due to the difficulty in identifying and addressing its underlying causes. Among chronic pain conditions, low back pain (LBP) stands out as a prevalent and debilitating disorder, affecting the majority of individuals at some point in their lives. In 2020, LBP was responsible for 8.1% of the global years lived with disability, highlighting its widespread impact and burden on healthcare systems [11].

Although clinical guidelines for managing LBP exist, they are often tailored to high-income settings, limiting their applicability globally. For individuals with chronic LBP, participation in family, social, and professional activities is severely impacted, with substantial implications for mental health and economic stability [2, p.1332]. To address these challenges, physiotherapy has established itself as a promising ap-

proach, offering non-invasive, evidence-based interventions that aim to restore functionality and reduce pain. Among these, fascial manipulations have gained increasing recognition for their ability to address biomechanical dysfunctions associated with chronic pain and myofascial disorders.

Fascial manipulations focus on restoring the integrity and mobility of the fascia vital connective tissue that plays a key role in mechanical force transmission and structural support. Dysfunction in the fascia, including densifications and restrictions, contributes to movement limitations, sensitization, and the perpetuation of chronic pain. Myofascial pain, a common contributor to LBP, is characterized by fascial dysfunctions and the presence of trigger points, which further exacerbate discomfort and impair mobility [8, p. 58].

Fascial Manipulation (FM), a specialized technique targeting the densification of fascial tissues, aims to restore physiological tension and improve the sliding of fascial layers [3, p. 11-12]. Through interventions such as fascial decompression, specific stretching, and myofascial release, fascial therapy addresses underlying dysfunctions, alleviates local inflammation, and prevents connective tissue fibrosis. Research suggests that FM can correct biomechanical imbalances, reducing chronic pain and improving functional outcomes in patients with LBP and other chronic pain conditions [6, p. 3107].

Moreover, combining FM with exercise therapy enhances flexibility, reduces pain, and improves overall mobility [5, p. 117]. This integrative approach leverages the benefits of therapeutic exercises and targeted fascial techniques, optimizing recovery and promoting long-term improvements in physical health.

The integration of fascial manipulations within physiotherapy protocols represents a significant advancement in the management of chronic pain and LBP. By addressing the underlying biomechanical dysfunctions and restoring fascial integrity, these interventions provide a holistic solution to pain management. Expanding access to such evidence-based approaches necessitates the adaptation of care standards, training of medical staff, and the strengthening of healthcare systems to ensure universal coverage and accessibility [4, p. 321]. This integrated approach not only enhances clinical outcomes but also reduces the socio-economic burden associated with chronic pain and LBP. Future research should continue to explore the long-term benefits of combining FM with other physiotherapeutic modalities, paving the way for innovative, patient-centered care solutions.

Research materials and methods

The aim of the study is to investigate the effectiveness of fascia manipulation in combination with kinesiotherapy interventions in managing chronic back pain. The study aims to evaluate the impact of these techniques on pain reduction, musculoskeletal function improvement, and mobility restoration.

The objective of this study is to assess the effects of fascia manipulation combined with kinesiotherapy interventions on chronic back pain by reducing muscle tension, alleviating mechanical dysfunctions, comparing the efficacy of the combined treatment with conventional treatments, identifying functional and clinical changes, and exploring the neurophysiological mechanisms involved in chronic pain syndrome.

The study's hypothesis is that fascia manipulation, combined with physiotherapeutic interventions, is more effective than conventional treatments in reducing chronic back pain and alleviating mechanical dysfunctions, while also producing neurophysiological changes that help reduce muscle tension and central sensitization, positively impacting musculoskeletal function.

This study involved the selection of eight participants, who were subsequently divided into two groups: the control group and the experimental group. The participants, aged between 30 and 50 years and of both sexes, were diagnosed with chronic low back pain persisting for over three months. All participants were enrolled in a structured rehabilitation program at the CRM KineticA center.

The intervention was carried out over a defined timeframe, spanning from April 1 to November 30, 2023, with each participant attending between 10 and 15 rehabilitation sessions. Comprehensive assessments were conducted at two distinct time points – baseline (initial evaluation) and post-intervention (final evaluation) – to ensure a thorough analysis of therapeutic outcomes.

A multidimensional approach was adopted for the evaluation process, incorporating both subjective and objective measures:

- **Pain Intensity** - quantified using the Visual Analogue Scale (VAS), a reliable tool for assessing pain levels.
- **Range of Motion (ROM)** - flexion and extension amplitudes were measured to evaluate functional mobility.
- **Quality of Life and Functional Mobility** - assessed using standardized questionnaires and observation protocols tailored to the study objectives.
- **Lumbar Mobility** - evaluated through the Schober Test, a validated method for assessing lumbar flexibility and movement capacity.

Participants in the experimental group underwent a combination of therapeutic exercises and fascial therapy, with interventions guided by the Fascial Distortion Model (FDM). This model focuses on identifying and addressing specific distortions within the fascial system, aiming to restore normal tissue mechanics and alleviate pain. In contrast, the control group received standard physiotherapy sessions, emphasizing conventional approaches without targeted fascial interventions.

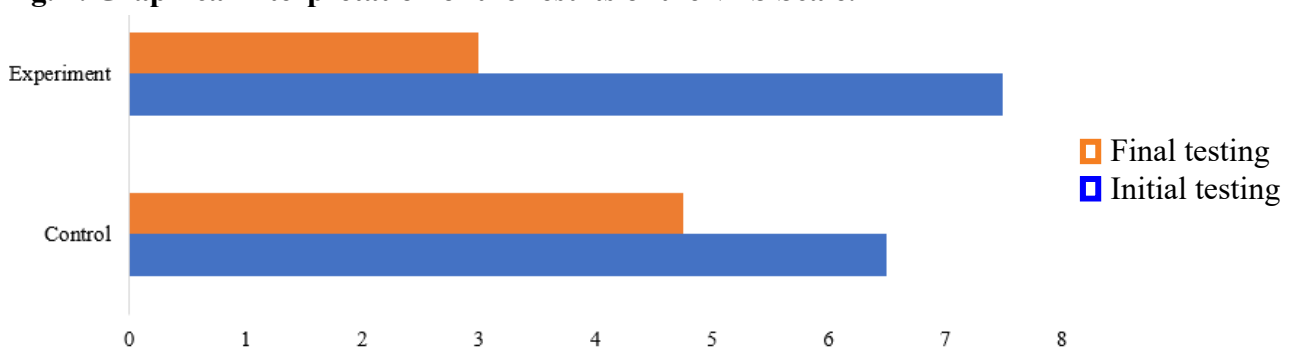
To ensure individualized care, the therapeutic program for each participant was carefully tailored, taking into account their unique clinical presentations and personal goals. The overarching objective was to facilitate the participants' reintegration into daily life, including both professional and social activities, by improving physical functionality and reducing pain.

This research provides a structured framework for comparing the efficacy of combined therapeutic exercises and fascial therapy against standard physiotherapy in managing chronic low back pain. The findings have the potential to contribute to evidence-based clinical practices, offering insights into optimizing rehabilitation protocols for patients with chronic pain conditions.

Analysis and interpretation of results

The control group showed a decrease in pain, with an initial mean value of 6.5 ± 1.1 and a final value of 4.75 ± 1.3 . (Tab.1). This change was statistically significant ($t = 1.29$, $P < 0.05$), suggesting a reduction in pain intensity, but with a relatively modest impact compared to the experimental group. Thus, the results of the control group demonstrate an improvement, but also the limitations of the applied intervention, highlighting the need for more effective methods. In contrast, the experimental group had an initial average pain score of 7.5 ± 0.9 , which significantly decreased to 3.0 ± 1.1 following the intervention. (Fig.1). Compared to the control, the effect was much more pronounced, with a t-student of 3.16 and $P < 0.01$, indicating a superior efficiency of the intervention. This substantial difference suggests that therapeutic exercises, combined with fascial therapy, have generated significantly better results than standard interventions.

Fig. 1. Graphical interpretation of the results of the VAS Scale.

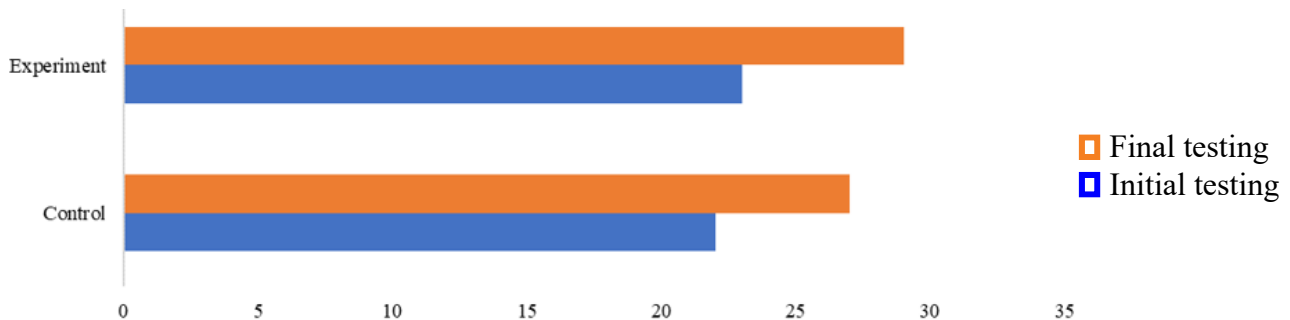


This indicates that the integrated method produced a synergistic impact, leading to a notable decrease in discomfort. The comparison between the two groups distinctly demonstrates that the therapeutic exercises linked to fascial treatment, utilizing the FDM paradigm, significantly affected the experimental group. This efficacy is due not only to the fascial manipulation techniques but also to the adaptation of these exercises to address the individual requirements of each patient. The control group saw a slight reduction in pain, whereas the experimental group underwent a significant alleviation, indicating a more thorough and efficacious treatment approach.

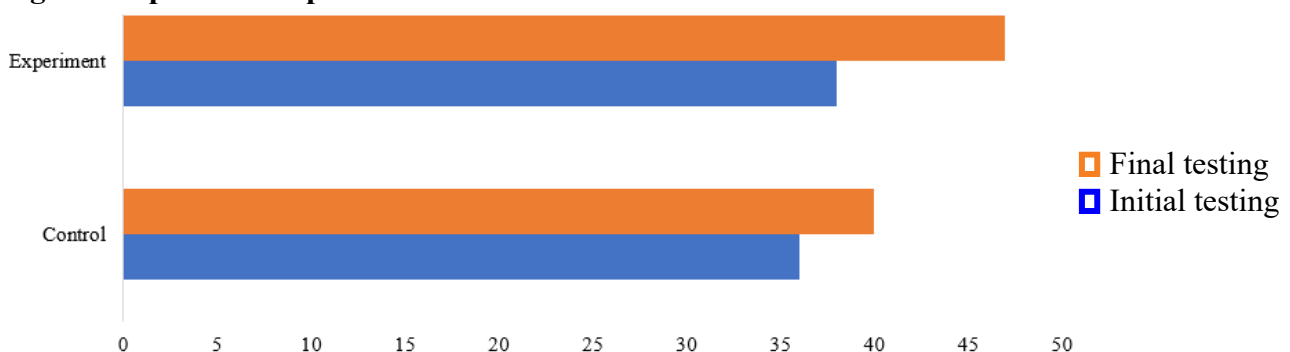
Table 1. Comparative initial and final evaluation data.

No	Group (n=8)	Initial testing	Final testing	t-student	P
VAS Scale					
	Control	6,5±1,1	4,75±1,3	1,29	P<0,05
	Experiment	7,5±0,9	3,0±1,1	3,16	P<0,01
Extension					
	Control	22±1,5	27±1,1	2,84	P<0,05
	Experiment	23±1,2	29±1,3	3,40	P<0,01
Flexion					
	Control	36±1,4	40±1,3	2,1	P<0,05
	Experiment	38±1,3	47±1,6	4,36	P<0,01

The results obtained from the study highlight significant differences between the control and experimental groups regarding joint mobility in both extension and flexion. In the experimental group, which benefited from therapeutic exercises combined with fascial therapy using the FDM (Fascial Distortion Model), a significant improvement in range of motion was observed. In extension, the experimental group recorded an increase from 23 ± 1.2 to 29 ± 1.3 , with a mean difference of 3.40 and a P-value < 0.01 , indicating strong statistical significance (see Table, Fig. 2).

Fig. 2. Graphical interpretation of the results of the extension movement.

In contrast, the control group showed a more modest improvement, with an average difference of 2.84 (from 22 ± 1.5 to 27 ± 1.1) and a P-value < 0.05 . This comparison suggests that the intervention applied in the experimental group was significantly more effective in improving extension mobility. Regarding flexion, the experimental group recorded an increase from 38 ± 1.3 to 47 ± 1.6 , with an average difference of 4.36 and a P-value < 0.01 , again demonstrating the effectiveness of the method used. The control group experienced an increase of only 2.1 (from 36 ± 1.4 to 40 ± 1.3), with a P-value < 0.05 (see Table 1, Fig. 3).

Fig. 3. Graphical interpretation of flexion results.

Conclusions

The aim of this study was to evaluate the effectiveness of therapeutic exercises combined with fascial therapy using the FDM (Fascial Distortion Model) in reducing pain and improving joint mobility. The results confirm the hypothesis that this integrated approach is superior to standard interventions.

The experimental group showed a significant reduction in pain (from 7.5 ± 0.9 to 3.0 ± 1.1 , $P < 0.01$) and notable improvements in mobility, in contrast to the control group, which experienced a modest reduction in pain (from 6.5 ± 1.1 to 4.75 ± 1.3 , $P < 0.05$). These results suggest that therapeutic exercises, combined with fascial therapy, generated a synergistic effect, facilitating faster and more efficient recovery.

Thus, we conclude that implementing the FDM method in therapeutic exercises can represent a valuable intervention in patient rehabilitation, contributing to pain reduction and improved joint functionality.

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VALENCES OF PSYCHOLOGICAL ASSESSMENT OF CURRICULUM

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The given article addresses the importance of psychological evaluation of the curriculum for ensuring a balanced, relevant and effective education. The analysis showed that curriculum balance is a central element in preventing cognitive and emotional overload of school pupils. The balanced curriculum between theory and practical activities supports the harmonious development of pupils, allowing a diversification of competences and an increased interest in learning. In terms of relevance, curriculum that includes up-to-date content and adapted to contemporary social and economic realities has proven to increase students' motivation and better prepare them for integration into society. In terms of potential, the study shows that a curriculum focused on essential skills such as critical thinking, creativity and adaptability has a positive long-term impact on students' personal and professional success. Curriculum focused on these skills supports pupils not only in academic performance, but also in developing essential social and emotional competences. Finally, the analysis of impact on teaching practice and on the relationship with the community revealed that a flexible and relevant curriculum contributes to an effective collaboration between teachers, pupils and parents. Thus, the psychological evaluation of the curriculum becomes essential to adapt the contents and teaching methods to the real needs of pupils and to strengthen the relationships between school, family and community, promoting an integrated and effective education.

Keywords: *psychological assessment of curriculum, balance of curriculum, relevance of curriculum, potential of curriculum, impact of curriculum.*

VALENȚELE EVALUĂRII PSIHOLOGICE ALE CURRICULUMULUI

Articolul dat abordează importanța evaluării psihologice a curriculumului în asigurarea unei educații echilibrate, relevante și eficiente. Analiza a arătat că echilibrul curriculumului este un element central în prevenirea supraîncărcării cognitive și emoționale a elevilor. Curriculumul echilibrat între teorie și activități practice susține dezvoltarea armonioasă a elevilor, permițând o diversificare a competențelor și un interes crescut pentru învățare. În privința relevanței, curriculumul care include conținuturi actualizate și adaptate realităților sociale și economice contemporane a demonstrat că sporește motivația elevilor și îi pregătește mai bine pentru integrarea în societate. În ceea ce privește potențialul, studiul arată că un curriculum centrat pe abilități esențiale, cum ar fi gândirea critică, creativitatea și adaptabilitatea, are un impact pozitiv pe termen lung asupra succesului personal și profesional al elevilor. Curriculumul axat pe aceste abilități îi sprijină pe elevi nu doar în performanța academică, ci și în dezvoltarea unor competențe sociale și emoționale esențiale. În final, analiza impactului asupra practicii didactice și asupra relației cu comunitatea a relevat că un curriculum flexibil și relevant contribuie la o colaborare eficientă între profesori, elevi și părinți. Astfel, evaluarea psihologică a curriculumului devine esențială pentru a adapta conținuturile și metodele de predare la nevoile reale ale elevilor și pentru a întări relațiile dintre școală, familie și comunitate, promovând o educație integrată și eficientă.

Cuvinte-cheie: *evaluarea psihologică a curriculumului, echilibrul curriculumului, relevanța curriculumului, potențialul curriculumului, impactul curriculumului.*

Introduction

The school curriculum plays an essential role in the mental development of pupils, influencing different aspects of their cognitive, emotional, personality and behavior spheres. Thus, a well-structured curriculum develops critical thinking, creativity and problem-solving ability. The curriculum for school subjects is oriented towards the following aspects: formative valence, informative valence, social valence, cultural valence, applicative valence, innovative valence, etc. Thus, Math, Science, and the Humanities provide pupils with opportunities to develop their intellectual skills and learn how to think logically and analytically. Subjects that emphasize personal development and emotional education can help pupils understand and manage their emotions. Disciplines such as Civic Education or school counseling classes contribute to

developing empathy, managing stress and improving interpersonal relationships. The curriculum can also impart moral, ethical and social values that contribute to the formation of a strong character. History and literature classes can help to understand the concepts of interculturality, responsibility, civic sense, moral sense and respect for diversity.

Through group activities, joint projects and other ways of organizing lessons stipulated in the curriculum, pupils develop essential social skills such as cooperation, communication and team spirit, which are fundamental for their integration into society. Also, a curriculum that encourages personalized learning and the development of each student's unique abilities can increase self-confidence and motivation to learn, but a rigid curriculum based only on memorization and grades can lead to frustration, anxiety and low self-esteem, especially in pupils who do not fit this learning style. It is necessary that the curriculum is not overloaded or does not put too much emphasis on performance and assessment as it will increase the stress and anxiety level of pupils. Conversely, a balanced curriculum that includes time for recreation and personal development contributes to better mental health. Curriculum can valorize pupils' potential if it is built on multiple levels of understanding and competences, allowing pupils to progress from simple knowledge to analysis and evaluation.

Based on these considerations, and from the fact that the curriculum reflects the school's educational offer, we set out the purpose to analyze the valences of psychological assessment of the curriculum from the perspective of the balance, relevance, potential and impact of curriculum.

In educational practice in our country, according to the curriculum design and development methodology stipulated in the "National Curriculum Reference Framework", at a certain period of time, the curriculum, like any other regulatory document, becomes the object of pedagogical evaluation. [1, 2, 3] The question arises: to what extent is the psychological component of the curriculum assessment relevant for the elaboration of a final appreciation regarding the effectiveness of the curriculum? The answer still comes from the complicated process of curriculum design, which is significantly influenced by the laws of cognitive psychology, age psychology, learning psychology, etc. The authors take into account psychological considerations in developing the curriculum to ensure that learning is as effective as possible for each pupil. It is necessary to understand how the brain processes information. And the curriculum in school subjects should present the information in a way that it can be learned and understood more easily. Psychology provides information on how a curriculum can be organized to achieve pupils learning at an optimal level and how much information pupils can absorb in learning different curriculum content. [4]

Theoretical Analysis of Curriculum Assessment Criteria from Psychological Perspective

We will analyze in this text sequence the following curriculum assessment criteria: balance, relevance, potential and impact of the curriculum.

The balance of curriculum constitutes the structure and order of the component elements: the purposes, the objectives, the contents, the teaching methods, the description of assessment system, the planning of activities. The subject of balance in the curriculum has been addressed over time by several theorists and researchers in psychology and education, being an essential element for the development of a curriculum that meets the varied needs of pupils and society. Thus, John Dewey, a pioneer in progressive education, argued in his work „Democracy and Education” (1938) the need for a balanced curriculum that integrates both the interests of pupils and the demands of society. Dewey emphasized the importance of balancing theory and practice in order for learning to be relevant and functional. Ralph Tyler developed the curriculum model known as the „Tyler Rationale” in „Basic Principles of Curriculum and Instruction” (1949). He emphasized the balance between educational objectives, learning experiences and assessment methods to ensure a coherent and effective curriculum. Author Jerome Bruner in „Process of Education” (1960) promoted the idea of a spiral curriculum that introduces fundamental concepts in a balanced way and develops them progressively. This type of curriculum involves returning to central themes as pupils progress, thus balancing the depth and complexity of learning. Another important researcher, Elliot Eisner wrote about curriculum balance in the „Educational Imagination” (1979). He advocated a comprehensive curriculum that combined cognitive, emotional and aesthetic aspects, emphasizing the importance of including the arts

and creativity in education. Howard Gardner, known for the theory of multiple intelligences, promoted in „Frames of Mind” (1983) the idea that a balanced curriculum should take into account the different types of intelligence of pupils, giving them the opportunity to develop their specific abilities. Philip Jackson in „Life in Classrooms” (1968), explored how classroom activities can contribute to a balance between academic goals and the social and emotional needs of pupils, emphasizing the importance of social interactions and the school environment in curriculum.

So, the researches and theories of these authors highlight the need to build a balanced curriculum, which takes into account both academic and social, emotional and practical aspects, preparing pupils for an active and informed participation in society.

Currently, the authors of school curriculum try to maintain the balance in terms of aspects: innovation *versus* tradition, pupil-centered activities *versus* subject-centered activities, individual learning methods *versus* group learning methods, audio techniques *versus* visual techniques, needs of society *versus* individual needs of the pupil who learns, defining cognition *versus* emotional or behavioral objectives; breadth *versus* depth of curriculum, etc. [5] The aspect of balance must be considered both in the design and development process and in the curriculum assessment process.

The relevance of curriculum reflects the degree of applicability of curriculum content to pupils needs and societal demands. [6] The issue of curriculum relevance has been explored in studies in psychology and pedagogy, with an emphasis on how education can respond to the needs and interests of pupils, preparing them for real life. Thus, Jean Piaget in his studies on cognitive development, emphasized the importance of relevance of the curriculum in relation to the stages of cognitive development of pupils. He argued that the curriculum must be adapted to the children’s level of understanding to stimulate active learning and discovery. His works have had a major influence on conceptions of a curriculum relevant to the age of pupils.

The theory of proximal development zone of (PDZ) of Lev Vygotsky highlighted the importance of relevance in the curriculum by adapting the content to level of individual development of each pupil. Vygotsky argued that learning must be contextualized and facilitate the development of pupils’ potential, thus having practical and personal relevance. David Ausubel in his work „Educational Psychology: A Cognitive View” (1968), developed the theory of learning through advanced organizers, emphasizing that the relevance of curriculum can be increased by logically structuring information and connecting new knowledge with already existing knowledge. Thus, pupils can perceive the usefulness and practical applicability of the information learned.

Benjamin Bloom in his studies on the taxonomy of educational objectives, pointed out that the relevance of curriculum can be maximized by clear educational objectives that allow pupils to understand the usefulness of each acquired competence. Through his taxonomy, he proposed a framework through which knowledge and competences can be structured so that they have practical applicability. Also, the author Paulo Freire in the work „Pedagogy of the Oppressed” (1968), proposed a relevant curriculum that addresses the social and cultural aspects of pupils’ lives, to help them understand and criticize the social structures around them. He argued that education must be relevant and emancipatory, not just a set of standardized knowledge.

These studies and theories have emphasized the importance of a curriculum that is relevant to pupils, both cognitively and practically.

The potential of curriculum reflects its ability to achieve the educational goals, to achieve the expected effects regarding the cognitive results, the attitude and behavior changes of the pupils in the process of learning, training. [6] The topic of potential of the curriculum – in the sense of its ability to support the holistic development of pupils – has been addressed in several studies in psychology. In the work „Origins of Intelligence in Children” (1952), J. Piaget emphasized the importance of a curriculum adapted to the level of development of pupils in order to maximize their intellectual potential. In „Experiential Learning: Experience as Source of Learning and Development” (1984), David Kolb approached the potential of curriculum through the lens of experiential learning, emphasizing that pupils develop their full potential when they are actively involved in experiential learning processes. This model suggests that through hands-on methods and interactive activities, the curriculum can facilitate the overall development of pupils.

The author Elliot Eisner in his work „Educational Imagination” (1979) presented the importance of the potential of curriculum to support the cognitive and aesthetic development of pupils, arguing that the inclusion of arts and creative activities can stimulate imagination and innovative thinking. This type of curriculum can maximize pupils’ potential by diversifying learning experiences.

These works and researches have contributed to the understanding of how the curriculum can support the full development of pupils in the context of the Romanian and Moldovan educational system, encouraging an adaptive, competence-based and pupil-centered approach.

The impact of curriculum. This dimension in the evaluation of curriculum refers to the impact of curriculum on teaching practice, on administrative and managerial methods, on the relationship of community and parents with the school, on the social behavior of pupils. In the analysis of this aspect, the impact of curriculum on all elements of the educational system is considered. We will further analyze psychological aspects regarding the impact of curriculum on teaching practice. The curriculum plays an essential role in shaping teaching practice, directly influencing the methods and strategies used by teachers in the teaching process. Through its structure and content, the curriculum defines the learning objectives and essential competences, providing teachers with a guide in the development of educational activities and materials. When the curriculum is well constructed, it can stimulate teaching creativity, giving teachers the freedom to adapt lessons to meet the diverse needs of pupils. On the other hand, a rigid curriculum can limit teachers’ flexibility, reducing opportunities to use innovative methods or personalize learning. At the same time, the curriculum is a determining factor in the choice of teaching resources, from textbooks and worksheets to projects and extracurricular activities, which support the deepening of concepts taught. Each curriculum change brings with it challenges for teachers, requiring them to update their knowledge and incorporate new teaching techniques. Adapting to new curricular demands can be difficult, but it offers teachers opportunities for professional development, encouraging them to become more reflective and improve their methods. Furthermore, curricula also influence the way teachers assess pupils progress, introducing new criteria and assessment standards. In this way, curricula not only outline classroom activities, but also create coherence between educational goals, teaching methods, and assessment. Therefore, the school curriculum is not just a plan of study, but a shaping force that profoundly impacts teaching practice, the professional development of teachers, and ultimately the learning experience of pupils.

The subject of impact of the curriculum on teaching practice has been addressed in numerous studies in psychology and pedagogy, exploring how curriculum influences teaching methods, teacher-pupil relationships and assessment strategies. Thus, Jerome Bruner argued that curriculum structure directly affects teaching methods. Through the „spiral curriculum” model, he suggested that progressively returning to key concepts allows teachers to gradually deepen content, better adapting to pupils’ level of understanding. David Ausubel, points out that the structure and organization of the curriculum influences the way teachers present information. Ausubel argued that a well-structured curriculum facilitates effective teaching and meaningful learning. Maria Montessori in her works argues that a flexible and child-centered curriculum positively influences teaching practice, allowing teachers to support self-directed learning. Through its structure, the Montessori curriculum helps to create an environment where pupils learn at their own pace, guided by personal interest. Elliot Eisner explored how curriculum shapes teaching practice, arguing that a varied and creative curriculum allows teachers to adopt diverse teaching strategies, including activities that stimulate creativity and critical thinking.

These studies have had a profound impact on how curriculum is perceived to influence teaching methods and teachers’ professional development, demonstrating the importance of an adaptive and pupil-centered curriculum in promoting effective and meaningful teaching practice.

The impact of curriculum on the relationship between the community, parents and educational institutions can be identified by analyzing the perceptions and the level of their involvement in the children’s education. A curriculum that encourages collaboration between school and family, through projects or extracurricular activities, increases the involvement of parents in their children’s education. They feel themselves more motivated to participate in educational activities, talk with teachers and contribute to the learning process. Also, curriculum that includes elements of civic education and the development of social compe-

tences can strengthen the links between school and community, promoting shared values such as respect, responsibility and civic engagement. Curriculum that includes themes and projects adapted to the cultural and social specifics of the community can encourage community participation in school activities, and parents and other people in the community can become active partners in the educational process. A clear and transparent curriculum allows parents and the community to understand educational goals and assessment methods. This facilitates communication between teachers and parents, creating a partnership based on transparency and collaboration. The curriculum that includes social and emotional education programs helps to develop a positive environment around pupils, encouraging parents and community members to support the school and contribute to the formation of a safe and friendly environment for children. When the curriculum is designed to meet the needs of modern society, parents and the community are more likely to valorize education. This increases the prestige of school in the community and encourages the support and funding of educational initiatives.

Thus, the curriculum can play an essential role in strengthening the link between school, parents and community, supporting a strong educational environment based on collaboration, support and shared values.

Conclusions

Psychological evaluation of the curriculum is essential to ensure that it effectively meets the needs of pupils and fulfills its educational goals. The balance of curriculum is a key first aspect, as it must provide a harmonious combination of theoretical knowledge and practical skills. If certain areas are overloaded, pupils may become overwhelmed and interest in learning may decrease, negatively affecting their emotional state as well. The relevance of curriculum is another important dimension, which implies that the contents must be updated and aligned with the demands of society and the labor market. An irrelevant curriculum can decrease pupils' motivation and increase the risk of dropping out, being perceived as useless in the context of current realities. The potential of curriculum, in this sense, refers to its ability to develop in pupils not only academic knowledge, but also essential socio-emotional skills. The curriculum should support the development of critical thinking, creativity and adaptability, elements that contribute to pupils' personal and professional success.

Also, the impact of curriculum on teaching practice must be evaluated from the perspective of flexibility and teaching methods. Teachers need a curriculum that allows them to adapt their methods to meet the individual differences of pupils, which contributes to a more effective and satisfying educational process. In addition, the curriculum influences the relationship between the school and the community, and psychological assessment can help identify how it encourages parental and community involvement. When the curriculum is relevant and adaptable, parents tend to be more actively supportive of the educational process, feeling that it supports their children in real ways. Psychological assessment thus allows the continuous adjustment of the curriculum, taking into account the emotional, cognitive and social needs of pupils, as well as the demands of a constantly changing society.

The need to periodically evaluate the curriculum has always existed, to adapt it to socio-economic changes and the needs of pupils, thus ensuring its relevance and effectiveness in education. Psychological evaluation of the curriculum is necessary for several reasons: because it ensures that the educational program meets the cognitive, emotional and social needs of pupils.

First, it will be determined whether the curriculum is adapted to the pupils' developmental stages, thus avoiding overloading or under-stimulating them. Also, psychological assessment can identify whether the curriculum is able to capture the interest and stimulate the curiosity of pupils, reflect the diversity of learning styles, develop emotional intelligence, communication skills, conflict resolution and other socio-emotional competences essential for long-term success.

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THEORETICAL CONCEPTUALIZATIONS REGARDING SCHOOL CURRICULUM MONITORING FROM THE PERSPECTIVE OF STUDENT THINKING DEVELOPMENT

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The article explores the importance of curriculum monitoring from the perspective of students' thinking development. It outlines the evolution of the curriculum as a central tool in education, defining the learning path and educational objectives. An analysis is made of the historical development of the curriculum and its various definitions and components. The paper proposes a multidimensional approach to curriculum monitoring, including both the analysis of curricular documents and the use of qualitative and quantitative methods to assess the impact of the curriculum on the development of students' thinking. It also emphasizes the relevance of adapting the curriculum to students' needs and their cognitive development stages. Finally, future research directions are presented, highlighting the importance of continuous curriculum monitoring from the perspective of students' thinking development, in order to meet the needs of a constantly changing society.

Keywords: *cognitive development, curriculum, students, thinking, monitoring, educational system, empirical research.*

CONCEPTUALIZĂRI TEORETICE PRIVIND MONITORIZAREA CURRICULUMULUI ȘCOLAR DIN PERSPECTIVA DEZVOLTĂRII GÂNDIRII ELEVILOR

Articolul explorează importanța monitorizării curriculumului din perspectiva dezvoltării gândirii elevilor. Este elucidată evoluția curriculumului ca instrument central în educație, definind traseul de învățare și obiectivele educaționale. Este efectuată o analiză a evoluției istorice a curriculumului și diversele sale definiții și componente. Lucrarea propune o abordare multidimensională a monitorizării curriculumului, incluzând atât analiza documentelor curriculare, cât și utilizarea unor metode calitative și cantitative pentru a evalua impactul curriculumului asupra dezvoltării gândirii elevilor. De asemenea, se accentuează relevanța adaptării curriculumului la nevoile elevilor și la stadiile lor de dezvoltare cognitivă. În final, sunt prezentate direcțiile ulterioare de cercetare și este menționată importanța monitorizării continue a curriculumului din perspectiva dezvoltării gândirii elevilor, pentru a răspunde nevoilor unei societăți în continuă schimbare.

Cuvinte-cheie: *dezvoltare cognitivă, curriculum, elevi, gândire, monitorizare, sistem educațional, cercetarea empirică.*

Introduction

In a constantly changing society, educational systems face persistent pressure to modernize their approaches and methods to ensure students are equipped for present and future challenges. The school curriculum, the cornerstone of the educational process, plays a crucial role in this dynamic, providing the framework for developing the cognitive, emotional, and social skills essential for individual and collective success.

Curriculum monitoring is the process of continuously evaluating its relevance, efficiency, and impact on student development. This practice becomes indispensable in light of rapid technological advancements, globalization, and the diversification of educational needs. For instance, integrating new technologies into education or fostering transversal competencies like critical and creative thinking necessitates frequent adjustments and revisions to the curriculum. Monitoring offers the opportunity to identify gaps, adjust content, and implement innovative teaching strategies.

Historically, education was spontaneously and informally organized by religion, families, or communi-

ties. Starting in the late 18th century, states recognized the potential of developing educated workforces to strengthen economies and promote national identity through public schooling. Governments were prepared to bear the high costs of providing this public good, given its broader benefits for societies and economies. New structures replaced and absorbed traditional educational models. Access to more education improved individual opportunities, enabling those who climbed the educational ladder to achieve higher living standards and greater returns [1].

The curriculum, as a normative document fundamental to organizing the educational process, derives from the Latin term referring to a well-defined learning path, inspired by „curriculum vitae”, which denotes the path of a person’s life marked by significant circumstances [2, p. 72]. The term „curriculum” entered the vocabulary of education in the late 16th and early 17th centuries [3, p. 80], initially appearing in medieval university documents (e.g., Leiden, Netherlands, 1582; Glasgow, Scotland, 1633). One of the earliest lexicographic mentions appears in *The Oxford English Dictionary*, defining it as „a prescribed course of study or instruction in a school or university”. By the mid-19th century, the term „curriculum” was commonly used worldwide to refer primarily to the informational content of educational programs.

Monitoring is a continuous process of following, observing, supervising and controlling an educational fact or phenomenon, in which information and data are collected, analyzed and interpreted in order to evaluate the supervised educational fact or phenomenon and to take necessary decisions. Monitoring the implementation/functioning of the school curriculum means the systematic and continuous monitoring of how the education system and process behaves in relation to the proposed changes. Regarding the education process, three types of monitoring are distinguished:

- administrative monitoring, which refers to the follow-up/supervision of compliance with the legal provisions regarding the education plan, curriculum, textbooks, the organization and development of the educational process, etc.;
- formative monitoring, focused on monitoring the learning process: for example, the periodic administration of criterion tests aimed at the essence of a study program, allows the identification of problems, difficulties in its development, etc.;
- monitoring/piloting school performance, which is generally achieved with the help of normative tests; they have the role of informing, in comparative terms, about what schools and classes „produce” [4].

Results and discussions

The core terms related to the curriculum are „school discipline” and „study program”. Building on these, various definitions of „curriculum” over time have focused on aspects such as learning experience, objectives, content and their interrelations, its prescriptive and axiological dimensions, and its nature as a project requiring implementation. Below are several definitions reflecting both the historical-geographical dimension and educational policy perspectives [5, p. 109]:

- „The curriculum indicates the list of contents of school subjects” (G. Mialaret, 1979).
- „The curriculum refers to the purpose and content of an educational program, together with their organization” (D. Walker, 1990).
- „The curriculum is considered a project that defines the purposes and objectives of an educational action, the paths, means, and activities used to achieve these purposes, as well as the methods and tools necessary for evaluating the results obtained” (L. D ‘Hainaut, 1981).
- „The curriculum represents the plans developed to guide learning in schools - usually materialized in documents of varying levels of generality - and the implementation of these plans in classrooms; students’ experiences take place in a learning environment that also influences what is learned” (A. Glatthorn, 1981).
- „The curriculum is a set of interrelated plans and experiences that a student undertakes under the guidance of the school” (C. J. Marsh, K. Stafford, 1988).
- „The curriculum includes any educational activity developed by the school and directed towards a goal, taking place either within or outside the institution”.
- In its broadest sense, the curriculum „encompasses any personal experience acquired in various socio-cultural contexts and situations” (UNESCO, 1975).

-, „The conceptualization of the curriculum, its comprehensive approach, involves identifying the cognitive acquisitions that are available and compatible, which can be coherently selected and articulated into an integrative curriculum concept. For this integrative approach, three premises are important:

1. The notion of the curriculum is multidimensional, implying multiple levels of analysis;
2. This concept can be defined by a family of terms, within which each has its own legitimacy, but none, in isolation, is sufficient to express the essence of the curriculum;
3. The curriculum is not a static concept but one that undergoes continuous growth and successive enrichment [6].

The implementation of any curriculum requires close monitoring, the development of a coherent action plan for this purpose, and a clear methodology for conducting the monitoring process. The goal set before schools today is to equip students with a set of functional competencies, necessary either for transitioning to a higher level of education or for more successful integration into society [7].

According to the theory and methodology of curriculum design and development, the school curriculum, like any normative act, is subject to periodic evaluation and continuous monitoring. Through monitoring and evaluation, the extent to which the curriculum specifies when, what, how much, and how learning occurs is assessed, alongside the quality of its normative description of the educational vision of learning and the projective quality of forecasting the educational effects that learning will have in each school discipline within an educational cycle.

The monitoring process, as well as curricular evaluation, will consider a series of value-based principles:

- The principle of aligning the curriculum with national and international socio-cultural contexts;
 - The principle of openness to current developments in curriculum-related issues;
 - The principle of coherence in the relationship between the curriculum and the goals of the educational system, as well as the relationship between the various intrinsic components of the curriculum;
 - The principle of relevance in formulating educational objectives, grouping curricular areas, and selecting content;
 - The principle of optimal horizontal and vertical articulation of all elements within the curricular process [8].
- The criteria for designing the procedure for monitoring curriculum implementation should include the following parameters of analysis:
- Is the curriculum relevant to learners, i.e., is it perceived by students as suitable for their current, future, and developmental needs?
 - Does the implemented curriculum have flexibility, i.e., does it allow for the emergence and manifestation of individual learning differences?
 - Does the curriculum ensure continuity, i.e., does it facilitate a smooth transition from one educational level to another?
 - Are educational institutions encouraged to develop portions of the curriculum tailored to the needs and characteristics of their student populations? [9].

The information presented in this article reflects the initial research on the topic: „Theoretical conceptualizations regarding the monitoring of the school curriculum from the perspective of student cognitive development” within the research project „Theory and Methodology of Continuous and Cyclical Monitoring and Development of the School Curriculum”. The research aims to address fundamental questions about how the curriculum influences students’ cognitive development, serving as an effective tool for cultivating cognitive skills in students of various ages.

The investigative perspective is psychological and focuses on the following main directions to be implemented during the research project:

1. Initially, we aim to clearly define the concept of “curriculum monitoring,” considering its formative and summative dimensions. We plan to begin the research by analyzing curriculum theory, learning and evaluation theories, as well as more specific theories such as the constructivist or socio-cultural theories. Useful questions to be clarified here include:

- What is the curriculum, and what are its components (objectives, content, methods, evaluation)?

- How are the general goals of education reflected in the curriculum?
 - How does the curriculum respond to the needs of a changing society?
 - What learning theories underpin the design of the curriculum?
 - How do these theories influence the choice of content, teaching methods, etc.?
2. It is essential to establish a clear connection between the key concepts of the research topic (curriculum and thinking) and to identify indicators that allow us to assess students' progress in developing different types of thinking. Questions we aim to address in this section include:
- What are the basic psychological theories that explain thinking processes (e.g., Piaget, Vygotsky, Bruner), and how can these be integrated into the curriculum?
 - What are the main types of thinking, and how can they be developed?
 - The zone of proximal development – what activities foster efficient and functional thinking development?
 - How are the objectives targeting the development of thinking formulated in the curriculum? Are they measurable and aligned with Bloom's Taxonomy levels?
 - What types of content are most suitable for stimulating different types of thinking?
 - Are effective teaching methods being used to develop various types of thinking (e.g., discovery learning, problem-solving, projects, case studies, etc.)?
 - How can students' thinking development be assessed? What tools and techniques are appropriate (rubrics, portfolios, alternative tests)?
 - What implicit messages and values does the curriculum convey, and how can these influence the development of thinking?
3. We aim to present the characteristics of thinking development at different age stages and their specifics for various educational levels according to psychological literature. Piaget's theory on cognitive development stages still provides much clarity on specific modes of thinking. Understanding these stages allows teaching strategies to be adapted to students' developmental levels. For example, practical activities and manipulations are essential for preschoolers, while adolescents can engage in abstract discussions and solve complex problems. Additionally, components of thinking and the critical role of schools in cultivating them can be analyzed. Thus, it is logical to expect the curriculum to include activities that stimulate all these components of thinking, tailored to students' developmental levels.
4. Highlighting the most important types and dimensions of thinking: convergent and divergent thinking, inductive and deductive reasoning, abstract or concrete thinking, critical, creative, analytical, emotional, moral thinking, etc. Understanding these types of thinking is essential for teachers aiming to create effective learning experiences. Through diverse and engaging activities, teachers can stimulate the development of all types of thinking in students.
5. It is important to analyze how students' thinking develops within various school subjects. Thus, we will examine the curriculum across several disciplines to understand how they foster thinking development. We believe that every school subject offers a suitable ground for cultivating specific types of thinking. For example, humanities subjects can effectively develop thinking through text analysis, understanding literary concepts, and comparative source analysis. Science subjects easily foster logical, analytical, and abstract thinking. The arts, for instance, can stimulate creative, imaginative, and aesthetic thinking. Physical education can contribute to developing critical and strategic thinking through exercises and sports games.
6. We will approach the curriculum for different subjects as a tool that can either facilitate or inhibit the development of students' thinking. It is important to identify curriculum elements that positively impact this development.
7. To this end, qualitative methods (interviews, case studies, curriculum analysis) and quantitative methods (questionnaires, systematic observations) can be used. The primary objective remains a detailed analysis of the curriculum for various disciplines, focusing on how activities targeting the development of students' thinking are integrated. However, we also propose complementing this information with administering questionnaires to teachers and students to gather their perceptions regarding how the curriculum is monitored and its impact on the development of students' thinking.

8. Finally, synthesizing the obtained results, we aim to offer recommendations and examples of activities that can be integrated into various subjects to stimulate cognitive processes in general and students' thinking in particular.

By adopting a psychological perspective on curriculum monitoring, the research can make important contributions to understanding the relationship between curricular structure and students' cognitive development. Thus, the project will provide concrete recommendations for optimizing the educational process and contribute to improving the quality of education in Moldova and beyond.

Conclusions

Summarizing the above, we highlight the importance of monitoring the school curriculum from the perspective of developing students' thinking. The monitoring process must be not only continuous but also adapted to the cognitive needs and socio-cultural context of students. By integrating educational and psychological theories, the curriculum can effectively contribute to developing various types of thinking, such as critical, creative, and analytical. Furthermore, adapting teaching and assessment methods to students' developmental stages is essential for maximizing the educational impact. Developing an effective curriculum that promotes students' thinking requires close collaboration among researchers, teachers, psychologists, and parents. Through a joint effort, we can create an educational system that provides all students with the opportunity to maximize their cognitive potential.

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SCHOOL AS A SPACE FOR CREATIVE THINKING

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Creative thinking is considered to be one of the key skills of the 21st century. The problem of developing creative abilities of schoolchildren is the basis, the foundation of the learning process, is an ‘eternal’ pedagogical problem, which does not lose its relevance over time, requiring constant, close attention and further development. The article presents a theoretical review of the problem of creativity, describes the goals and pedagogical conditions of creativity development in schoolchildren, suggests some directions of modernisation of the educational process and curriculum in order to create conditions for the development of creative thinking.

Keywords: *creativity, creative thinking, school, students, creative thinking development.*

ȘCOALA CA SPAȚIU PENTRU GÂNDIRE CREATIVĂ

Gândirea creativă este considerată a fi una dintre competențele-cheie ale secolului XXI. Problema dezvoltării abilităților creative ale elevilor este baza, fundamentul procesului de învățare, este o problemă pedagogică „eternă”, care nu își pierde relevanța în timp, necesitând o atenție constantă, atentă și o dezvoltare ulterioară. Articolul prezintă o trecere în revistă teoretică a problemei creativității, descrie obiectivele și condițiile pedagogice ale dezvoltării creativității la școlari, propune câteva direcții de modernizare a procesului educațional și curricula predată pentru a crea condiții de dezvoltare a gândirii creative.

Cuvinte-cheie: *creativitate, gândire creativă, școală, elevi, dezvoltarea gândirii creative.*

Introduction

Today’s society is particularly in need of people who are enterprising, creative, ready to find new approaches to solving urgent socio-economic and cultural problems, able to live in a new democratic society and be useful to this society.

In this regard, the problem of developing creative thinking and creative activity of an individual is of particular relevance today. Creative individuals have always determined the progress of civilisation, creating material and spiritual values that are notable for their novelty, non-template, helping people to see the unusual in seemingly ordinary phenomena. But today the educational process is faced with the task of educating a creative personality, starting from primary school. This task is reflected in alternative educational programmes and innovative processes taking place in modern schools.

Creative thinking is a component of functional literacy, which is understood as a person’s ability to use his/her imagination to develop and improve ideas, form new knowledge, and solve problems he/she has not encountered before. According to PISA (Programme for International Student Assessment) [19], creative thinking is also the ability to think critically and improve one’s designs.

Creative thinking plays a huge role in human life. It is a factor that is necessary for creating something new, because all modern inventions are the result of a non-standard approach to familiar things. Creative approach helps to react faster to tasks, skilfully get out of difficult situations, live out of the template and generate cool ideas. People with creative thinking are able to think outside the box and find unconventional solutions to standard situations.

Conceptual base

The modern system of general education does not pay due attention to the development of creative thinking in schoolchildren: the emphasis is placed on logic, as well as on mastering knowledge in a number of exact and humanitarian disciplines [13]. The small number of hours devoted to fine arts, music and choreography in modern schools is not enough for children to develop their potential on a large scale. It is not surprising that

many parents are interested in various methods of developing their child's creative thinking, as this can give them a significant advantage over their peers and lay the foundation for their future speciality.

Education today is aimed not only at equipping students with a system of knowledge, skills and abilities necessary for the implementation of the school curriculum, but also at the development of their creative abilities and capabilities, the formation of readiness for creative problem solving.

The social order for a creative personality cannot be successfully implemented without modernising the school learning process. Its reorganisation presupposes, first of all, the focus of teachers' efforts on the development of students' memory, thinking, imagination, systematisation of knowledge and skills of creative activity, improvement of properties and qualities of their personality, providing them with the ability to find their own way out of non-standard situations. A creative approach to the implementation of the school programme is one of the important indicators of their learning ability [9, 13]. In connection with the need of society in creative schoolchildren and its fulfilment, there is a need to study the main characteristics of a creative personality and the conditions of their formation by means of the educational process of school. Such characteristics are creativity, creative activity and creative potential of a personality.

Therefore, today in pedagogical science and practice there is an intensive search for new, non-standard forms, methods and techniques of teaching. Non-traditional types of lessons, problem-based teaching methods, collective creative activities in extracurricular activities that promote the development of creative activity of junior schoolchildren are widespread.

As mentioned by Professor Ig. Racu [6], creativity as a mechanism of productive activity, aimed at stimulating the development of creative personality of schoolchildren, involves clarifying its essence and identifying the main characteristics of this complex personal education.

The analysis of scientific literature allows us to talk about the ambiguity of approaches to this issue. In the 60s of the XX century, the impetus for the identification of creative thinking was the information about the lack of connection between intelligence and the success of solving problem situations. It was found that the latter depends on the ability to use the information given in the tasks at a fast pace in different ways. This type of thinking [1, 2, 16, 18] was called creativity and began to study it independently of intelligence - as thinking associated with the creation or discovery of something new.

To determine the level of creativity, J. Guilford identified 16 hypothetical intellectual abilities that characterise creativity [16].

Among them:

1. fluency of thought - the number of ideas arising per unit of time;
2. flexibility of thought - the ability to switch from one idea to another;
3. originality - the ability to produce ideas that differ from conventional views;
4. curiosity - sensitivity to problems in the world around us;
5. ability to develop a hypothesis;
6. irreality - logical independence of the reaction from the stimulus;
7. fantasy - complete detachment of the response from reality in the presence of a logical connection between the stimulus and the response;
8. problem-solving ability, i.e. the ability to analyse and synthesise;
9. the ability to improve an object by adding details;
10. and so on.

E. Torrance identifies four main parameters that characterise creativity: ease - the speed of performing textual tasks; flexibility - the number of switches from one class of objects to another during the answers; originality - the minimum frequency of a given answer to a homogeneous group; accuracy of task fulfilment [18].

The author of the methodology of creativity development, teacher O. Г. Захарова [10] considers creativity as the ability to think outside the box, the ability to produce unexpectedly new solutions. She considers creativity from the point of view of the ability to work with stereotypes of perception, thinking, and activity. In her opinion, every culture is based on stereotypes. The more variants of reaction a person has, the more stereotypes he has accumulated - the easier it is for him, the more of them he can use. If the psyche is plastic

and can choose a variant of behaviour adequate to a particular situation and, if necessary, develop a new one, because none of the proposed ones suited the situation, then this plasticity is creativity.

V. Д. Шадриков in his monograph *Mental Development of Man* writes that ‘creativity is an attitude, attitude of a person, expressed in highlighting the problem in a new light, freedom from stereotypes, openness and aspiration to non-trivial solutions’ [14, p. 32].

Among the most promising directions of studying the phenomenon of creativity at the present time stand out the studies of Д.Б. Богоявленская, who defines human creative activity as a certain mental structure inherent in the creative type of personality. Д.Б. Богоявленская considers creativity as a peculiarity of intelligence or level of thinking, as a qualitative definition of the highest level of intellectual activity. Speaking about the sources and conditions of creativity development, she characterises it as a socially conditioned phenomenon that develops in activity [8].

Creativity is based on a set of natural gifts, reserves, aptitudes and abilities, which act as prerequisites for the formation of the creative potential of the individual, the manifestation of its creative activity and readiness for creative activity.

A. Maslow [12] distinguishes two levels in creativity - primary and secondary. The primary level is involuntary creativity associated with insight. The secondary level is arbitrary, associated with hard work, long training.

Researcher H. M. Гнатко [9] distinguishes two levels of creativity: potential and actual. From his point of view, potential creativity is pre-activity creativity, which defines the personality in terms of its readiness to acquire actual creativity, to display creative activity.

The aim of creativity development is to create prerequisites for self-realisation of pupils in creative learning process and later in independent activity. The essence of this process is to awaken the natural forces of a schoolchild from curiosity to self-realisation, which is manifested in the development of his/her creative potential and creative activity. Creativity acts as a basis, a starting point for the formation of a schoolchild’s creative potential.

According to E. Torrance [18], creativity includes increased sensitivity to problems, to deficiency or contradiction of knowledge, actions to define these problems, to search for their solutions on the basis of hypotheses, to test and change hypotheses, to formulate the result of the solution.

Creativity is the key to the future. All progress is the result of finding new, often unexpected, more effective, simpler and faster methods of solving any problems [13]. And this requires continuous improvement of creative skills.

Therefore, today the issue of developing creative thinking in the younger generation is acute. Without realising the laws of didactic influence on the personality, without the development of creative thought, full perception of the world, it is difficult to bring up a harmoniously developed personality.

Analysing trends in the development of new ideas.

The process of creativity development will be successful if the system-forming basis of the school educational process is a model based on systemic and holistic approaches to the accumulation of students’ experience of creative activity, providing for the principles and methods of creative learning [5, 13, 17].

The attitude in educational work to novelty and non-standard approach in solving educational tasks carry the main pedagogical load, aiming pupils at creative actions and attitudes [5]. A specific feature of the learning process aimed at developing creativity is the free choice of actions, the need for novelty and creative self-realisation.

Satisfaction of students’ need for creative self-realisation is possible in active creative activity, involving interaction, cooperation and co-creation of students and teachers in solving learning tasks [17], taking into account individual capabilities and creative abilities, experience of their creative work.

The orientation of the educational process on the personality of a schoolchild, the formation of his/her creative characteristics breaks the established canons of its organization [17]. Traditional teaching as a unity of prescriptions for students and teachers of the curriculum and standard assessments of students’ learning achievements have a negative impact on the development of creativity, which makes it necessary to restructure the traditional practice of the educational process.

The main directions of its modernisation should be considered to be:

- creation of a healthy psychological climate, trust in the system of relations 'teacher - schoolchild', ensuring co-operation and co-creativity in solving learning problems [1]
- actualisation of the teacher's own creative potential [2];
- teacher's mastery of methods of diagnosing figurative and verbal creativity, types of thinking, creative thinking, interests and aptitudes of students [4];
- actualisation of positive learning motivation and attitudes to a creative approach to the performance of learning tasks, development of creative personal attitudes in pupils, the need for creative self-realisation [27];
- use of technologies of creative work: application of active forms (presentation, demonstration, report, composing a virtual computer work, dramatisation) and methods (project method, frames, brainstorming, heuristic methods of problem solving) of lessons [15];
- gaining experience of creative activity through free and self-initiated, personally involved, personally meaningful teaching, providing freedom of choice of tasks and ways of their fulfilment, creating a situation of success for each pupil [4];
- organisation of work on independent developments, individual and group projects (project activities) [2];
- providing conditions at the lesson, in particular, dividing the lesson time into active and relaxation periods, which will give pupils an opportunity to reflect on the question posed [3];
- use of the potential of extracurricular activities in all subjects, through the realisation of the opportunity to satisfy the cognitive interest of pupils on the basis of an in-depth entry into the world of knowledge from the natural sciences, humanities and arts in an atmosphere of co-creation, equal cooperation between pupils, teachers and parents; through the voluntary choice of an individual educational route and the pace of its development in the conditions of different-age groups [9];
- liaising with the parents of pupils through joint classes on topics of industrial orientation [7].

In the process of education it is important not so much to change the content, forms and methods of teaching, as to establish and consolidate personal attitudes that stimulate creative actions of pupils, their constant creative growth, development of the ability to originality and creative constructiveness of pupils' thoughts. It is necessary to teach pupils to think independently, to show initiative and creative activity, to act inventively and unconventionally.

Positive results of the educational process can be said only if a healthy psychological atmosphere, nurturing and developing educational environment is created at school. И. Я. Лернер [11] believes that the development of students' personality directly depends on a certain moral and emotional climate at lessons. According to the scientist, the decisive role in this is played by the position of the teacher himself, his creative enthusiasm, benevolence, and the atmosphere of freedom of thought and self-expression he creates.

Conclusions

Students should learn to perceive new things, develop their creative thinking, ability to act creatively, opening new horizons of cognition and creativity. The use of didactic technologies and methods of creative work in the educational process stimulates the need for constant renewal and change of students' worldview. The combination of the educational process with scientific research is an important condition for the development of creativity and the formation of creative potential of the schoolchildren.

Skilful application of methods and techniques that ensure high activity in educational cognition is a means of developing creative abilities of students.

So, for creativity it is not necessary to find additional time and, especially, special classes. Creativity should permeate the whole lesson, everything that is done at the lesson. Compulsory components of the lesson should be supplemented with creativity.

Thus, creative thinking is defined as the process of reception, semantic processing, preservation of received knowledge and its application in new situations, when solving practical and theoretical problems, i.e. this knowledge is used in the form of skills and new, original problems are solved on their basis.

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VALUE ORIENTATIONS OF ADOLESCENTS FROM THE PERSPECTIVE OF PSYCHOSOCIAL FACTORS

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This article presents some of the authors' conceptions of values and value orientations. We note that the given paper contains only a sequence of the research carried out on the subject of „Emotional intelligence and value orientations in adolescents” in which value orientations are described in accordance with the results obtained following the administration of the Value Orientations Test, developed by M. Rokeach. This tool determines two types of values, namely: terminal values, represented by ideals or goals, and instrumental values, designated by modes of conduct. The experimental group consists of 341 teenagers. Taking into account that internalization of values promoted by the sociocultural context in which adolescents live is dependent on several factors, we considered it necessary to identify the value orientations of adolescents from the perspective of psychosocial factors: gender, environment of origin. The analysis of the results of the descriptive statistics shows differences both in the male/female subjects and in the subjects from the urban/rural environment, for the terminal value orientations and instrumental value orientations.

Keywords: *value orientations, terminal values, instrumental values, psychosocial factors, gender, background, adolescents.*

ORIENTARILE VALORICE ALE ADOLESCENȚILOR DIN PERSPECTIVA FACTORILOR PSIHOSOCIALI

În acest articol sunt prezentate unele concepții ale autorilor cu privire la valori și orientările valorice. Menționăm că lucrarea dată conține doar o secvență a cercetării realizate la subiectul „Inteligența emoțională și orientările valorice la adolescenți” în care sunt descrise orientările valorice în conformitate cu rezultatele obținute în urma administrării Testului de orientări valorice, elaborat de către M. Rokeach. Acest instrument determină două tipuri de valori și anume: valorile terminale, reprezentate de idealuri sau scopuri, și valorile instrumentale, desemnate de moduri de conduită. Grupul experimental este alcătuit din 341 de adolescenți. Luând în considerare că interiorizarea valorilor promovate de contextul sociocultural în care trăiește adolescentul este dependentă de mai mulți factori am considerat necesară identificarea orientărilor valorice ale adolescenților din perspectiva factorilor psihosociali: gen, mediu de proveniență. Analiza rezultatelor statisticii descriptive, denotă diferențe atât la subiecții de gen masculin/ feminin cât și la subiecții din mediul urban/rural, pentru orientările valorice terminale și orientările valorice instrumentale.

Cuvinte-cheie: *orientări valorice, valori terminale, valori instrumentale, factori psihosociali, gen, mediu de proveniență, adolescent.*

Introduction

The actuality of the scientific study carried out is guided by the changes and social challenges that take place in society and that directly relate to the age of adolescence. In the conditions of instability of public consciousness, in the process of professional and personal self-determination, teenagers try to promote and acquire social norms in the absence of valid models, with the quality of new conditions for social transformation. According to specialized literature, adolescents are less familiar with normative-value criteria, respectively we believe that new configurations are necessary for their active involvement in human life, obtaining high performances, achieving goals, orienting and directing their own value system. The changing society, through different forms of influence, offers and induces attitudes, values, ideals to teenagers. Internalization of the values promoted by the sociocultural context in which the adolescent lives is dependent on several factors. In this context, we consider it necessary to experimentally analyze value orientations of adolescents from the perspective of psychosocial factors such as gender, environment of origin, study profile, academic success, etc.

Concept and Argument

Referring to the research on value orientations, the authors mention that they differ in diversity and ambiguity. Sometimes value orientations are defined as a content of personality's orientation or as a variety of relationships, in the same way there is a definition that highlights value as a system of fixed social attitudes belonging to material and spiritual culture or as conscious and accepted personal meanings.

But, of course, all authors, in one way or another, mention that value orientations are analyzed as a complex of conscious and ordered values of the individual, thus determining one's behavior and activity. Accordingly, it is important to analyze in more detail the opinions of several authors regarding the perception of the concepts of values and value orientations. Personal values present one of the most important subsystems of the sphere of personality content.

In the view of the author M. Rokeach, an important property of values is that they are guidelines in people's activities and behavior [8]. In the conceptions of the author Ж. В. Горькая, value orientations are the most generalized and prioritized relations of an individual with values of the culture in which this personality was formed; - a structured, generalized system of value representations, which expresses the subjective attitude of personality towards objective conditions of life [4].

Starting from the classification proposed by D. Leontiev with reference to the psychological nature of individual values [7], Л. Карпушина, А. Капцов believes that personal values have a double essence [5; 6]. On the one hand, they assume that the relationship (ratio, attitude) has the function of directing and structuring, and on the other hand, it is located in the same row as needs and reasons, presenting as such value education, which manifests stimulating power, i.e. it has the function of orientation and motivation. In the view of the author F. Kluckhohn, value orientation is an organized and generalized conception, influencing behavior, regarding nature, the place of people in it, the relations with others, regarding desirable and undesirable, as they may be related to the environment and interpersonal relations [apud 2].

Values being analyzed from the aspect of that social significance, which is offered to them by society as a whole or by a certain social group, are: elements or phenomena of social life; the reason of activity and behavior, because a person's orientation in the world and the desire to achieve certain goals correlate strictly with the values included in personality structure; concepts and beliefs that are related to desired final states or behavior, are superior to specific situations, regulate the selection or evaluation of behavior or events, and are ordered by relative importance; the firm belief that a certain way of behavior is prioritized from a personal or social point of view, compared to the opposite way or the opposite behavior [3].

There is an interpretation of values, which identifies them as elements of the structure of a person's consciousness: interests, beliefs, etc. At the same time, in the definitions of value, there is another aspect of value relationship: only those elements of the social environment are called values for which the individual or group has the evaluation position; if values - are interests, then they constitute interests in some components of the social environment.

Therefore, in the process of researching value system, first of all we encounter a set of external conditions and internal features of human behavior. Highlighting the concept of value attributed to the internal and external world of the individual in general does not coincide with the division of values into the values of society and the values of the individual.

Value orientations are the most generalized and hierarchical relationships of the individual with the values of that culture in which a personality was formed; a structured, generalized system consisting of value representations, which express the subjective attitude of a personality towards the objective conditions of life [apud 2; 9].

Values are general principles of broad consensus that express what is essential and valuable in life, in accordance with the goals and ideals of a community. At the level of different types of values (moral, legal, aesthetic, political, economic, etc.) through aspiration, ideality and projective attitude objectifies at the same time the essence of human being and the fundamental results of social-historical practice. Consequently, values have both, a cognitive function and a structuring-formed one, according to the conceptions of the author D. Cristea [1].

Respectively, in the following we will refer to the particularities of value orientations according to psychosocial factors: gender and environment of origin.

Materials and Methods

In the research were involved 341 experimental subjects belonging to a certain age group, they were teenagers studying at high school (grade 10 and 12), college (year 1 and 2) and university (year 1 and 2). The interviewed teenagers studied at two universities in the Republic of Moldova: the State University of Moldova and the „Bogdan Petriceicu Hasdeu” State University in Cahul. The specialties they studied were different, namely: Psychology; Physics and Engineering; Informatics; Accounting, Business and Administration; Sociology, Social work, Law, Pedagogy; Pedagogy in primary education and preschool pedagogy; Social assistance.

The research was carried out during the years 2019-2021, and the administration of the tests was carried out in 2 stages due to the Covid 19 pandemic restrictions.

The gender composition of the sample was the following: 78% of the participants were female and 22% of the research participants were male. The sample involved in the experiment, according to the subjects' origin, was distributed a little disproportionately in the favour of urban environment. Of the total number of participants, 53.0% were from the urban environment, and 47.0% of subjects came from the rural environment. Teenagers did their studies in different profiles, namely 251 teenagers, which represented 74.0%, did their studies in the humanistic profile, and 90 teenagers, which represented 26.0%, did their studies in the real profile. Of the total number of teenagers (341 subjects) who participated in the research, most subjects – 116, which represents 34.0%, had an academic average between grades 8-9; 111 subjects (32.6%) had an academic average between grades 7-8; 67 subjects (19.6%) had an academic average between grades 9-10; 40 subjects (11.7%) had an academic average between grades 6-7; 7 subjects (2.1%) had an academic average between grades 5-6 and no subject indicated an academic average lower than 5 points.

In the conducted research, the following empirical methods were administered: 1. Psychosocial investigation; 2. Questionnaire for diagnosis of emotional intelligence (N. Hall); 3. Value orientations test (M. Rokeach); 4. Social Intelligence Test (Ph. Carter); 5. Self-confidence study test (V. G. Romek); 6. Scale of values (V. Gouveia); 7. FPI personality questionnaire Form B (F.Fahrenberg, H.Selg, R.Hampel); 8. The success motivation diagnostic test, T. Elers; 9. The diagnostic questionnaire of communicative and organizational skills COS – I (V.V. Sineavski, B. A. Fedorisin).

In the sequence presented in this article, we will analyze the results of the *Value Orientations Test (M. Rokeach)*. This psychometric tool presented by M. Rokeach classifies values into two types: terminal values, represented by ideals or goals, and instrumental values, designated by models of conduct. In general, terminal values reflect the belief that any personal or social ultimate goal of individual existence is worth pursuing. These ultimate values are represented by ideals or goals. On a comparative level, instrumental values present the belief that a certain way of acting from a personal and social point of view is preferable in all situations. Instrumental values are designated by models of conduct [8].

Results and Discussions

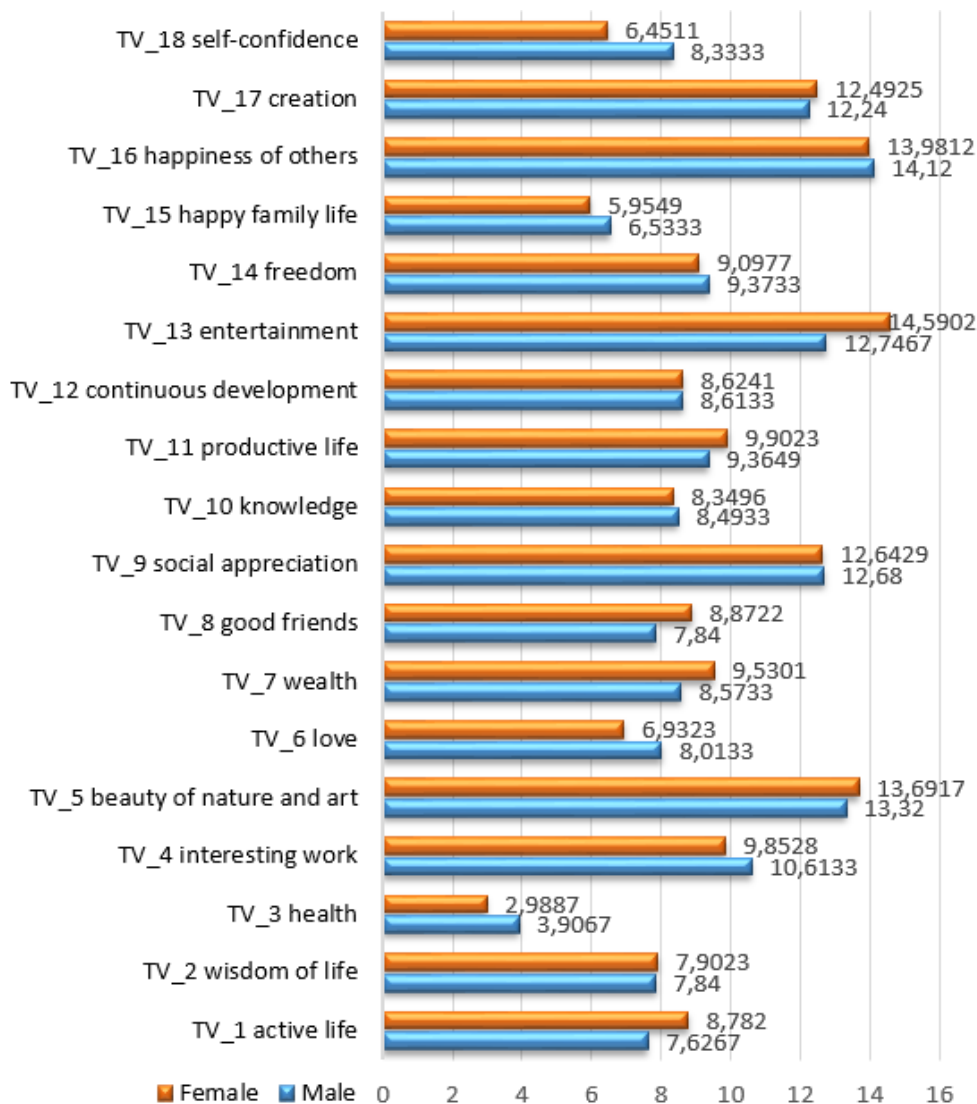
One of the objectives of the research carried out on the subject Emotional intelligence and value orientations in adolescents aims to identify value orientations of adolescents from the perspective of psychosocial factors (gender, background, study profile, academic success).

Next, we will present the descriptive statistics data for terminal value orientations according to the gender criterion. The differences between the averages depending on the gender criterion for terminal value orientations are presented in figure 1, they are: *active life, wisdom of life, health, interesting work, beauty of nature and art, love, wealth, good and faithful friends, social appreciation, knowledge, productive life, continuous development, entertainment, freedom, happy family life, happiness of others, creation, self-confidence*.

According to the results presented in the study, terminal value orientations differ depending on the gender factor (figure 1). The obtained data show that female subjects compared to male subjects recorded higher averages for the following terminal value orientations: active life, wisdom of life, beauty of nature and art, material well-being, good friends, productive life, continuous development, enter-

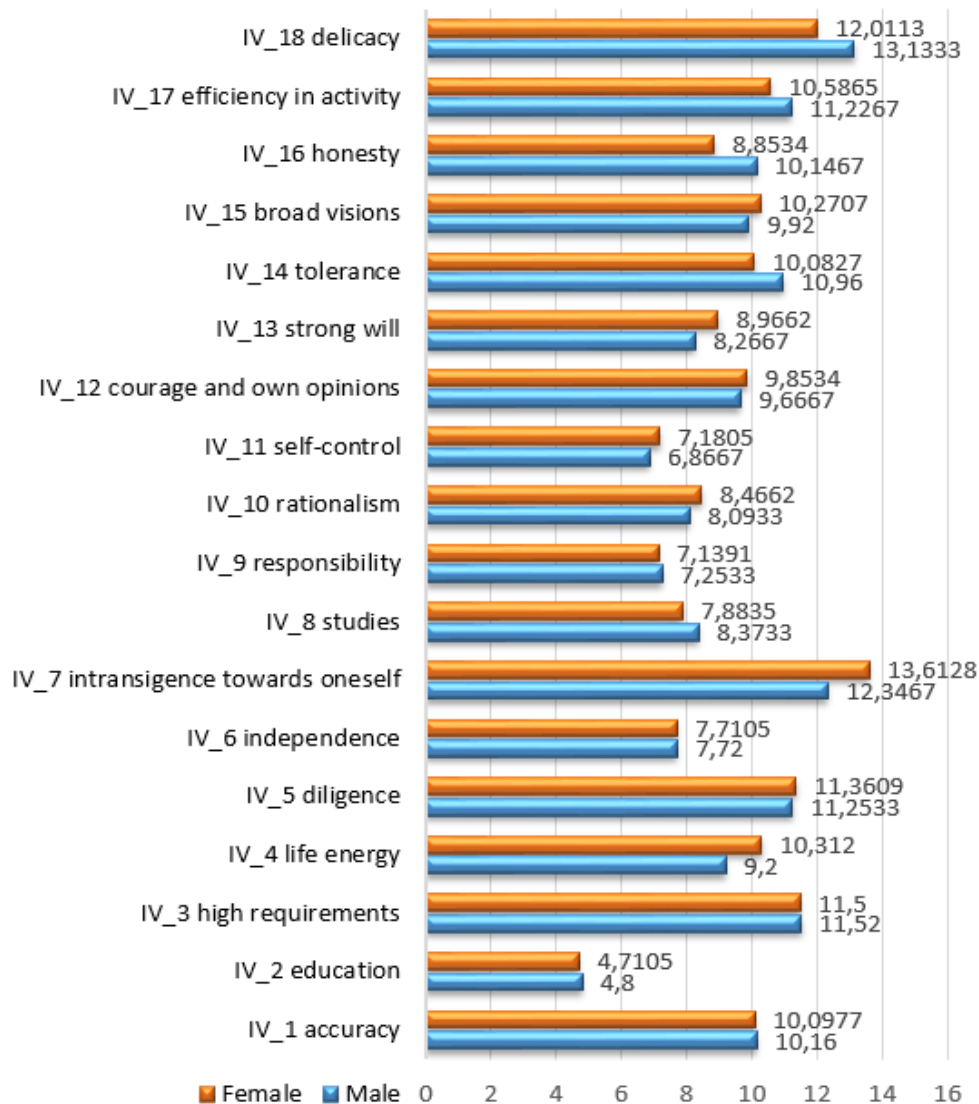
tainment, creation. Female adolescents compared to male adolescents recorded lower averages for the following terminal value orientations: health, interesting work, love, social appreciation, knowledge, freedom, happy family life, happiness of others and self-confidence.

Fig. 1. The means for terminal value orientations depending on the gender factor.



We administered the T-test to identify differences in the means of variables by the factor - gender. From the T-test results we identify that for the terminal values (active life, wisdom of life, health, interesting work, beauty of nature and art, love, wealth, good and faithful friends, social appreciation, knowledge, productive life, continuous development, entertainment, freedom, happy family life, happiness of others, creation, self-confidence) there are differences between the means of the variables. These differences are significant for the following terminal values: active life ($t=-2.02$; $p=0.044$); health ($t=1.98$; $p=0.048$); amusements ($t=-3.58$; $p=0.001$); self-confidence ($t=2.95$; $p=0.003$).

Next, we present the descriptive statistics data for the instrumental value orientations according to the gender criterion. Thus, following the logical series of ideas in figure 2, we presented the differences between environments depending on the gender factor for the instrumental value orientations: *accuracy, education, high requirements, life energy, diligence, independence, intransigence towards oneself and others, studies, responsibility, rationalism, self-control, courage in sustaining one's own opinion and beliefs, strong will, tolerance, broad visions, honesty, efficiency in activity, delicacy*. According to the presented results, we identify that instrumental value orientations differ depending on the gender factor.

Fig. 2. The means for instrumental value orientations depending on the gender factor.

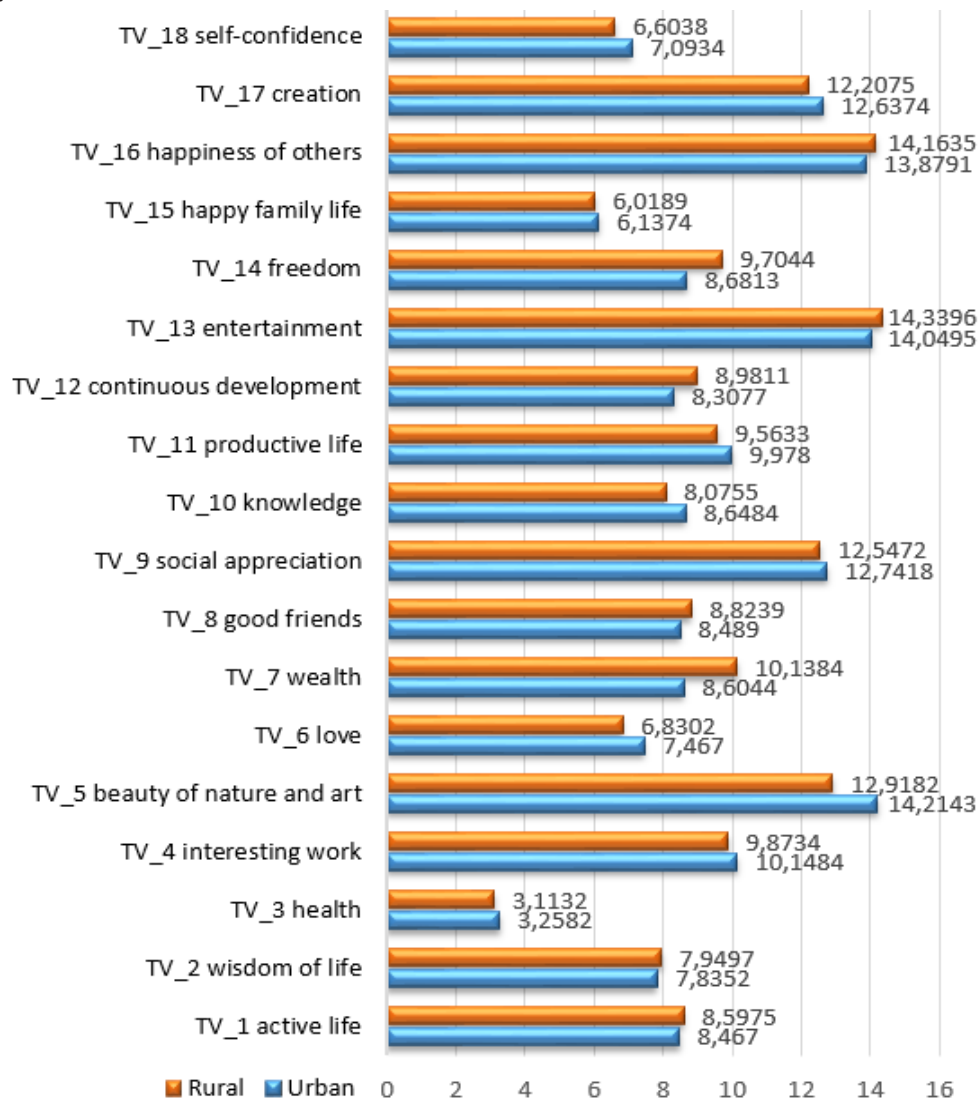
In the conducted research, we identified that female subjects compared to male subjects recorded higher averages for the following instrumental value orientations: life energy, executiveness, intransigence towards oneself and others, rationalism, self-control, courage and own opinions, will, broad visions. At the same time, female subjects compared to male subjects recorded lower averages for the following instrumental value orientations: accuracy, education, high demands, independence, studies, responsibility, tolerance, honesty, effectiveness in activity, delicacy.

Similar to the case described for terminal values and from the results obtained in the T-test with reference to instrumental values, we identify differences between the averages of the variables in male and female subjects. The differences are significant for the following instrumental value orientations: intransigence towards oneself and others ($t=-2.03$; $p=0.042$); honesty ($t=2.14$; $p=0.026$).

In accordance with the objectives of the research, we analyzed the terminal value orientations according to the factor of environment of origin (urban/rural), respectively, we present here the data of the descriptive statistics. The differences between environments, depending on the environment of origin criterion, for the terminal value orientations are presented in figure 3. However, the data obtained indicate that terminal value orientations denote differences depending on the environment of origin factor (urban/rural).

Thus, the subjects from the urban environment compared to the subjects from the rural environment (fig. 3) recorded higher averages for the following terminal value orientations: active life, wisdom of life, material well-being, good and faithful friends, continuous development, entertainment, freedom, happiness of others.

Fig. 3. The means for terminal value orientations depending on the environment of origin factor (urban/rural).



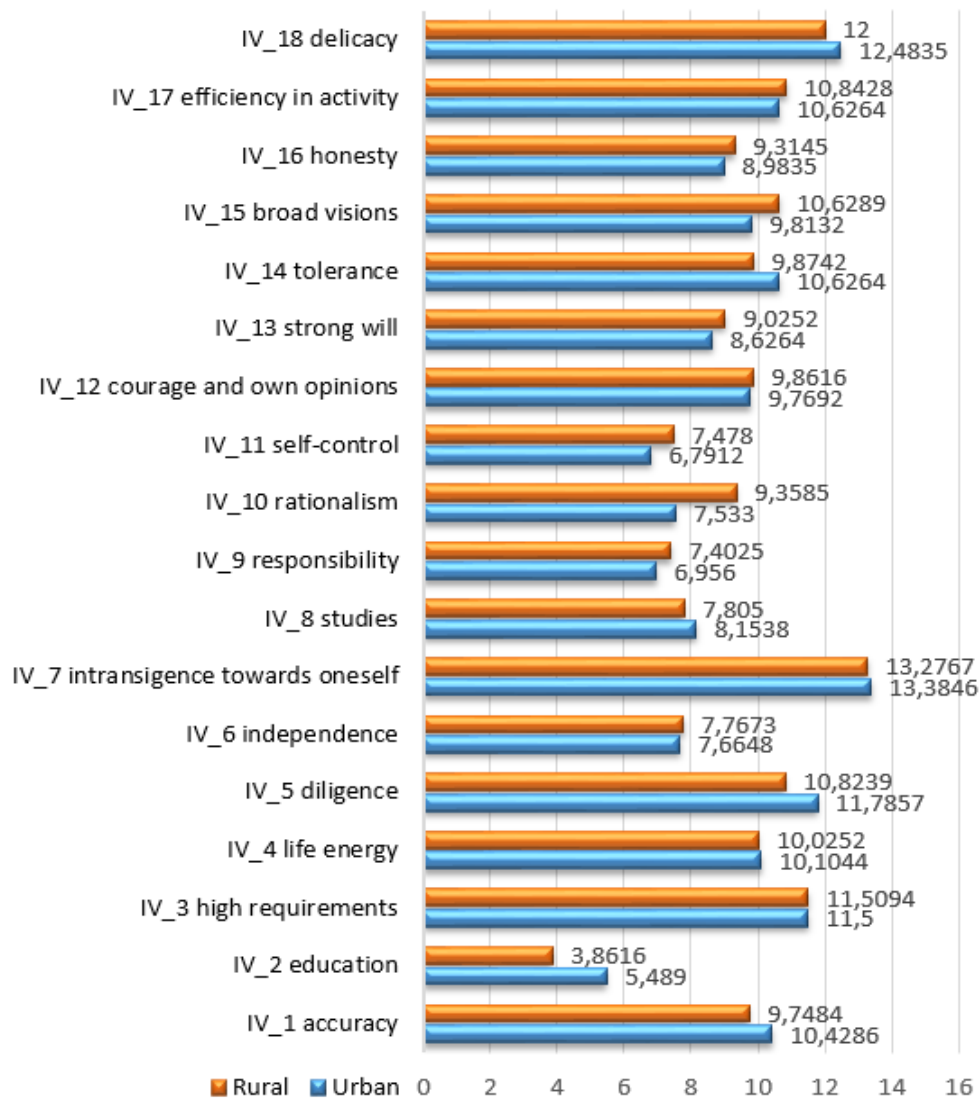
The subjects from the urban environment compared to the subjects from the rural environment recorded lower averages for the following terminal value orientations: health, interesting work, beauty of nature and art, love, social appreciation, knowledge, productive life, happy family life, creation, self-confidence.

According to the results obtained for the T-Test, we identify that there are differences between the averages of the variables in the subjects from the urban and rural environment. These differences are significant for the values: beauty of nature and art ($t=2.93$; $p=0.004$); material well-being ($t=-2.99$; $p=0.003$); freedom ($t=-2.12$; $p=0.034$).

We presented the descriptive statistics data for the instrumental value orientations according to the environment of origin factor (urban / rural). In figure 4 we graphically illustrate data on the differences between environments depending on the environment of origin (urban / rural) for this type of values.

The presented results show that the instrumental value orientations present some differences depending on the environment of origin (urban/ rural). Moreover, the subjects from the urban environment compared to the subjects from the rural environment recorded higher averages for the following instrumental value orientations: independence, responsibility, rationalism, self-control, courage in supporting one’s own opinion and convictions, will, broad visions, honesty, effectiveness in activity. At the same time, the subjects from the urban environment compared to the subjects from the rural environment recorded lower averages for the following instrumental value orientations: accuracy, education, life energy, executiveness, intransigence towards oneself and others, studies, tolerance, delicacy.

Fig. 4. The means for instrumental value orientations depending on the environment of origin factor (urban/rural).



The subjects from the urban environment and the subjects from the rural environment registered the same averages for the value high demands. The results obtained in the T-test allow us to highlight that there are differences between the averages of the variables in subjects from the urban environment and subjects from the rural environment for the instrumental value orientations. These differences are significant for the following instrumental value orientations: education ($t=3.43$; $p=0.001$); rationalism ($t=-3.41$; $p=0.001$). In the given sequence, we conclude that the analysis of the descriptive statistics results denotes differences in the subjects from the urban environment and in the subjects from the rural environment, for the terminal value orientations and the instrumental value orientations.

Conclusions

Analyzing the results obtained by the teenagers who participated in the discovery experiment, we identify multiple differences depending on the gender factor and the environment of origin. Female adolescents compared to male adolescents recorded higher averages for the following terminal value orientations: active life, wisdom of life, beauty of nature and art, material well-being, good friends, productive life, continuous development, entertainment, creation. These differences are significant for the following terminal values: active life; health; entertainment and self-confidence. In the conducted research, we identified that female subjects compared to male subjects recorded higher averages for the following instrumental value

orientations: life energy, executiveness, intransigence towards oneself and others, rationalism, self-control, courage and own opinions, will, broad visions. In the given case, the differences are significant for the following instrumental value orientations: intransigence towards oneself and others and honesty.

Teenagers from the urban environment compared to those from the rural environment recorded higher averages for the following terminal value orientations: active life, wisdom of life, material well-being, good and faithful friends, continuous development, fun, freedom, happiness of others. From the perspective of this factor, there are significant differences for the values: beauty of nature and art; material well-being and freedom. Moreover, the subjects from the urban environment compared to the subjects from the rural environment recorded higher averages for the following instrumental value orientations: independence, responsibility, rationalism, self-control, courage in supporting one's own opinion and convictions, will, broad visions, honesty, effectiveness in activity. In the given case, these differences are significant for the instrumental value orientations: education and rationalism.

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OBESITY – COMPLICATIONS ON THE BODY IN CHILDREN AND ADULTS

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The studies published in the last decades on the official platforms of the WHO and EUROSTAT demonstrate that, both among children and adults, the incidence of obesity has tripled. Obesity is a multifactorial condition that affects all vital organ systems of the body and significantly affects health and quality of life. Researchers in the field report that approximately 30% of children and 50% - 70% of adults with obesity associate at least one cardiovascular risk factor, diabetes co morbidity is present in 1% - 8% of obese children and approximately 45% of obese adults and approximately 25-30% of obese children may develop metabolic syndrome. Obesity also directly affects the musculoskeletal system, causing a number of problems related to posture and bone and joint health. At the same time, it is well known that from 40% to 80% of obese children remain obese in adulthood. Thus, obesity remains a major public health problem, being associated with long-term complications, such as cardiovascular, respiratory, endocrine, osteoarticular diseases.

Keywords: *obesity, incidence, complications, health risk, child, adult.*

OBEZITATEA – COMPLICATII ASUPRA CORPULUI LA COPII ȘI ADULȚI

Studiile publicate în ultimele decenii pe platformele oficiale ale OMS și EUROSTAT demonstrează că, atât în rândul copiilor atât și a adulților, incidența obezității s-a triplat. Obezitatea este o afecțiune multifactorială care vizează toate sistemele de organe vitale ale organismului și afectează semnificativ sănătatea și calitatea vieții. Cercetătorii din domeniul raportează că aproximativ 30% copii și 50% - 70% dintre adulți cu obezitate asociază cel puțin un factor de risc cardiovascular, comorbiditatea diabetului zaharat este prezentă la 1% - 8% copii obezi și aproximativ 45% la adulți obezi și aproximativ 25-30% dintre copii obezi pot dezvolta sindromul metabolic. Obezitatea de asemenea afectează în mod direct sistemul musculo-scheletic, cauzând o serie de probleme legate de postura și sănătatea oaselor și articulațiilor. Totodată este bine cunoscut faptul că de la 40% până la 80% dintre copiii obezi rămân obezi la maturitate. Astfel, obezitatea rămâne a fi o problemă majoră de sănătate publică, fiind asociată cu complicații pe termen lung, cum ar fi bolile cardiovasculare, respiratorii, endocrine, osteoarticulare.

Cuvinte-cheie: *obezitate, incidență, complicații, risc pentru sănătate, copil, adult.*

Introduction

In the last three decades, the prevalence of overweight and obesity among both children and adults has increased rapidly. Globally, in 1990, approximately 4% of children between the ages of 5 and 19 were diagnosed as obese. Between 2000 and 2016, the WHO reports that the incidence of children suffering from obesity increased from 10% to 18% (of which 6% were boys and 8% were girls) [11]. And according to the most recent studies, carried out between 2007 and 2019, through the COSI (Childhood Obesity Surveillance Initiative) initiative monitored by the WHO, it demonstrates that the prevalence of pediatric obesity in the European region has grown alarmingly and that one in 3 children (29% of boys and 27% of girls) aged between 7 and 9 live with overweight or obesity [15].

And the studies carried out between 1990 and 2023 confirm that the general obesity rate among adults in Eastern Europe has tripled, increasing from 15% to 50%, depending on the region [5, 8, 12]. According to data from the 2021 STEPS (WHO) study, more than six in 10 adults (63.9%) were overweight (BMI \geq 25 kg/m²), with a significantly higher proportion of men (70.8%) than women (57.0%) [14]. Statistics published in 2019 by EUROSTAT show that the highest proportions of women considered obese were recorded in Estonia (23.6%) Latvia (25.7%), Ireland (26.0%) and Malta (26.7%) , while for obese men the highest proportions were found in Croatia (23.7 %), Ireland (25.7 %), Hungary (25.8 %) and Malta (30.6 %) [12] .

In the Republic of Moldova, the situation follows a similar pattern and according to official statistics, 56% of adults (18 years +) are overweight, including 23% who are obese [21].

Currently, obesity is considered the most widespread chronic disease that associates multiple comorbidities (hypertension, ischemic disease, type 2 diabetes, hormonal disorders, bronchial asthma, obstructive sleep apnea, degenerative diseases of the locomotor system, etc.) that seriously affect the state of health and quality of life, becoming the most serious public health problem of the 21st century [2, 4, 9, 22].

The aim of the respective study was to analyze the incidence of obesity among children, adolescents and adults in the European region. We also studied the impact of obesity as well as short and long-term complications as a risk factor on the health of children and adults.

Materials and methods

Study of the WHO (Global Health Statistics WHO) database and scientific articles published in electronic databases (Pubmed, Epub, Google Scholar) regarding the spread of obesity morbidity in the European Union. The prevalence of obesity and the complications occurring in both children and adults, officially registered in the statistical forms in the period 2010 - 2023, were studied and evaluated.

Obesity is a global phenomenon, which has reached the scale of an “epidemic” due to the increased incidence, which affects all socio-economic groups, regardless of age, sex or ethnicity.

Several researchers such as Llewellyn A et al. (2016), Geserick M. et al. (2018) in a systematic review and meta-analysis found that obese children have a higher risk of becoming obese adults. This depends on the age at which obesity was established, such as: approximately 25% of obese children between the ages of 2 and 5 will remain obese in adulthood, in obese 10-year-old children the risk increases to approximately 50%, and adolescents between 12 and 19 the risk increases exponentially to 80% for them to become obese adults. And obesity in both children and adults is associated with an increased risk of morbidity [7, 8].

Many comorbid conditions such as metabolic, cardiovascular, psychological, orthopedic, neurological, hepatic, pulmonary and renal disorders are observed in association with obesity and can develop in the child’s body and cause long-term complications with age.

A holistic approach to the association of obesity with various conditions involves treating obesity not only as a problem of excess weight, but as a determining factor for numerous other health problems. This involves a comprehensive understanding of the interaction between different organ systems as well as determining the complex factors that contribute to the development and association of these conditions.

The most common conditions reported to be associated with obesity are [1, 2, 3, 10, 19]:

- Cardiovascular diseases: High blood pressure, heart failure, atherosclerosis and coronary heart disease are often linked to obesity.

- Type 2 diabetes: Excess weight and abdominal fat increase the risk of insulin resistance, contributing to the development of diabetes.

- Metabolic disorders: Metabolic syndrome, dyslipidemia (high cholesterol)

- Respiratory disorders: Obstructive sleep apnea and obese hypoventilation syndrome are frequently associated with obesity.

- Musculoskeletal conditions: Obesity leads to joint problems such as osteoarthritis, especially in the knees and hips.

- Gastrointestinal problems: Gastroesophageal reflux disease (GERD) and non-alcoholic fatty liver disease are more common seen among the group of obese people.

- Chronic inflammation.

Currently, there are few studies that have examined the long-term effects of childhood obesity as a predisposing factor on later disease development among adults. However, existing studies show that suffering from obesity in childhood or adolescence appears to increase the likelihood of morbidity and mortality when the subjects reach the adult age.

Multiple studies conducted by Falkner B., Simmonds M. et al., Templin T. et al. demonstrated that childhood obesity is the most consistent predictor of heart disease at reaching adult age. This fact has been well documented in the last decades and it has been proven that arterial hypertension is the most common

cardiac comorbidity of obesity both among children and adolescents as well as adults. Cardiovascular risk increases with exceeding the normal BMI around the 85th percentile of body weight, implicitly with a decrease in the level of high-density lipoprotein cholesterol (HDL-C) and a higher level of triglycerides, and as a consequence it generates other changes in the body that become a risk factor for the association of other ailments [5, 7, 20].

According to Tong J. et al. excess weight affects several systems in the body. First of all, in obese people, blood volume and cardiac output increase to ensure the nutrition of additional adipose tissue, so the heart has to work more intensively to maintain blood circulation and as a result blood pressure increases. Also, obese people are prone to develop insulin resistance, which can lead to type 2 diabetes and metabolic syndrome. And metabolic syndrome is a group of conditions that includes elevated blood sugar, increased waist circumference, and abnormal levels of LDL cholesterol (low-density lipoprotein) and triglycerides. These conditions contribute to the development of atherosclerosis and increased blood pressure with serious consequences such as myocardial infarction and stroke. Obesity is also associated with a state of chronic inflammation in the body. This occurs with the excess accumulation of adipose tissue which becomes a metabolically active organ and produces a series of inflammatory molecules such as: pro-inflammatory cytokines, adipokines (with varied roles in inflammation and regulation of metabolism) [21].

The research carried out by Esanu V. et al. (2018), reveals that the increase in the prevalence of hypertension in childhood is largely a consequence of obesity. Thus, childhood obesity promotes atherosclerotic disease in vascular structures such as the aorta and coronary arteries. Also, overweight in childhood and adolescence has a strong influence on the structure and function of the heart, with a preponderance of the left ventricle [6].

The results obtained in another similar study carried out by the Moldovan researchers Romaniuc L. and Revenco N. (2023) showed that about 3.5% of obese adolescents 23% - 30% were diagnosed with hypertension [17].

The study conducted by Posohova NV revealed that overweight/obesity in the first years of life was present in 30% of the children included in the study, of which 50% were between 7-8 years old, and 20% were between 11- 12 years. And the most common symptoms reported by children with obesity degree II-III were: headache (50%), chest pain and shortness of breath during physical activity (40% of children), and palpitations at rest were reported of 20% of boys and 30% of girls. Also, high blood pressure was detected in these children, up to 150 ± 20 mmHg for systolic and 90 ± 10 mmHg for diastolic [13].

According to Raj M. (2012) the likely mechanisms of obesity-related hypertension include insulin resistance, sodium retention, increased activity of the sympathetic nervous system, activation of the renin-angiotensin-aldosterone system, and altered vascular function [14].

Multiple studies indicate that childhood obesity is a major risk factor for the development of type 2 diabetes, due to increased insulin resistance and associated metabolic dysfunctions. Previously, type 2 diabetes (T2D) was considered a disease of adults, and currently it has become frequently diagnosed among obese children aged between 7 and 18 [1, 9, 18].

According to WHO data, more than 50% of hypertensive patients have additional cardiovascular risk factors, namely: type 2 diabetes (15-20%), elevated LDL-cholesterol and triglycerides (30%), overweight/obesity (40%), hyperuricemia (25%) and metabolic syndrome (40%) [11].

In this context, the results obtained in the study by Abbasi A. et al. demonstrate that the increase in the prevalence of obesity among children and adults has contributed to the increase in the incidence of type 2 diabetes (T2D), but not type 1 diabetes (T1) [1].

Another study finds that insulin resistance is a well-known cardiovascular risk factor in adulthood and has a strong association with childhood obesity. The rate of insulin resistance was 37% of boys and 27.8% of girls during the prepubertal period, while during puberty the rates increased to 61.7% for boys and 66.7% for girls [19].

We believe that the likely reasons why insulin resistance and/or hyperinsulinemia may increase blood pressure include the antinatriuretic effect of insulin, increased activity of the sympathetic nervous system, increased responses to endogenous vasoconstrictors, altered cation transport across the vascular membrane, impaired endothelium-dependent vasodilation, and stimulation the endothelium.

Llewellyn A. et al. conducted a systematic review and meta-analysis study investigating childhood obesity as a predictor of morbidity in adulthood. The obtained results confirmed that 31% of diabetes cases and 22% of hypertension cases in adults were preceded by coronary disease diagnosed among the children that have been diagnosed as overweight or obese, aged after 12 years [8].

In the specialized literature, the association of pediatric obesity and the metabolic syndrome (MS), also known as „insulin resistance syndrome”, is frequently described. MS is defined as a clustering of at least 3 of 5 medical conditions: abdominal obesity, hypertension, elevated blood glucose, elevated serum triglycerides, and low serum high-density lipoprotein (HDL). It is also well established that adults who meet the criteria of this syndrome are under increased risk of developing type 2 diabetes and cardiovascular disease. Most studies show that one of the most important risk factors in the development of MS among adults and children, is the excess of adipose tissue in the abdominal region.

Thus, the metabolic syndrome becomes a common condition among both adults and overweight children. Data obtained by Ferranti et al., using a definition adapted for children, identify a 9.2% prevalence of MS among them. In the same context, according to the official data presented in the specialized literature, the prevalence of MS among overweight adults diagnosed with hypertension varies from 25% to 40%, depending on the region, race and ethnicity [16, 18]

Also, there are multiple studies that demonstrate the association of obesity with musculoskeletal disorders.

Nowicki P. et al. studied the effects of childhood obesity on the growing skeleton. The study demonstrates that obesity plays an important role in altering bone mass accumulation, particularly through the metabolic syndrome that is associated with abdominal obesity. Despite the mechanical load that might encourage bone strength, the endocrine changes and nutritional deficiencies that result from obesity actually lead to a lower ratio of total bone mass. Thus, MS deregulates the endocrine system in several ways, including insulin resistance, increased inflammatory cytokine production, altered leptin production, and vitamin D deficiency. It is also now well accepted that factors influencing childhood bone mass are determinants important risk factors for osteoporosis in adulthood [10].

The increased fracture risk identified among obese children has led to focus on the relationship between excess adipose tissue, bone density and the impact of obesity on the process of skeletal development. Currently, advances in skeletal imaging have shifted the focus from bone quantity among obese children to assessing changes in bone microarchitecture. Accordingly, the findings of these studies suggest that bone strength in the appendicular skeleton does not adapt to increased body size, resulting in a mismatch between bone strength and the forces exerted during falls.

Fewer studies have quantified the prevalence of weight-related orthopedic conditions in overweight compared to normal weight children.

These studies show that overweight children report more frequent musculoskeletal problems in the spine, ankle and feet in daily life than children with normal weight. It was also found that overweight adolescents over the age of 12 sought medical help more frequently for lower extremity problems than their normal-weight peers. Orthopedic conditions associated with childhood obesity include: extremity fractures, slippage of the femoral capillary epiphysis, tibia varus, and misalignment of the lower extremities in both valgus and varus. [10, 22].

The relevant studies that focused on the effects of childhood obesity as a predictor of musculoskeletal disorders among adults, demonstrated that the functional and structural limitations imposed by obesity can lead to aberrant mechanics of the lower limbs and increase the risk of chronic musculoskeletal injuries [7].

There are multiple studies that demonstrate that obesity, regardless of age, involves disturbances in lung function. In this context, researchers who have studied this topic indicate that the most common respiratory disorder associated with obesity is obstructive sleep apnea syndrome (OSAS). Another lung condition commonly reported to be associated with obesity is asthma. In his study di Palmo E. et al. states that in children asthma and obesity can occur simultaneously. And researchers Beuther DA and Sutherland ER believe that asthma can predispose to obesity. According to the obtained results, it was proven that the risk of developing obesity is almost twice as high among the children aged eight [12, 18].

Conclusions

1. In recent decades, the incidence of obesity has tripled, taking on the scale of an “epidemic”, which affects the health status of both the pediatric population and adults.
2. Current evidence linking childhood obesity to deterioration of cardiorespiratory health, both in the short and long term, is compelling. The contribution of this pathological condition during childhood period to cardiovascular morbidity and mortality in adulthood is significant.
3. Obesity is a multifactorial metabolic condition that affects most body systems, with short-term or lifelong consequences. Often, obesity is associated with conditions not only of the cardio-respiratory system, but also with musculoskeletal conditions, located especially at the level of the spine and lower limbs. These conditions are established in childhood and progress during adulthood, negatively influencing health and quality of life.

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CLARIFICATION OF THE CONCEPT OF AUTISM SPECTRUM DISORDER

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The article's content is centered on a conceptual and methodological analysis of autism spectrum disorder. It presents the evolution of the concept over several years, delineates its defining characteristics and particularities, and compares its nosological status to the international diagnostic manuals (DSM and ICD). Additionally, it examines the terminology related to autistic pathology. A variety of research methods were employed, including the analysis and synthesis of specialized literature, the method of deduction and induction, and the method of comparison. The findings of the study, as presented in the article, elucidate the present status of the term «autistic spectrum disorder» and foreshadow assumptions regarding the subsequent selection of empirical methods, which will facilitate the definitive identification of respondents who fall within the nosological category of autistic spectrum disorder.

Keywords: *concept, autism, autism spectrum disorder, nosology, empirical methods.*

CLARIFICAREA CONCEPTULUI DE TULBURARE DE SPECTRU AUTISM

Conținutul articolului este centrat pe o analiză conceptuală și metodologică a tulburării din spectrul autist. Prezintă evoluția conceptului de-a lungul mai multor ani, delimitează caracteristicile și particularitățile sale definitorii și compară statutul lui nosologic cu manualele internaționale de diagnostic (DSM și ICD). În plus, examinează terminologia legată de patologia autistă. Au fost folosite o varietate de metode de cercetare, inclusiv analiza și sinteza literaturii de specialitate, metoda deducției și inducției și metoda comparației. Concluziile studiului, așa cum sunt prezentate în articol, elucidează statutul actual al termenului „tulburare din spectrul autist” și prefigurează ipoteze privind selecția ulterioară a metodelor empirice, care vor facilita identificarea definitivă a respondenților care se încadrează în categoria nosologică a tulburarea spectrului autist.

Cuvinte-cheie: *concept, autism, tulburare din spectrul autismului, nosologie, metode empirice.*

Introduction

This article presents a detailed investigation of the key aspects of autism, a mental condition that presents distinctive features and a specific chronology of first manifestations from an ontogenetic perspective. Additionally, it explores the dynamics of autistic pathology during an individual's life. A review of the history of research dedicated to autism revealed significant developments in the understanding and diagnosis of autism as a disorder, including the scientific acceptance of the term «autism spectrum disorder.

First references on autistic behaviors

The term 'autism' and the syntagma 'autism spectrum disorder' have a complex and evolving history. From a scientific perspective, the concept of autism can be traced back a century and a half, preceding the research of the American pediatrician Leo Kanner, who is widely regarded as the initiator of this field.

The first documented instances of concern regarding this phenomenon can be traced back to the early decades of the 19th century. At that time, the available information about such children was vague and inconclusive, except for one notable case encountered in 1800. This was the case of Victor, “the child of Aveyron”, reported by the French physician Jean Marc Gaspard Itard, under the phrase “the child discovered in the wild”. In 1801, Itard assumed responsibility for the child at the National Institute for the Deaf (Institut National des Jeunes Sourds de Paris). This institution was a place dedicated to the education of hearing-impaired children, where Itard commenced his study and education of Victor, striving to integrate him into society and develop his communication skills [7, p. 110].

Over the past two centuries, the history of research and re-education about the case of the so-called

„child of Aveyron”, as well as the pedagogical methods developed by Itard (1801), have continued to serve as a foundation for the development of techniques used in the rehabilitation of children with impairments. Itard employed a range of innovative pedagogical techniques to foster the cognitive and social abilities of Victor de la Aveyron. The French doctor employed several specific techniques, including:

- sensory stimulation – used to capture Victor’s attention and help him differentiate between different sensations. For example, Itard used distinct sounds, varied textures, and objects of different temperatures to stimulate the child’s sensory perception;

- auditory training – Itard tried to develop Victor’s auditory ability, using various sounds and music. The doctor noticed that Victor reacted more to certain sounds and used this information to help him develop his listening and concentration skills;

- physical exercises and outdoor activities - Itard encouraged physical activities and time spent in nature, considering that they could contribute to Victor’s healthy development. The French doctor believed that physical exercises and games would help the child develop physical strength and learn to interact with the environment;

- learning by association – this method was used to teach Victor to recognize and name objects. For example, Itard showed Victor an object and told him its name, repeating the process until Victor began to make the connection between the object and the word;

- the use of rewards – the reward system applied by Itard was to encourage positive behaviors and to motivate Victor to actively participate in the learning process. Rewards included favorite food and objects of interest to the child;

- imitation exercises – Itard used imitation techniques to teach Victor social behaviors and basic skills. By observing and imitating the actions of Itard or other personae, the child learned to make gestures and participate in simple activities.

Although Itard (1807) achieved some success in the development of „Victor de la Aveyron” his efforts did not result in complete integration into society. However, they were pivotal in the formulation of the initial concepts of special education and the psychology of learning [7, p. 115].

The detailed analysis of Victor’s behavior led to the formulation of numerous hypotheses and innovations in the field of child psychiatry. Notable observations include a) exclusive focus on objects essential for survival; b) intermittent attention to objects that aroused curiosity; c) episodic laughter without a clear stimulus; d) emotional state conditioned by limited objects or foods that gave satisfaction, manifested by anger in their absence [3, p. 66].

Being a topic of interest in an era when psychiatry was beginning to consolidate as a medical discipline, and questions related to the origin of ideas and education were the order of the day, „Victor de la Aveyron” generated intense debates since its appearance. In his first diagnostic report „Rapport sur le sauvage de l’Aveyron”, Itard (1801) emphasized the ignorance of previous centuries. Children raised in the wild had been studied before him, but, according to his statements, „the way of research in those times was so deficient that observation was not valued, and many essential facts for the understanding of human nature had been lost” [7, p. 120].

In light of Itard’s research and failures, another prominent figure in French research in the field, Édouard Séguin, pedagogue and physician, a disciple of Itard, developed a sensory method in 1830 for the education and training of children exhibiting symptoms similar to those of the „child of Aveyron”. Séguin researched children with intellectual disabilities, differentiating between idiocy (a cessation of cognitive development) and dementia (a deterioration of the psyche), and developed a sensorimotor approach to education. The material comprised a variety of activities and instruments that facilitated the utilization of the senses (vision, hearing, touch) and movement, thereby enhancing the acquisition of knowledge through experiential learning. Among the materials promoted by Séguin (1840) were tactile games, puzzles, objects with different textures, and activities involving hand-eye coordination. The objective of these tools was to enhance children’s fine and gross motor abilities, as well as to foster their capacity to concentrate and persevere, which are crucial elements in the learning process. Subsequently, Séguin established an educational institution for individuals with intellectual disabilities in Paris. He subsequently relocated to the United States, where he

further disseminated his approach and the tenets outlined in the treatise entitled „*Traitement moral, hygiène et education des idiots*” (1866) [12].

The scientific methods developed by Séguin inspired the Italian paediatrician and pedagogue Maria Montessori in 1900, who introduced significant innovations in the medical field with her approaches. Montessori asserted that children with deficiencies should not be excluded from the law and that they have a right to live and receive an education. The author devised an elementary pedagogical method for children with mental and social difficulties [5, p. 15].

At the beginning of the 19th century, the concepts of „*dementia precocious*” and „*regression*” began to emerge from observations of children with mental disorders. Such disorders constitute an integral aspect of childhood psychoses, including autism.

The assertion that „*history never evolves linearly and often allows the coexistence of reminiscences of the past with promises of the future*” [13] reflects a non-linear conceptualization of history and human development. This can be associated with several authors in the fields of psychology and the history of psychology, particularly those whose work has been influenced by psychodynamic thinking and those who have explored child development and its associated psychological conditions.

The notion that „*during the latter decades of the nineteenth century, several specialists put forth hypotheses and posed inquiries regarding the potential existence of alienation in children*”, this concept may be attributed to the works of various authors, including:

1. Although Sigmund Freud is primarily known for his contributions to psychoanalysis and the study of the unconscious, he also investigated a range of topics related to psychic development in children, including concepts such as regression and fixation. In his theory, Freud discussed the potential impact of childhood traumas on subsequent development, suggesting that they may contribute to various forms of alienation or neurosis (Freud, 1905, cited in Storr, 1989).

2. Jean-Martin Charcot and Pierre Janet were two pioneering figures in the fields of psychology and psychiatry in France, who conducted significant research on hysteria and other mental disorders, including in children. Charcot and Janet were among the first to investigate the hypothesis that childhood psychological experiences can have a significant influence on an individual’s mental health, thereby contributing to discussions on alienation and other disorders (Charcot & Janet, 1889, as cited in Ellenberger, 1981).

3. John Dewey, an American philosopher, and psychologist, espoused a non-linear approach to educational and social development, underscoring the pivotal role of past experiences in molding future behavior and thought processes. In the field of education, Dewey advocated for a non-linear approach to learning, emphasizing the role of experience and continuous interaction with the environment in shaping knowledge acquisition (Dewey, 1938, as cited in Gutek, 2003).

4. William James, the founder of functional psychology, held the view that human experiences and consciousness are not fixed but rather fluid. Furthermore, he considered that development is not a strictly linear process but is influenced by a series of interdependent factors, including past experiences (James, 1890, apud Taylor, 1996).

The contributions of these authors and others active in the latter decades of the nineteenth century to the formation of ideas about the psychological development of children and the influence of early experiences, including traumatic ones, on alienation and other mental disorders were significant.

In 1911, the Swiss psychiatrist Eugen Bleuler first described the syndrome of „*infantile schizophrenia*”, a term that replaced the previously used name „*dementia precocious*”. In addition to the symptoms of this condition, Bleuler emphasizes the significance of dissociation, introducing the term ‚*autism*’ to describe children who appear to be wholly devoted to their inner world.

Conceptualizing the phenomenon: from „autism” to „autism spectrum disorder”

In 1943, the renowned American pediatrician Leo Kanner made the first descriptions of the autism syndrome, examining the behavior of 11 autistic children. Although the term ‘autism’ was initially derived from the domain of adult psychiatry, where it was linked to one of the defining characteristics of schizophrenia according to Bleuler (1911), Kanner introduced a notable innovation by delineating a discrete childhood disorder, distinct from the pathologies that emerge later in adulthood [9, p. 72].

Kanner concentrated on the 11 cases he initially examined, noting the following clinical features:

- a striking lack of emotional attraction from the autistic individual towards others;
- a strong inclination to maintain the environment unaltered;
- a keen fascination with specific characteristics of objects and their movements, particularly stereotypical ones;
- the total absence or delay of language, with any language that does emerge often accompanied by a multitude of pronunciation and expression disorders.

Kanner (1943) put forth the proposition that these disorders manifest from the earliest stages of life. However, the intellectual capabilities of children diagnosed with autism were, at the time, considered to be unimpaired. This hypothesis was subsequently refuted by subsequent research.

In terms of the etiology and potential triggers of autism, Kanner (1943) advanced the view that autism is the result of a deficiency in the child's innate endowment. He stated that: „These children entered the world with an inherent inability to form relationships with others” (Kanner, 1943, cited in Frith, U, 2003).

The behavioral phenomenon of autism has been recognized since antiquity. Kanner's contribution to the field was to introduce it into the medical sphere and define it as a distinct syndrome, called early childhood autism. Contemporary studies demonstrate the persistence of these cognitive, perceptual, and social adaptation difficulties throughout the individual's life, manifesting in various ways identified by Kanner. However, the predominant reference remains the general term autism [15, p. 81].

In the contemporary period, Kanner's work was paralleled by that of the Austrian pediatrician Hans Asperger, based in Vienna, who also described a similar pathology. Due to the challenging circumstances of the era and the ongoing conflict, the two scholars were unable to communicate and remained unaware of each other's work until later. While Kanner situates the clinical picture within the context of infantile psychoses, Asperger emphasizes the distinctions between what he terms a „psychopathy”, underscoring the constitutional peculiarities of the personality, and a bona fide mental disorder. Additionally, he notes the occasionally paradoxical abilities of his patients, which, when appropriately harnessed, could confer social benefits. The Austrian physician proffers a definition wherein autism is regarded as „an unconventional mode of thinking and experiencing that can culminate in remarkable achievements in life” [4, p. 9].

While Asperger's symptoms may have manifested less severely than those observed in his American counterpart, it is imperative to consider the political context. During the Nazi regime, a diagnosis of psychosis was tantamount to a death sentence. In the present era, Asperger's syndrome is regarded as a relatively mild form of autism, with the capacity for cognitive functioning remaining intact under the prevailing international diagnostic criteria [4, p. 10].

A detailed analysis of specialized literature and recent research in the field of autism has enabled the formulation of a complex perspective on the variability of phenomena associated with this disorder. Recent discoveries have revealed that the term „autism” encompasses a considerable variety of manifestations, many of which have been added to the initial symptoms described by pioneers in the field, such as Kanner and Asperger [1, p. 43].

It is widely acknowledged that children diagnosed with Kanner autism are significantly impaired, frequently displaying signs of severe distress accompanied by a range of neurological symptoms and impairments. These include repetitive and involuntary movements, coordination and balance difficulties, impaired motor initiation, and intense and occasionally paradoxical sensory reactions. These factors contribute to an increased complexity in language acquisition, resulting in a range of unusual and sometimes unconventional disruptions in speech patterns [10, p. 23]. The current approach to autism necessitates a comprehensive grasp of the multifaceted phenomena associated with it. This is crucial to enable the provision of tailored and efficacious interventions for each individual affected by this disorder.

The authors in question provided clinical pictures and descriptions of such precision and clarity that they remain relevant and influential in the present day.

In the subsequent decades, more comprehensive studies of the mental structure of individuals diagnosed with autism were conducted by English experimental psychologists, including Beate Hermelin and Neil O'Connor, in collaboration with psychiatrist Lorna Wing, with a focus on cognitive psychology. The work

of this team posited the existence of a central deficiency that characterizes autism, manifested by: (a) an insufficiency of social interactions; (b) an insufficiency of verbal and non-verbal communication; (c) an insufficient involvement in games and imaginative activities. The research indicates that these deficits associated with autism are not random, but rather result from a distinctive underlying developmental disturbance. [11, p.45] It is now established that these difficulties with verbal, perceptual, and social adaptation persist throughout life, manifesting in various forms. The term most commonly used in the specialist literature to describe this condition is 'autism'.

In his article, „Autistic Children: In his 1976 article, „Infancy to Adulthood,” British Professor Michael Rutter, a prominent expert on autism symptomatology, observed the absence of eye contact and the lack of spontaneous anticipatory gestures in these children. Rutter demonstrated that autistic children did not seek comfort from their parents and approached strangers with the same ease as those they knew well. In 1979, Rutter outlined three fundamental symptoms that are characteristic of autistic children. The initial symptom is the failure to develop social relationships. The subsequent symptom is a delay in language development, whereby some children are non-verbal and others exhibit echolalia, often confusing the use of personal pronouns such as ‚I’ and ‚you’. The third symptom described by Rutter is the presence of ritualistic and compulsive behavior, accompanied by stereotyped movements and gestures [11, p. 46].

Taking a broader view than Rutter’s, psychoanalyst George Victor (1986) differentiated childhood autism from childhood schizophrenia. In his view, the predominant symptoms are the following:

- rituals, which predominantly have the role of preserving self-control and keeping the environment unchanged, respectively, the rituals of autistic children are much more bizarre than those of schizophrenic children, and the children adhere to them with greater adhesiveness;
- isolation, implies the solitude of autistic children, their detachment, and withdrawal;
- sensations, describes the peripheral vision of these children, their seeming deafness and ignorance of surrounding events while tuning in to distant ones;
- movement, increased flexibility in head movements, teeth grinding, blinking, or grimacing.
- sleep, sleep difficulties are common;
- mixed symptoms, the author describes autistic children’s indifference to possessions and how they get upset when objects break or are incomplete, also describes the panic that follows a slight change and their indifference to very large changes;
- early childhood symptoms also show how, both as infants and later, autistic children are content to be left alone for hours at a time.

Subsequent findings indicated that psychoanalytic therapy was less efficacious, which contributed to the growing influence of the behaviorist perspective in the treatment of autism. This approach, which posits that the autistic child is „stuck in a network of negative reinforcement” within an unfriendly parental environment, gained prominence in the 1960s due to its potential to structure the environment and enhance the child’s motivation. Nevertheless, the utilization of behavioral techniques yielded favorable outcomes, namely the alleviation of the autistic individual’s anxiety and an improvement in the symptoms, rather than a complete cure for the disorder [11, p. 47].

A comprehensive definition of the autistic syndrome can be formulated by taking into account the various aspects of autism as a whole. The majority of experts in this field concur that autism has a profound impact on the emotional, cognitive, and communication abilities of the individual. This disorder is characterized by an impairment of neurodevelopment, which gives rise to a variation in social and interactional behavior.

The term „autism spectrum disorder” is used to describe a heterogeneous group of conditions that are clinically and statistically associated with autism. This phrase was introduced to reflect the diversity and complexity of the manifestations of autism, which encompass a range of difficulties in the areas of communication, behavior, and social interaction, varying in degree. Accordingly, this designation was adopted to emphasize the extensive range of characteristics and levels of severity observed in the developmental disorders associated with the concept of autism. The term „autism spectrum disorder” was introduced into the medical and scientific literature as a replacement or expansion of the concepts of „autism disorder” or „infantile autism”.

In the 1980s and 1990s, researchers and specialists in the field of autism, including the English psychiatrist Lorna Wing and the English clinical psychologist Judith Gould, contributed to the recognition and popularisation of the concept of a broad spectrum of manifestations of autism. Since the early 1970s, these two British researchers have concentrated their efforts and brought their disparate perspectives together in London. They introduced the concept of the „triad of impairments”, which refers to a set of behaviors often found in children with autism spectrum disorder and which are still used to identify autism today. The researchers highlighted the considerable variations in symptoms and levels of functioning observed between individuals diagnosed with this condition, which led to the adoption of the term „autism spectrum disorder” [8, p. 14].

The history of the term autism and the phrase „autism spectrum disorder” reflects the evolution in understanding and diagnosis of autism spectrum disorders over time. In conclusion, it can be stated that the syntagma „autism spectrum disorder” has been the subject of extensive study over time. This is to emphasize the diversity and complexity of the manifestations of this spectrum of conditions and to ensure that these disorders can be approached with understanding, empathy, and support for affected people.

Comparison of nosological terminology regarding autistic pathology in DSM and ICD

The Diagnostic and Statistical Manual of Mental Disorders (DSM) has been pivotal in defining and classifying autism spectrum disorders (ASD). In the initial editions of the DSM, autism was classified as „classic childhood autism”. Subsequently, in the DSM-4 and DSM-4-TR editions (revised text), the term was expanded to encompass „autistic disorder” and „developmental disorder” within the broader category of the autistic spectrum.

The publication of the DSM-5 in 2013 represented a significant advancement in the conceptualization and understanding of autism. The latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) eliminated the previous subcategories of autistic disorder and Asperger’s syndrome, introducing the unified term „autism spectrum disorder” (ASD). This terminology encompasses a broader range of conditions within the social, communicative, and behavioral domains, encompassing the full spectrum of autism within a single diagnostic entity, thereby superseding the previous practice of categorizing symptoms into distinct categories. The DSM-5 marked a pivotal moment in the standardization and clarification of the diagnosis of autism spectrum disorder. It introduced more precise criteria and greater flexibility in the assessment and diagnosis of this condition.

In the International Classification of Diseases (ICD), an international classification system for medical conditions managed by the World Health Organization (WHO), the term „autism spectrum disorder” is defined and classified according to ICD-10. In this system, autism is included in the category „Generalized developmental disorders”, which in turn comprises several subcategories, including:

The following categories are included in the ICD-10 classification of autism spectrum disorders: *classic infantile autism; atypical autism; asperger syndrome; other generalized developmental disorders*.

The aforementioned subcategories serve to reflect the considerable diversity of autism manifestations and characteristics and are employed to classify and diagnose autism spectrum disorders by the ICD-10. It should be noted that future editions of the ICD may include updates or changes to the classification and terminology of autism spectrum disorders, reflecting developments in the understanding and diagnosis of these conditions.

By the DSM-5, autism spectrum disorder, heretofore referred to by several different names, including infantile autism, childhood autism, Kanner autism, high-functioning autism, atypical autism, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger’s disorder, is diagnosed based on the fulfillment of specific criteria.

The diagnostic process is founded upon a clinical assessment of the individual’s behaviour and functioning, to identify specific essential components. The primary diagnostic criteria are as follows: the presence of persistent deficits in functional-verbal communication; deficits in social interaction; the presence of restrictive and repetitive patterns of behavior, interests, and activities.

The core elements of autism spectrum disorder (ASD) are characterized by persistent impairment of reciprocal social communication and social interaction (Criterion A), as well as restrictive and repetitive

patterns of behavior, interests, or activities (Criterion B). These symptoms manifest from an early age and result in limitations or impairments to daily functioning (Criteria C and D).

How the functional impairment becomes evident varies according to the characteristics of the individual and their living environment. The central diagnostic features are observed at an early developmental stage. However, current interventions, compensation, and support can alleviate difficulties, at least in some contexts. Additionally, the manifestations of the disorder exhibit considerable variability contingent on the severity of the condition, the level of development, and the chronological age of the individual. This phenomenon is encapsulated in the concept of the spectrum. The specific criteria for diagnosing autism spectrum disorder must be met, and these criteria may vary depending on the age and developmental level of the affected individual.

As previously stated, the nosological categories from DSM-4 were eliminated in DSM-5, with autistic pathology now encompassed within a single nosological entity: autism spectrum disorder.

The diagnostic criteria for autism spectrum disorder (ASD) are similar in both the DSM-5 and the ICD-10. Some of the criteria common to both classification systems include:

The following criteria must be met for a diagnosis of autism spectrum disorder (ASD) to be made: deficiencies in functional and verbal communication; behavioral deficiencies in social interaction; the presence of repetitive and restrictive behavior patterns, limited interests and activities; the presence of these symptoms since early childhood; significant difficulties in social, academic, or occupational functioning.

There are significant discrepancies between the DSM-5 and ICD-10 about the terminology and structure of the diagnosis of autism spectrum disorder.

Regarding the terminology employed in the diagnostic process, the following points are worthy of note:

The **DSM-5** employs the term „autistic spectrum disorder” (ASD) to encompass a broader spectrum of neurological conditions, characterized by difficulties in social communication and repetitive or restrictive behavioral patterns. This represents a shift from the previous terminology, «autistic disorder,» which was used in the DSM-4.

In the International Classification of Diseases, 10th Revision (**ICD-10**), autism spectrum disorders are classified under codes F84.0–F84.9. This includes childhood autistic disorders, Asperger’s syndrome, and other pervasive developmental disorders not otherwise specified.

Regarding the structure of the diagnosis, the **DSM-5** employs the term «Autism Spectrum Disorder» to encompass a range of symptoms and severities, whereas the **ICD-10** utilizes the term «Autism Disorder» as a discrete and distinct entity. Additionally, the diagnostic criteria differ.

The **DSM-5** emphasizes two principal domains for diagnosing ASD: impairments in verbal and social communication and the presence of repetitive behaviors. While the fundamental criteria are comparable, the discrepancies pertain more to the specifics of the communication criterion.

In the **ICD-10** classification, social connection and integration issues associated with autism spectrum disorder are subsumed under the rubrics of social interaction disorders, communication difficulties, and repetitive patterns of behavior.

Conversely, the DSM-5 espouses a more streamlined and unified perspective, characterizing the condition as a singular entity, designated as „Autism Spectrum Disorder”. This approach can be justified by the findings of researchers in the field of psychology, including U. Frith, demonstrated significant overlaps between the various forms of disorder in the autism spectrum and the difficulty in their precise delimitation. Accordingly, the disparate treatment of autism spectrum disorders between the ICD-10 and DSM-5 reflects divergent priorities and perspectives in the classification and diagnosis of these conditions within the two classification systems.

Conclusion

The study of autism, including the clarification of terminology, has spanned a significant period of over a century. During this time, researchers in the fields of psychiatry and psychology have engaged in ongoing efforts to conceptualize and diagnose autism in a more precise manner. Although over several decades there has been a differentiation of terminology presented in the main diagnostic and statistical manuals of

mental disorders concerning autistic pathology, the term „autistic spectrum disorder” currently represents a unitary concept. This is also the case in the ICD, which aligns with international trends in the diagnosis and classification of neurodevelopmental disorders.

By the nosological guidelines outlined in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-V), a manual that exerts considerable influence in the scientific and applied fields within our country, our text employs the phrase „autistic spectrum disorder”. It is also crucial to highlight that the term „autistic spectrum disorder” encompasses an inherent reference to the multifaceted manifestations of autism. This enables researchers to adopt a tailored epistemological approach, aligning with the specific research objectives, to incorporate a particular form of autism or a cluster of autism-related characteristics.

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PARTICULARITIES OF COMMUNICATION IN COUPLES: THEORETICAL SYNTHESSES

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In recent years, in the context of socio-cultural changes, including the increase in the divorce rate, the changes occurring in the dimension of gender roles and the increase in the importance of personal independence in couples, it is essential to focus on understanding how communication can influence these relationships. Couple relationships have become more complex, and expectations towards the partner have increased. Effective communication between partners is considered one of the most important predictors of relationship longevity and can decrease the risk of separation.

Keywords: *couple, family, relationship, communication, types of communication, variety of delivery methods, dysfunctional relationships.*

PARTICULARITĂȚILE COMUNICĂRII ÎN CUPLU: SINTEZE TEORETICE

În ultimii ani, în contextul schimbărilor socio-culturale, inclusiv a creșterii ratei divorțurilor, a schimbărilor intervenite în dimensiunea rolurilor de gen și a creșterii importanței independenței personale în cupluri, este esențial să ne concentrăm pe înțelegerea modului în care comunicarea poate influența aceste relații. Relațiile de cuplu au devenit mai complexe, iar așteptările față de partener au crescut. Comunicarea eficientă între parteneri este considerată unul dintre cei mai importanți predictorii ai longevității relației și poate scădea riscul de separare.

Cuvinte-cheie: *cuplu, familie, relație, comunicare, tipuri de comunicare, varietatea metodelor de livrare, relații disfuncționale.*

Introduction

In the field of psychology, especially in the psychology of couple and family relationships, communication is both a given and a fundamental condition for subjective and intersubjective (interrelation) existence. Communication is a human activity that is present in all aspects of family life. We know that in the process of communication, various conscious and unconscious contents are transmitted, belonging to the protagonists involved in the act of communication. For this reason, it is important to analyze the different types, functions, and stakes of communication from the perspective of the theories that have established them [5, p. 143].

If love is the heartbeat of relationship, communication is its lifeblood. Many research studies of family strengths found communication to be a common thread in keeping family relationships strong and viable. A relationship will be made or broken to the degree a couple learns and practices effective communication skills. Poor communication is the surest sign of unhappiness in marriage and the greatest predictor of marital trouble. Regular expression of appreciation and affection is characteristic of healthy, quality marriages [1, p. 266].

Types of communication

According to the theories and paradigms of communication (formal, transactional, relational-systemic, phenomenological, and praxiological), the following types of communication can be found in any type of relationship:

- **Defensive communication:** reproach, defense, attack.
- **Passive communication:** lack of involvement, truncated message (sabotage).
- **Active communication:** message clarity; this type of communication involves possessing communication strategies and skills, as well as the use of verbal and non-verbal communication codes.
- **Assertive communication:** clarity of message and information [5, p. 145].

The stakes of communication

As an interactional process that involves intersubjective and thus interrelation exchange between two people (partners in a couple), they are the main actors who can interpret communication similarly or differently. For this reason, it is important to identify the subjective and intersubjective stakes of communication. From a general to a specific perspective, Alex Mucchielli classifies the possible stakes of communication as follows:

- **Informational Stake:** providing information.
- **Positioning Stake:** positioning oneself in relation to the partner (role).
- **Mobilization Stake:** influencing the partner (as a resource).
- **Relational Stake:** the moment of interaction determines the nature of the relationship – a regressive or growth-oriented relationship.
- **Normative Stake:** establishing a system of cohabitation rules [9, p. 75-88].

Communication in the couple and family context

In conclusion, communication is carried out by two or more actors in a given situation, and the analysis of communication must always be related to the context and the actors involved. The situation reflects various aspects related to psychological mechanisms such as identification, projection, etc., which influence how information is managed by those involved to achieve certain goals or stakes.

In the context of couple relationships and family groups, communication also relies on a system of internal representations influenced by family members, which shape specific models of introjected communication and interaction. The introjection of parental or familial relationship models generates a set of expectations and interaction patterns with adaptive or maladaptive tendencies. [11, p. 190].

Levels of communication in couples

From the perspective of the levels at which communication occurs in a couple's relationship, the following modes are identified:

- Cognitive communication.
- Emotional-affective communication.
- Intimate-erotic communication.
- Gestural communication (body language).
- Intellectual communication.
- Spiritual communication.

A psychoanalytic perspective on the levels of communication in couples is provided by Alberto Eiguer (2006), who identifies three levels:

1. **Imaginary level:** projections and introjections, the first stage of falling in love.
2. **Symbolic level:** meanings and significance.
3. **Real level:** behavior in the couple and dynamics, which, along with the other two levels, constitute the space of the couple [3, p.90].

Communication is the process by which one person receives messages from another. It is the sharing of messages, ideas, attitudes, and feelings resulting in a degree of understanding between a sender and a receiver. Various avenues of communication, both verbal and nonverbal, come into play. The ability to express oneself as clearly as possible is very important, but perhaps more critical to the communication process is the ability to listen effectively. Learning a few principles and practicing some of the skills in these three areas can help prevent some of the communication breakdowns common in marriage. Avenues of Communication. Whether or not it is realized, communication is going on all the time. A person can speak volumes without ever opening his mouth. Conversely, the person who talks a lot may not necessarily be an effective communicator [2, p. 1-6].

We all communicate by using a variety of delivery methods, including:

Verbal delivery – These are the words used to send a verbal message. Words represent meanings given to objects, thoughts, and feelings. Different people may give different meanings to the same words. Only about 11 percent of the impact of a message is determined by the words used.

Vocal delivery – This includes tone of voice, accent given to particular words, intonation, and length and frequency of pause used to deliver a particular verbal message. Approximately 34 percent of a message's impact is determined by vocal delivery.

Facial Expression – An old cliché says that a picture is worth a thousand words, and that certainly holds true in communication. The face often reflects the sender's emotions or feelings. The expression can be pleasant, angry, happy or sad, confused, annoyed, demanding, controlling, loving, etc. Regardless of the sender's words, the expression is more likely to reveal the true meaning of the message. A full 55 percent of a message's impact is determined by facial expression.

Touching – Appropriate physical contact has the power to convey feelings of warmth and love. Within a marriage, gentle touches, holding hands, kissing, hugging, cuddling, massaging, and sexual intimacy are important ways of communicating tenderness, love, care, and appreciation. *Gesturing* – Hand and arm movements often serve as key methods of delivering a message. Gestures can be emphatic, soothing, rude, powerful, or patronizing. When used along and your partner, enter the picture. If our timing is bad for a particular discussion, or if emotions are so intense as to get in the way, you cannot expect good quality communication. Recognizing emotions, naming them, and sharing them using "I" statements can help enhance your communication.

Faulty Communication – When only part of the message comes through, you and your partner can expect something similar to network trouble on your television. Good chance you will come up with the wrong perception at least part of the time. This is where reflection, or paraphrasing, the message back to your partner can be extremely helpful. If you perceived or interpreted the wrong message, reflection will allow your partner to clarify the exact meaning.

Non-comprehension – When you and your partner are on different wavelengths, comprehension will be minimal. If you ask how work. Faulty communication occurs went today, and your spouse and posture can send additional non with verbal delivery they can give additional meaning to a message.

Body Movement – Things such as scratching, crossing arms or legs, closed-mindedness, will not understand all of what she is trying to tell you; this is non-comprehension. Different wavelengths may occur because of standing and comprehend [8, p. 140-160].

COMMUNICATION answers in computer jargon, you different interests, verbal messages to another person. Such manipulations might be perceived, accurately or not, as nervousness, boredom, disinterest, different ways of looking at things, or different education or expertise in an area. Patience and extra care in expressing yourself clearly can clear the way for better understanding and reduce rudeness.

Head movement – Moving the head to indicate agreement or disagreement gives immediate feedback to the other person who then knows where the other stands on the issue [10, p. 52].

Areas of Communication Breakdown

Try as hard as you will, you will not always be able to communicate effectively in your marriage. Accept that fact. Then work at applying the tools and skills just discussed to help minimize communication breakdown.

Poor Quality Communication – This is where the sensitivities and emotions of sender and receiver, you when other things get in the way, such as distractions or preoccupations. Trying to discuss something important when your spouse is watching the Super Bowl or reading the newspaper results in incomplete, ineffective communication. Eliminating distractions, setting aside special times for communicating, and being sensitive to the other's needs of the moment will go a long way in eliminating faulty communication.

Misunderstanding—When you put your own projections or perceptions into the message your spouse is sending, you tend to evaluate or judge. When the message can be interpreted in more than one way, as most messages can, there is a good chance you will come up with the wrong perception at least part of the time. This is where reflection, or paraphrasing, the message back to your partner can be extremely helpful. If you perceived or interpreted the wrong message, reflection will allow your partner to clarify the exact meaning.

Non-comprehension – When you and your partner are on different wavelengths, comprehension will be minimal. If you ask work went today, and your spouse answers in computer jargon, you will not understand

all of what she is trying to tell you; this is non comprehension. Different wavelengths may occur because of different interests, different ways of looking at things, or expertise in an area. Patience and extra care in expressing yourself clearly can clear the way for better understanding and comprehension [7, p. 62].

V. Satir in the book *Conjoint Family Therapy* ask : *What do we mean by „communication”*? Isn't studying how people communicate almost like studying how they walk a cross a room?

a. The word „communicate” is generally understood to refer to nonverbal as well as verbal behavior within a social context. Thus „communication” can mean „interaction” or „transaction.” „Communication” also includes all those symbols and clues used by persons in giving and receiving meaning.

b. Taken in this sense, the communication techniques which people use can be seen as reliable indicators of interpersonal functioning.

c. As an aid to therapy, a study of communication can help close the gap between inference and observation as well communication and symptomatic behavior [12, p.80].

People must communicate clearly if they are going to get the information which they need from others. Without communication we, as humans, would not be able to survive.

a. We need to find out about the world. We learn to differentiate and relate ourselves to objects by learning experience, what we can expect from them.

a. We need to find out about other people and about the nature of relationships.

- What, for example, are the socially approved ways to act, ways expected by others?

- What behavior will please or displace others?

- Why do others respond as they do?

- How do we appear to others? How do others see us, evaluate us, react to as?

b. We receive this vital information in two basic ways:

- We ask for verbal responses.

- We also observe nonverbal behavior [12, p. 81].

Communication, problem solving, positive exchange (expression affection, sexual satisfaction) and the expression of aggression are areas where relational skills are particularly important. These are the four relational dimensions crucial for the stability of the couple.

They can be operationalized in different manifestations of interactions within the couple:

- the exchange of affection between spouses (verbal and non-verbal)

-the exchange of hostilities between spouses (verbal and non-verbal)

- the ability to listen (verbal and non-verbal behaviors)

- support (verbal and non-verbal behaviors)

- conflict resolution (verbal and non-verbal behaviors)

- sexuality (verbal and non-verbal behaviors).

The inappropriate pattern of interaction is formed because it does not exist skills to listen to the other, skills to face difficult situations.

Couples differ not only in the frequency and reasons for disagreements their marriage, but also according to the intensity of the feelings generated by these misunderstandings.

Couples in which the attachment is deep, who are sure of the solidity of their bond, I know different feelings compared to couples in which the mutual attachment is weak and in which the spouses have a tendency to offend each other [4, p. 6].

Conclusion

In conclusion, the issue of communication within couple relationships is one of the essential aspects to be addressed in psychotherapy. It offers the possibility to decode digital language (the meaning of words), metaphorical messages regarding various types of transactions, and the analog meaning (coded value) of what is expressed. By analyzing the modes, stakes, and functions of communication within couple relationships and the family group, communication becomes a complex system, a special and particular language. It encompasses defining elements such as feelings, beliefs, representations, the unsaid (individual or group secrets), conflicts, life plans, values, ideals of the partners involved directly and indirectly (such as rela-

tives). Thus, communication is a deeper act than it appears at first glance. It goes beyond the declarative discourse of an individual, implying responsibility, knowledge, and respect.

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CRITICAL THINKING IN PRIMARY SCHOOL PUPILS. A BRIEF OVERVIEW ON STANDARD AND MORE RECENT PERSPECTIVES

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This article is intended to discuss a topic that is essential to the development and well-being for pupils' worldwide – critical thinking. This analysis takes into account two perspectives: the standard mechanism and more recent reinterpretations of teaching critical thinking to children. Pupils need to be taught, from a young age, different techniques in an attempt to develop their critical thinking; with the purpose of helping them filter all that, they receive through the means of electronic gadgets. Well-known researchers such as Matthew Lipman, or Jeremy Harmer have their works enriched nowadays by recent researchers such as Ellen Galinsky in a desire to enhance the quality of studies in classroom contemporaneous dynamics. It is never too late for teachers to guide pupils in acquiring not only basic abilities, such as reading or writing, but also other life skills meant to help them filter, analyze, evaluate, and decide for themselves.

Keywords: critical thinking, pupils, primary school, internet, social media, technology.

GÂNDIREA CRITICĂ LA ELEVII DIN ÎNVĂȚĂMÂNTUL PRIMAR. O PRIVIRE GENERALĂ ASUPRA PERSPECTIVELOR TRADIȚIONALE DAR ȘI A CELOR ACTUALE

Acest articol își propune să discute un subiect esențial pentru dezvoltarea și bunăstarea elevilor din întreaga lume – gândirea critică. Analiza ia în considerare două perspective: mecanismul standard și reinterpretările mai recente ale predării gândirii critice copiilor. Elevii trebuie învățați încă de la o vârstă fragedă diverse tehnici pentru a le dezvolta gândirea critică, cu scopul de a-i ajuta să filtreze tot ce primesc prin intermediul dispozitivelor electronice. Considerațiile cercetătorilor bine-cunoscuți, precum Matthew Lipman sau Jeremy Harmer, sunt astăzi optimizate de cercetători recenți precum Ellen Galinsky, în dorința de a îmbunătăți calitatea studiilor în dinamica contemporană a sălii de clasă. Nu este niciodată prea târziu pentru profesori să-și ghideze elevii în dobândirea nu doar a abilităților de bază, precum citirea sau scrierea, ci și a altor abilități de viață menite să îi ajute să filtreze, să analizeze, să evalueze și să decidă asumat.

Cuvinte-cheie: gândire critică, elevi, școala primară, internet, social media, tehnologie.

Introduction

Teachers find themselves nowadays in an interesting and equally challenging position. Young pupils do not seem to be interested in what the teacher has to say, explain or demonstrate. Pupils seem to give no importance whatsoever to what is happening around them, get easily distracted, and lack patience. They seem to have devised a new personal universe limited to electronic gadgets and virtual friends. A change has to occur in the classroom. The world around children is changing and teachers need to adapt. All the new information that simply bombards young students comes without any kind of filters and is the teacher's duty at school, as it is their parents' at home, to teach them how to filter it.

There is one certain thing that defines the human species and that is their rationality. People are rational and this implies that they can think, an ability that clearly differentiates them from other creatures. It is the thought, a human's super power, that defines people as having an extraordinary complex mental mechanism. A process that helps interpret and evaluate information, a connection between the human mind and the outside world, but human thinking is not a uniform process. It is something that progresses with time and thrives on the information received at school, at home or by exploring one's surroundings.

From this field of psychological interpretations and understanding of the human mind comes the theory

of critical thinking. A concept largely discussed in the '80s, critical thinking has come again to haunt teachers by forcing them to change the way they teach. Pupils still need basic skills like reading or writing, but how the teacher does it makes the difference.

In the 80s the American National Institute of Education undertook a series of conferences that had as their main topic early education and children's problem-solving process. The key words in education become thinking and cognitive abilities. This is a time when names such as Edward de Bono, Matthew Lipman, or Susan Carey became known worldwide [15]. These conferences are also the place where all agreed that critical thinking needs be taught to pupils [15; 12].

The principles promoted by this new critical thinking movement go further in time to the constructivist theories that state the primary role of subject in its seek of knowledge. Strictly speaking, constructivism is not a theory but rather a philosophical explanation about the nature of learning [11; 12; 13; 15].

Thus, critical thinking becomes an active process of learning that encourages reflexion, debate and free speech, three key factors which will initiate the pupil to become the architect of its own concepts, thus achieving knowledge.

Mielu Zlate made a systematization of the thinking process. He envisions a differentiation between nine types [21]. Critical thinking is alongside reproductive and productive- creative thinking. Reproductive thinking functions in a linear way, unproductive by means of quality. Productive- creative thinking, on the other hand, implies the possibility of multiple solutions and the discovery of new possible principles concerning a given problem [21].

Researchers state that thinking in a critical manner implies that one must constantly evaluate, be curious, ask questions, or look for answers. However, one must not overlook the negative implications to this. One might receive the tag of an attention seeker or opposing others just as a means of getting only his idea through.

By using professor Sălăvăstru's scheme to compare the concept of critical thinking, one can make a clear differentiation between facts stated in the 80s by Matthew Lipman and contemporaneous observations made by Ellen Galinsky [17;18].

Critical Thinking and Matthew Lipman

Lipman's considerations pin point a truth that parents, students and teachers sometimes tend to overlook. „The school is a battleground because it, more than any other social institution, is the manufacturer of the society of the future, and virtually every social group or fraction therefore aspires to control the school for its own ends” [13; 15].

What Matthew Lipman did to the classical curriculum is something that had never seen before in the American public school system. With his philosophical novel for children „Harry Stottlemeier's Discovery”, Lipman initiates what will be known as The Philosophy for Children. This is a technique that encourages teachers to promote the idea that a classroom is actually a „community of inquiry”, a place where students exchange ideas. Any pupil can be a valuable contributor to any kind of topic [10; 13; 15].

Inside a classroom, the message travels three ways: from teacher to student, from student to teacher and from student to student. A connection meant to develop listening skills, willingness to approve others arguments and openness to the possibility of changing ones believes. „In short, the classroom is designed to reinforce the student's potential for reasonableness. This involves more than being able to engage in skilful reasoning” [11; 13; 15].

Matthew Lipman states that critical thinking is in itself self-correcting and sensitive to context. It can identify its own lacks and errors and is capable to correct them [15].

Critical thinking in Ellen Galinsky's perspective

Adapting to the model of self improvement literature, Ellen Galinsky's book „Mind In The Making” moves critical thinking outside the classroom and places it in the field of essential life skills. Like walking, eating, or speaking, critical thinking is just as important and together with physical and mental abilities defines the modern man.

Her book begins with a very simple experiment in which the readers are asked to think of a couple of words, which describe best modern, day-to-day life. Words such as complex, distracting, fast moving, 24-7, and stressful seem to define what people endure, but this is not true just for adults, children face the same obstacles as well [6, p. 7].

To navigate this world, children need to focus, to determine what is important, and to pay attention, amid many distractions. In this aspect, she identifies three essential points about these life skills:

- These skills are not only important for children.
- Adults need them as well.
- Adults have to practice them as well to promote them to children [6, p. 14].

These life skills could not develop without the brain's pre-frontal cortex, the place where the executive functions of the brain happen. This part of the human brain functions as a sort of manager. This is the part which manages attention, emotions, and behaviour in order to reach one's goals.

Her work emphasizes seven essential life skills:

1. Focus and self control

Focus and self-control involve many executive functions of the brain, such as paying attention, remembering the rules, and inhibiting one's *initial response to achieve a larger goal* [6, p. 14].

2. Perspective thinking

Peter Drucker, known as the father of modern management, calls this an “outside-in perspective”, seeing things as a customer would see them - and deems it responsible for launching the most successful new businesses [6, p. 68-100].

3. Communicating

Kathy Hirsh-Pasek of Temple University says that observing children communicate is actually seeing their mind at work [6, p. 104-115].

4. Making connections

At one point, all pupils or adults have epiphanies, situations that were a mystery become all of a sudden clear, called an „ah” moment [6, p. 168-173].

5. Taking challenges

Pupils face every day challenges. Various situations occur at school, at home or with their friends. These challenges, positive or negative, can be stressful.

The National Scientific Council on the Developing Child, directed by Jack P. Shonkoff of Harvard University, has conducted a research on the level of stress that young children face and how they cope with it. The conclusion was that, while there are different types of stress, the key factors in whether these experiences ultimately have a positive, tolerable or toxic impact on children's development are how long the stress lasts and whether or not children have safe and dependable relationships with people to whom they can turn for support [6, p. 248-230].

Young pupils seem to be scared to take on challenges due to their fear of failure and public shaming.

6. Self-directed, engaged learning

For a research paper, Ellen Galinsky reached out directly to the people that created and evaluated the impact of several learning programmes. She discovered that many things made a difference, such as emotional and intellectual learning being linked. But above all stood the fact that all those involved in the research became “community learners”. Teachers, pupils, and parents all shared their motivation for learning.

As Nobel Prize winner James Heckman of the University of Chicago puts it, „motivation begets motivation” [6, p. 299-302].

7. Critical thinking sums up all the essential life skills

At its base, critical thinking is actually a permanent search for the truth and knowledge. These are meant to guide beliefs, decisions, and actions. Critical thinking develops from childhood and into adulthood and it must be promoted. It parallels the reasoning used in the scientific method because it involves developing, testing, and constantly redefining theories about „what causes what”. [6, p. 200-204].

The complex description of critical thinking comes with several other details. For example, the fact that it develops in six steps:

- identify the dilemma, problem or issue;
- determine the goal;
- come up with alternative solutions;
- consider how these alternatives solutions might work;
- select a solution to try;
- evaluate the outcome and, if the solution isn't working, try something else;

Furthermore, the author states that from all skills, critical thinking draws on all the skills.

It takes self control to define the issue and determine the goals, then one has to take into consideration alternative solutions, and finally to evaluate the evidence to determine whether the result is functional.

Critical thinking is the ability to step back and look at what one is doing, to look at the dimensions of the task, and to evaluate [6, p. 201]. Just as in the case the '80s conferences when one could go back as far as constructivist theories, Ellen Galinsky identifies a precursor to critical thinking as the process of theorizing [6, p. 206].

Children are constantly developing theories, too. Alison Gopnik of the University of California at Berkeley says that children are using the same kinds of processes as scientists. They are making up theories about what is happening around them and at the same time they are checking to see if those theories fit what they see and what other people are telling them. They test their theories by asking questions and making predictions and this is extremely obvious if one pays attention to their play patterns [7].

Critical Thinking In The Classroom

Taking a teacher's viewpoint into perspective, many have come to realize the limitations of the theorized teaching books and in the end it is up to the teacher and its ability to always adapt or change. The job of a teacher is made up of several other skills. They have to be perfect actors that excel on the classroom's stage. They have to be researchers who always try to look beyond what is common knowledge. Moreover, they have to be refined psychologists who understand how the human mind works. Every classroom listener comes with its own unique habits, comprehensions, and emotions. How can teachers manage this all? By understanding that children have two learning abilities.

Firstly, they learn from others. Children do not see people's actions as something that happens randomly- they focus their attention on what people in their lives seem to transmit. This, consequently, leads to learning by imitation [7].

Secondly, they are curiosity. Young pupils accumulate knowledge from their direct experiences. It is true that young children often seem enforced by their curiosity, eager to understand and finally to master the information that they have gathered [7].

How can teachers promote critical thinking in the classroom?

In an attempt to analyse the multitude of perspectives discussed above, one must have an overview on certain patterns that emerge in the classroom. There can never be a correct assumption about developing critical thinking without overseeing the mechanism of pupils' personal interpretations and the impact that their environment and social particularities have on their assessments. It is an interesting experiment for a teacher to see how children form arguments about what certain concepts mean or stand for.

As an example, a vocabulary lesson can accurately illustrate this situation. The presentation dealt with the cultural perspective concerning the celebration of Halloween and an audience consisting of 4th grade students.

As means of lesson objectives, there was the familiarization of pupils with Halloween festivities, their particularities, and the celebration worldwide.

Since the beginning of the activity, it came as a surprise the fact that even though the Halloween celebrations are popular, children lacked basic knowledge about them. One of the deceitful details encountered was the translation of the celebration's name itself- hell will win- a mystical, occult element that centered around devils, curses or satanic rituals.

Further explanations were given to the pupils by presenting the Christian custom of offering food to others as tribute for those who had passed away. An interesting fact that was noted here was that this feast is at the beginning of November, close to Halloween.

The next step was a presentation of Mexican traditions and festivals for „Día de los Muertos”- Day of the Dead. This was the point that came with the explanation for the costumes, chants, and cemetery traditions. Pupils made a connection between the Halloween masks and those worn by local Romanian children on the 31st of December to scare off bad spirits and finally, the pupils watched a short part from the ”Encanto” movie.

For older pupils this type of lesson could work as a research project. Ask pupils to look for the meaning of words or for the historical background of certain traditions and present their findings to the class.

Curiosity could work just as well in the classroom. For a “daily routine” lesson, an experiment could help pupils learn vocabulary, grammar (Present Simple) and talk about advertising and its impact on consumption behaviour. For this lesson, a Colgate commercial was used, the first Romanian ad for this product, filmed in 1993 and the targeted students were pupils in the 3rd grade.

The lesson objectives concerned using the specific verbal tense, but most importantly was to make students talk and debate on advertising.

The activity begun with a simple discussion about pupils` morning routines. The teacher showed the class a toothpaste ad and asked them about the subject of the video, if it was funny and why, what was the purpose of this clip and if they had used that product. Particular attention was given to the last part of the ad where an ink and chalk experiment was performed. The pupils were asked to do the same experiment at home and see if what they saw in the ad was actually true.

The conclusion for this type of lesson is not in the vocabulary or grammar patterns the students use, but actually in their day-to-day activities. What they see or hear can unconsciously motivate them to buy certain items.

For older pupils this type of lesson could be concluded by asking them to do their own commercial and try to convince their colleagues to buy something. After this, the class could say what they liked about the presentation or did not and if they would buy that product or not.

General conclusions

Taking into account theoretical views and classroom personal experiences, both Matthew Lipman’s standard view on critical thinking and Ellen Galinsky’s more recent perspective offer valuable insights into the development of this essential skill in children, yet they reflect different approaches shaped by their respective times and educational contexts.

Lipman’s foundational work emphasizes the importance of teaching critical thinking as a structured process focusing on skills such as reasoning, argumentation, and logical analysis. His approach advocates for creating a classroom environment where students can actively engage in questioning and reasoning to solve problems. This perspective has been instrumental in shaping educational practices that foster intellectual autonomy and cognitive skills from an early age.

On the other hand, Galinsky’s contemporary viewpoint takes a more adaptive approach, recognizing the need for critical thinking skills in a rapidly changing, technology-driven world. She points out the importance of helping children develop not only the ability to think logically but also the emotional and social intelligence necessary to navigate complex, information-rich environments. Her work integrates skills like perspective-taking and decision-making, emphasizing the role of critical thinking in both academic and everyday contexts.

Together, these perspectives highlight the evolving nature of critical thinking education. While Lipman laid the groundwork for a structured approach focused on reasoning and analysis, Galinsky expands this foundation by incorporating the need for flexible, adaptive thinking in response to the challenges of modern society. Both views are crucial for preparing children to thrive in an increasingly complex world, demonstrating that critical thinking is not just about academic success, but also about equipping young people with the tools to make informed, thoughtful decisions throughout their lives.

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EMOTIONAL AND PERSONALITY CHARACTERISTICS OF INDIVIDUALS PRONE TO BODY DYSMORPHIC DISORDER

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The article presents the results of theoretical analysis of the problem of dysmorphophobia in scientific literature and the results of the conducted empirical study. At the theoretical level the psychological features of self-relationship of persons prone to dysmorphophobia are analysed. On the basis of the analysis of empirical data it is revealed that there is a significant difference between the conditionally healthy group and the group with a strong tendency to dysmorphophobia, according to the following indicators: self-management, reflected self-relationship, self-acceptance and self-accusation. It is shown that within the framework of psychological counselling based on the principles and methods of cognitive-behavioural, narrative and body-oriented therapy, it is possible to reduce dysmorphophobic anxiety and improve the self-esteem of persons prone to dysmorphophobia.

Keywords: *body dysmorphophobia, body perception, self-relationship, self-acceptance, psychological counselling, cognitive-behavioural therapy, narrative therapy, body-oriented therapy.*

CARACTERISTICI EMOTIONALE ȘI DE PERSONALITATE ALE PERSOANELOR LA TULBURARE DISMORFICĂ CORPORALĂ

Articolul prezintă rezultatele analizei teoretice a problemei dismorfofobiei în literatura științifică și rezultatele studiului empiric realizat. La nivel teoretic sunt analizate caracteristicile psihologice ale relației cu sine a persoanelor predispuse la dismorfofobie. Pe baza analizei datelor empirice, se arată că există o diferență semnificativă între grupul sănătos condiționat și grupul cu o tendință puternică la dismorfofobie, în funcție de următorii indicatori: autogestionarea, autorelaționarea reflectată, autoacceptarea și autoacuzarea. Se arată că, în cadrul consilierii psihologice bazate pe principiile și metodele terapiei cognitiv-comportamentale, narative și orientate spre corp, este posibilă reducerea anxietății dismorfofobice și îmbunătățirea autoaprecierii a persoanelor predispuse la dismorfofobie.

Cuvinte-cheie: *dismorfofobie corporală, percepție corporală, relaționare cu sine, autoacceptare, consiliere psihologică, terapie cognitiv-comportamentală, terapie narativă, terapie orientată spre corp.*

Introduction

The problem of body dysmorphic disorder (BDD) is becoming increasingly relevant in modern society. There is a steady increase in dissatisfaction among people in various areas of life, especially with their bodies: appearance, weight, and body proportions.

Special attention to the problem of dysmorphophobia by researchers of the late XX century was associated with the growing popularity of cosmetic procedures [4]. Dissatisfaction with oneself and one's body has long been a widespread phenomenon, and the 'socialisation and normalisation' of dysmorphophobia makes doctors, social workers and clinical psychologists pay attention to it. The relevance of psychological aspects of dysmorphophobia is also confirmed by statistical data reflecting the high prevalence of this disorder. According to the calculations of K.A. Phillips [15], the frequency of dysmorphophobia in the population is 0.7-2.4%, in general psychiatry samples - 13-16%, in dermatology - 9-12%, in cosmetic deontology - 9.5% and in orthodontics - 7.5%.

Beauty standards change every few years, often contradicting each other, and urging people to conform regardless of their physiological predispositions and current lifestyle. In pursuit of social approval, people are willing to give up their individuality, resort to severe diets, exhausting exercise, and even surgical intervention.

Representation of one's own appearance is a part of a person's thinking about himself and his place in society [5]. Appearance is an important formation in the structure of personality, its self-concept, influencing interpersonal and emotional spheres, as well as the course of objective life processes [2]. It is widely known that in our society slimness is associated with happiness, youth, life success, high social status, and overweight is associated with weakness, laziness, weak character and other negative traits. This is why many people tend to judge obese people as less happy, confident, intelligent and disciplined.

Conceptual base

Body dysmorphic disorder is a mental disorder accompanied by a sense of personal unattractiveness or the presence of a specific physical defect despite the objective absence of such evidence. Considering its high prevalence nowadays (17-29% of the population of both genders according to the latest data [10]), it is also important to note the impact of this disorder on the quality of life of those affected. As a result - refusal of education by schoolchildren and students, inability to find a job, financial problems, inability to start a family, and much more. This disorder can significantly affect a person's emotional and psychological state, leading to decreased self-esteem, anxiety, depression, and social isolation [16].

One of the characteristic symptoms of body dysmorphic disorder is the „mirror symptom”, characterized by emotions of anger and rejection in response to one's reflection (to the point of wanting to destroy the mirror). This symptom also manifests in refusal to be photographed, looking at one's photos, or excessively editing them. During self-examination, a person with this diagnosis exhibits strong selective attention, focusing only on their imagined flaws and extending these perceptions to their overall appearance, ignoring their merits [11].

Mental health professionals note numerous potential causes of body dysmorphic disorder: past abuse (psychological, physical, and/or sexual), cold or overprotective parents, inappropriate attitudes towards appearance from one or both parents, negative evaluations of a person's appearance by their environment, and others. They also noted one common trait among all people with this disorder: special aesthetic sensitivity [20].

Traditionally, the treatment of body dysmorphic disorder involves a combination of cognitive-behavioral therapy and, if necessary, medication in the form of selective serotonin reuptake inhibitors [18].

An important aspect of therapeutic relationships with a client with body dysmorphic disorder is that the therapist should not spend much time trying to convince the client that they look good because the client has already heard this from others and will likely devalue it, relying primarily on their negative experience of evaluation from others (e.g., during bullying). The client's beliefs about their appearance must be validated by the therapist and discussed through Socratic dialogue, allowing the person with body dysmorphic disorder to explore the truth and objectivity of their judgments and test the alternative theory against existing experience [13].

An important element of cognitive-behavioral therapy for body dysmorphic disorder is working with the client's unrealistic and negative automatic thoughts and core beliefs, further replacing them with alternatives. This occurs through an automatic thoughts diary and cognitive restructuring processes, allowing questioning of the client's destructive psyche elements and testing them for realism [15].

The use of metaphors in communication with a client with body dysmorphic disorder helps shift the focus of their attention and view the problem from a new angle. In further therapeutic work, one can periodically return to the images presented in the metaphor, manipulating and projecting them onto the existing reality, thus simplifying problem analysis [9].

People with a diagnosis of body dysmorphic disorder often identify their appearance as closely related to a specific meaning and unpleasant early experience. Typical themes include teasing and bullying in school, insecurity about appearance changes or acne during adolescence, medical procedures, accidents, or sometimes sexual trauma. This circumstance prompts the therapist to explore some of the client's early memories using images from the time they first started feeling ugly or hu-

miliated. Jaycox L. H., Foa E. B, Morral A. R. [12] found that imagined exposure allows a person to associate the context with a safe environment and distinguish between traumatic and non-traumatic events. Ehlers A. and Clark D. M. [7] noted that challenging images of past trauma allows detailing memory fragments and providing them with context within the autobiographical foundation and broader knowledge of current experience. Through the process of transforming and clarifying traumatic material, clients with body dysmorphic disorder rid themselves of heightened fixation on these images and, consequently, on their body image associated with painful past episodes. For this, the rescripting method (a technique allowing intervention in traumatic memories using imagination) is applied.

In addition to the cognitive-behavioral approach, many studies have shown that exercises based on mindfulness principles (such as meditation) help people with body dysmorphic disorder reduce emotional responses to dysfunctional thoughts, lower stress, depression, and anxiety, and adjust the self-perception model [19].

Mindfulness training includes acquiring qualities considered fundamental for developing and strengthening self-compassion, especially for those suffering from appearance-related disorders who often experience its deficiency. Ferreira C., Pinto-Gouveia J., Duarte C. found that increased levels of self-compassion are associated with lower levels of body dissatisfaction and weaker tendencies towards eating disorders [8].

Self-attitude is a complex psychological phenomenon characterizing an individual's position towards themselves [1]. However, it is important to distinguish between self-esteem and self-attitude as psychological concepts. Self-esteem represents the emotional evaluation of oneself by an individual in specific situations and within the context of certain activities, while self-attitude is a more stable and enduring formation reflecting the general tendency of a person to accept or reject themselves.

Despite the existence of numerous studies in the field of mental health, the topic of dysmorphophobic disorder is still considered understudied, which certainly affects the quality of psychological care provided to them.

Research Methodology

In the *framework* of our study, we emphasised on the research of self-relationship of persons prone to this disorder. *Purpose* of the study: To identify the peculiarities of self-relationship of people prone to dysmorphophobia.

Hypothesis of the study: there are peculiarities of self-relationship in persons prone to dysmorphophobia disorder.

In our research, the following methods were used: BDDQ-DV (The Body Dysmorphic Disorder Questionnaire-Dermatology version) [6], DCQ (Dysmorphic Concern Questionnaire) [14] and Method of Self-attitude research Пантилеев С.Р. [3].

The study sample consists of 70 people (51 women and 19 men). The unequal gender ratio is due to the absence of significant statistical differences in manifestations of dysmorphophobia in men and women. The sample has an age range from 16 to 63 years (29 people from 18 to 24 years, 23 people from 25 to 34, 15 people in the 35-45 group, 2 people in the 45-55 group and 1 person over 55 years).

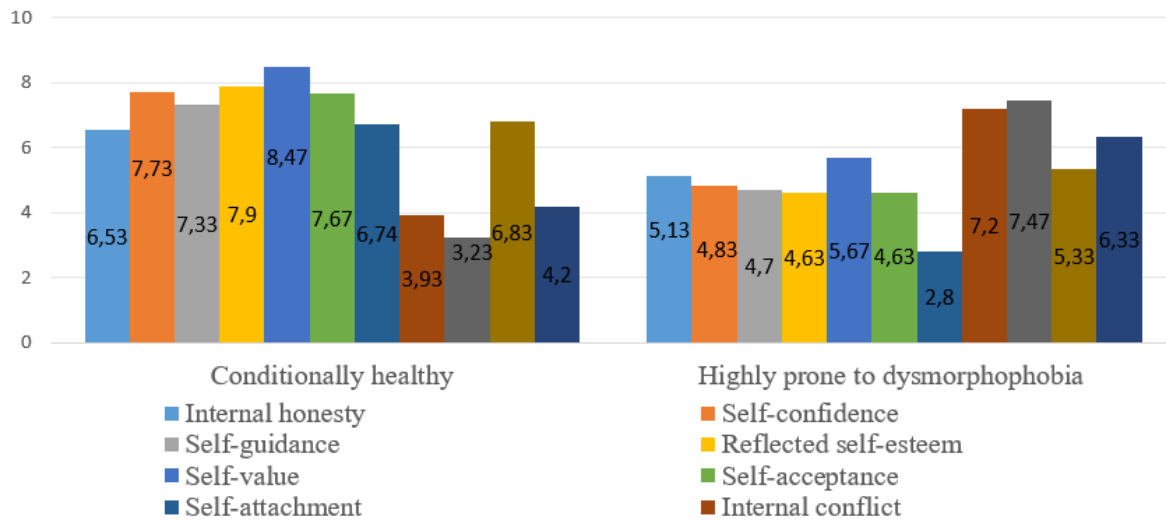
Results and Discussions

The test results revealed 30 conditionally healthy people, 10 people with a weak tendency to dysmorphophobia and 30 people with a strong tendency to dysmorphophobic disorder.

To solve the tasks of the study, we conducted a comparative analysis of the indicators of self-relationship of persons inclined and not inclined to dysmorphophobia.

The mean values of the Self-attitude methodology for the group of conditionally healthy and dysmorphophobic individuals are presented in Figure 1.

Figure 1. Comparison of indicators with a significant difference between the conditionally healthy group and the group with a strong proneness to dysmorphophobia.



In the statistical analysis, it was found that:

- There is a significant difference in the self-guidance indicator ($md=2.633$ Sig=0.000) between the conditionally healthy group ($m=7.33$ $sd=1.184$) and the group with a strong tendency towards body dysmorphic disorder ($m=4.70$ $sd=2.215$). This indicates that individuals with a high degree of body dysmorphic concern believe in the subjectivity of their „I” to temporary circumstances, their inability to resist fate, and also have poor self-regulation.

- There is a significant difference in the reflected self-attitude indicator ($md=3.267$ Sig=0.000) between the conditionally healthy group ($m=7.90$ $sd=1.882$) and the group with a strong tendency towards body dysmorphic disorder ($m=4.63$ $sd=2.141$): individuals with a high degree of body dysmorphic concern expect negative, disrespectful, and judgmental attitudes from others towards themselves.

- There is a significant difference in the self-acceptance indicator ($md=3.033$ Sig=0.000) between the conditionally healthy group ($m=7.67$ $sd=1.093$) and the group with a strong tendency towards body dysmorphic disorder ($m=4.63$ $sd=2.566$). This is due to the fact that individuals prone to body dysmorphic disorder do not accept themselves as they are. They have an unfriendly attitude towards themselves, do not accept their own desires and feelings.

- There is a significant difference in the self-esteem indicator ($md=2.767$ Sig=0.001) between the conditionally healthy group ($m=6.70$ $sd=1.750$) and the group with a strong tendency towards body dysmorphic disorder ($m=3.93$ $sd=2.765$): individuals prone to body dysmorphic disorder have an inflated self-esteem, which prevents them from self-developing. They experience exaggerated guilt and inferiority feelings.

- There is a significant difference in the self-understanding indicator ($md=2.500$ Sig=0.000) between the conditionally healthy group ($m=7.13$ $sd=1.408$) and the group with a strong tendency towards body dysmorphic disorder ($m=4.63$ $sd=2.141$). This indicates that individuals prone to body dysmorphic disorder have a lower level of self-knowledge, are poorly oriented in their feelings, emotions, and experiences, and do not know themselves well.

- There is a significant difference in the self-blame index ($md=-4.233$, Sig=0.000) between the conditionally healthy group ($m=3.23$, $sd=1.591$) and the group with a strong propensity for dysmorphophobic disorder ($m=7.47$, $sd=2.063$). This reiterates the importance of guilt as a component of the picture of a person’s propensity for dysmorphophobic disorder. People with high dysmorphophobic anxiety tend to blame themselves for any of their lapses and failures.

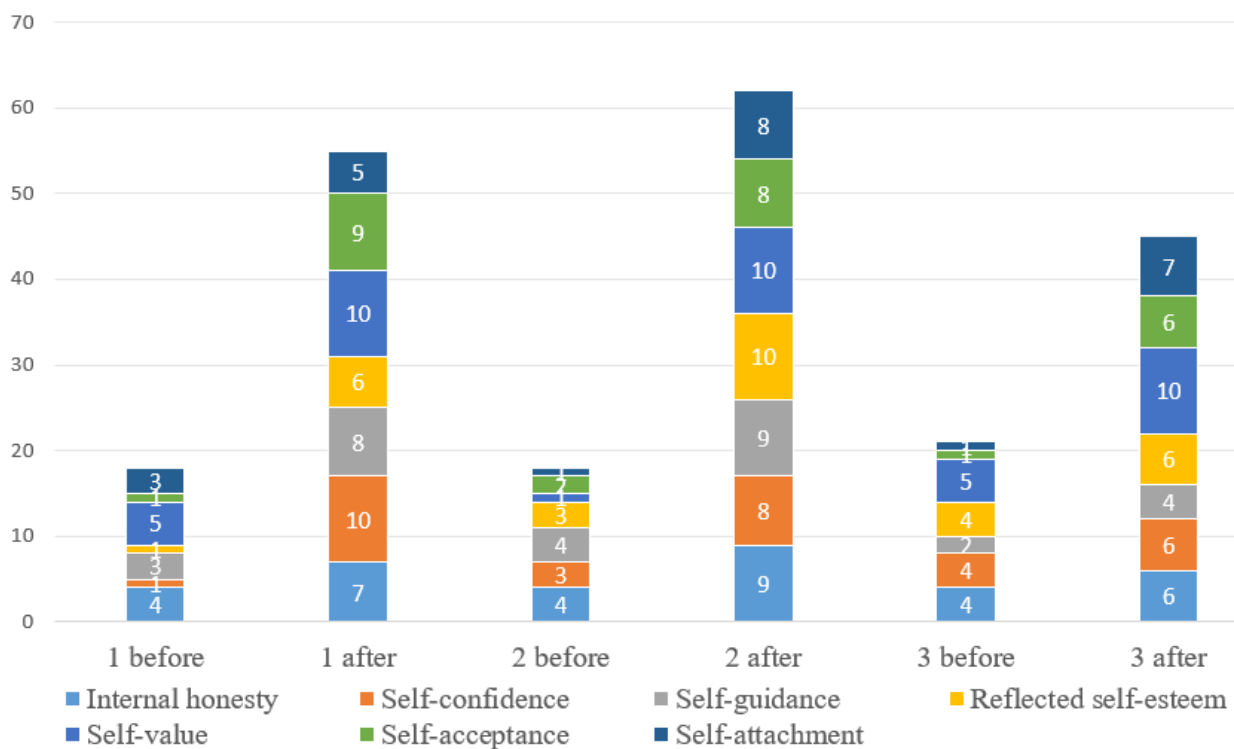
During the psychotherapeutic intervention, we applied methods from cognitive-behavioral therapy, narrative therapy, and body-oriented therapy (specifically: Socratic dialogue, externalization of the problem, metaphorical method, automatic thoughts diary, work with core beliefs, establishing contact with the inner

child, work with body awareness and establishing functional relationships with the body, catastrophic scenario, meditations, and bibliotherapy). The sample consisted of 3 clients, each exhibiting varying degrees of body dysmorphic disorder: a 33-year-old man and two women aged 25 and 24. Sessions with clients were conducted twice a week, each lasting 60 minutes, with an average of 25 sessions per participant.

The techniques we selected demonstrated their effectiveness, significantly reducing body dysmorphic concern (from 28 to 22, 25 to 9, 23 to 14) and the number of perceived flaws (from 12 to 3, 5 to 0, 3 to 0) in all three participants of the formative experiment.

Figure 2 shows changes in the respondents’ self-attitude before and after psychological counselling. A notable trend is the improvement in self-attitude in all three participants of the formative experiment.

Figure 2. Comparison of respondents’ self-esteem before and after psychological counselling.



In the course of psychological counselling, we found significant similarities in the history of all three dysmorphophobic clients (namely the presence of a violent component, bullying, comorbidity with affective disorders, and conflicts with parents). Dysmorphophobia with an earlier debut and a more pronounced trauma base required more psychotherapy sessions than dysmorphophobia that began in adolescence. Also in the course of the work, all three clients revealed blocked emotions of anger, which was subsequently reflected in their autoaggressive behavior. Our chosen techniques of cognitive-behavioral, body-oriented and narrative psychotherapy proved to be effective in dealing with the self-perceptions of people prone to dysmorphophobia.

Conclusions

Despite the fact that the diagnosis of dysmorphophobia syndrome is relatively simple, on the one hand, many patients try not to demonstrate symptoms or do not realise that they have painful experiences. On the other hand, this form of pathology is not always well known to narrow specialists, which leads to incorrect assessment of the clinical picture and, as a consequence, to unjustified diagnostic and therapeutic (including surgical) interventions. At the same time, the disease usually has a chronic course: according to Phillips K., McElroy S., Keck R, Pope H., Hudson J. [17], in diagnosed cases only 9 per cent of patients managed to achieve permanent remission and only 21 per cent - partial remission.

Thus, it is necessary to further improve the methods of timely detection and correction of this form of mental pathology in order to prevent severe personal and social consequences of the disease.

Based on the analysis of the obtained data, we propose the following recommendations for mental health professionals working with body dysmorphic disorder:

- Explore the core beliefs of clients prone to body dysmorphic disorder regarding themselves and their relationships with others (use the Core Beliefs Questionnaire).
- Separating the problem from the client helps in forming an alternative attitude towards their perceived flaw and transforming their self-perception.
- Pay special attention to the clients' connection with their own bodies, which is often disrupted.
- Investigate the presence of comorbid disorders in the client and, if necessary, involve a specialist in psychiatry.
- Working with the inner child helps clients prone to body dysmorphic disorder develop a more understanding and gentle attitude towards themselves.
- Use an automatic emotions diary and assign reading thematic literature as homework.
- Pay attention to the presence of blocked anger and address its processing.

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THE IMPACT OF EMOTIONAL INTELLIGENCE AND SOCIO-DEMOGRAPHIC FACTORS ON THE COPING MECHANISMS USED BY ADOLESCENTS

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The main objectives of this study were to investigate the relationship between the emotional intelligence of adolescents and the coping strategies used by them, as well as to determine the socio-demographic factors that have an impact on these coping mechanisms. The research sample included a number of 220 teenagers between the ages of 14 and 17, of which 100 from the urban environment, and 120 from the rural environment. The „Diagnosis of emotional intelligence” test developed by N. Hall, the Friedman Maturity Scale and the Cognitive-Emotional Coping Questionnaire CERQ were used as research tools. The main results conclude that adolescents with a high level of emotional intelligence especially use adaptive coping mechanisms - refocusing on planning, positive reassessment, positive refocusing and putting events into perspective and are less likely to use maladaptive coping mechanisms - self-blame, catastrophizing, rumination and blaming others. It was also found that socio-demographic factors influence differently the use of cognitive-emotional coping mechanisms.

Keywords: *emotional intelligence, coping mechanisms, adolescents, emotional maturity, socio-demographic factors, adaptive coping, maladaptive coping.*

IMPACTUL INTELIGENȚEI EMOȚIONALE ȘI AL FACTORILOR SOCIO-DEMOGRAFICI AȘUPRA MECANISMELOR DE COPING UTILIZATE DE ADOLESCENȚI

Prezentul studiu a avut ca și obiectiv principal stabilirea legăturii dintre nivelul inteligenței emoționale și mecanismele de coping folosite de adolescenți și evidențierea factorilor socio-demografici care influențează nivelul mecanismelor de coping. Eșantionul de cercetare a fost constituit dintr-un număr de 220 de adolescenți cu vârste cuprinse între 14 și 17 ani, dintre care 100 din mediul urban, iar 120 din mediul rural. Ca și instrumente de cercetare s-a folosit Testul „Diagnosticarea inteligenței emoționale”, elaborat de N. Hall, Scala de maturitate Friedman și Chestionarul de coping cognitiv-emoțional CERQ. Principalele rezultate conchid faptul că adolescenții cu un nivel ridicat al inteligenței emoționale utilizează îndeosebi mecanismele de coping adaptative - refocalizarea pe planificare, reevaluare pozitivă, refocalizare pozitivă și punerea în perspectivă și sunt mai puțin predispuși să folosească mecanisme de coping dezadaptative - autoculpabilizarea, catastrofarea, ruminarea și culpabilizarea celorlalți. De asemenea, s-a constatat că factorii socio-demografici influențează diferit utilizarea mecanismelor de coping cognitiv-emoțional.

Cuvinte-cheie: *inteligență emoțională, mecanisme de coping, adolescenți, maturizare emoțională, factori socio-demografici, coping adaptativ, coping dezadaptativ.*

Introduction

In the tumult of life, each person faces challenges and stressful situations that may exceed ordinary coping capacities. Understanding your own coping mechanisms and developing a varied set of adaptive approaches can help build resilience and improve your ability to cope with challenges. Coping mechanisms are used to manage emotions, to help us easily navigate through the difficulties encountered in life, to stay balanced to manage everyday challenges and to cope with life's pressure and other demands, for example external problems, such as environmental events or conditions as well as internal ones such as thoughts and emotions that exceed our available resources. There are two fundamental categories of coping mechanisms: those focused on problem solving and those focused on managing emotions. The first category refers to direct problem solving and focuses on identifying and addressing the root cause of stress, while the second type involves adjusting cognitive reactions to emotions in stressful situations by reinterpreting stressful

events [2]. Jeanne Segal argue that people with a high level of emotional intelligence achieve more success because they correctly identify and interpret their own emotions, know when and how to express their feelings, and are able to effectively manage their moods. It describes emotional intelligence as a set of skills, non-cognitive capabilities that affect a person's ability to manage demands and stressful situations in the environment [5]. Research conducted by Erözkan indicated a link or correlation among emotional intelligence levels and the coping strategies implemented, thus, individuals who are emotionally gifted can use predominantly adaptive coping mechanisms, which can contribute to a healthy approach to stress and management difficulties, while people with low emotional intelligence resort to maladaptive strategies. Studies exploring these relationships can provide important information for developing interventions and programs to promote mental health, as well as for identifying protective factors and ways to support their development in the community. Emotion regulation skills can be cultivated and improved through awareness, practice and, in some cases, therapeutic interventions such as cognitive behavioral therapy (CBT) [1]. Research supports the idea that how adolescents manage stress and difficulties during this crucial period of life can have a significant impact on their development and mental and physical well-being. Using effective coping strategies during adolescence can contribute to the development of a healthy and balanced ego, having a positive impact on multiple aspects of personal life. The ability to manage challenges and cope with stress can strengthen positive self-esteem and confidence in one's own abilities. Adolescents who develop adequate coping strategies tend to have fewer behavioral problems, can more effectively address challenges and avoid destructive or self-destructive behaviors.

Material and method

This study aims to investigate the relationship between emotional intelligence and the cognitive strategies adopted by adolescents, while also analyzing the impact of socio-demographic factors on the use of these coping mechanisms, in order to obtain a deeper and more comprehensive perspective on how they respond in various situational contexts.

Hypothesis 1: It was assumed that there is a connection between adolescents' emotional intelligence and the coping strategies they utilize.

Hypothesis 2 It was assumed that the way adolescents use coping mechanisms varies according to their gender, age and background.

To examine the connection among emotional intelligence and coping mechanisms used by adolescents, we used the following psychological research instrument:

- The „Diagnosis of emotional intelligence” test, developed by N. Hall, indicates the extent to which the adolescent feels, communicates and describes his own emotions, the ability to identify, assume and manage them. A high quotient of emotional intelligence ensures better empathy and a higher ability to understand those around you.

- Friedman maturity scale. This scale is utilized to evaluate emotional maturity by assessing emotional equilibrium or imbalance, aiming to gauge the current level of emotional intelligence. The test includes 25 items (questions) to be answered with Yes or No, each answer is associated with a certain number of points.

- The CERQ questionnaire (Cognitive-Emotional Coping Evaluation Questionnaire) which is a multidimensional tool designed to assess the cognitive coping strategies used by a person in the face of negative events or situations. This questionnaire identifies the different ways in which people can approach and manage stress or difficulties through thoughts and emotions [4].

Results and discussion

The research included a group of 220 teenagers, students from the 9th and 12th grades, aged between 14 and 17 years. Among them, 120 teenagers come from the rural environment, from a high school in the Municipality of Bucharest and 100 teenagers from the urban environment, from a high school in Brănești commune. The confirmatory experimental research was carried out between February and June 2022.

To begin with, we present the results of Spearman's non-parametric correlation analysis between variations in the use of CERQ coping mechanisms and emotional intelligence according to Hall and Friedman's model.

Table 1. Results of non-parametric Spearman correlation analysis between variations in the use of CERQ coping mechanisms and Hall and Friedman Emotional Intelligence.

Coping mechanisms SEARCH		Emotional intelligence Hall	Emotional maturity Friedman
1	Self-blame	-0.608**	-0.542**
2	Acceptance	-0.037	0.022
3	Rumination	-0.472**	-0.509**
4	Positive refocusing	0.446**	0.495**
5	Refocus on planning	0.511**	0.584**
6	Positive review	0.520**	0.543**
7	Putting it into perspective	0.435**	0.556**
8	Catastrophizing	-0.653**	-0.623**
9	Blaming others	-0.446**	-0.424**

Note: ** - $p < 0.01$.

The presented results indicate the following statistically significant relationships amongst emotional intelligence (Hall) and coping mechanisms:

Substantial positive correlation with Refocusing on planning ($r_s=0.511$; $p < 0.01$). This coping mechanism means that when faced with difficulties or problems, adolescents are able to look at the situation from various perspectives and organize themselves to cope an adverse event. This helps them stay calm and assess events objectively.

Substantial positive correlation with Positive reappraisal ($r_s=0.520$; $p < 0.01$), which means that these teenagers have the ability to give a positive connotation to a negative event in terms of personal development, considering that the experience will strengthen them, looking for the aspects constructive of it. They are also often open to learning from their experiences and constantly developing. They may be less prone to negativity and instead see every challenge as an opportunity to improve and grow.

Moderate positive correlation with Positive Refocusing ($r_s=0.446$; $p < 0.01$), which denotes an ability to direct attention to more pleasant or constructive aspects or activities, instead of exclusively focusing on the negative situations experienced. Those who use this mechanism are able to quickly stop focusing on unpleasant memories, shifting their focus to more positive or productive elements of the incident, however, they may still have moments when they may tend to become stuck in unfavorable feelings and ideas related to challenging or upsetting situations, they may feel weak or powerless and begin to doubt their own worth, which indicates the imperative of constant personal development.

Moderate positive correlation with Putting into perspective ($r_s=0.435$; $p < 0.01$). These teenagers have the ability to reduce the intensity of an event by comparing it to others and emphasizing that there are worse situations in the world. They show greater resilience in the face of overwhelming emotions and agitation caused by obstacles, due to their ability to take a broader view of situations and maintain a calm demeanor even in times of tension. However, there may still be times when they may tend to magnify or dwell on negative events without comparing them to other situations or putting them in the larger context of life. In such cases, they may experience increased levels of stress and anxiety, as focusing on negative events without relativizing them may distort their perception of reality. This can lead to a narrow and exaggerated view of current problems, making them appear more severe than they actually are.

The positive relationships identified associate high levels of Emotional Intelligence with high levels of use of CERQ adaptive mechanisms.

Hall Emotional Intelligence also correlates negatively with the following coping mechanisms:

Substantial negative correlation with Self-blame ($r_s=-0.608$; $p<0.01$). In this situation, adolescents demonstrate the ability to recognize and correctly interpret their own emotions, they are able to see things from the perspective of others and understand their feelings, which allows them to realize that they are not always to blame for negative situations and that responsibility can be shared. They communicate their emotions and concerns clearly and assertively, and seek support from others when they feel guilt becomes overwhelming.

Substantial negative correlation with Catastrophe ($r_s=-0.653$; $p<0.01$) this means that they do not tend to obsess over the seriousness of an experienced event, considering it the worst possible thing and worse than what other people have experienced. They typically approach challenging circumstances with a more resilient and balanced outlook. They may be able to identify and manage catastrophic thoughts more effectively by seeking alternative solutions and perspectives.

Moderate negative correlation with Rumination ($r_s=-0.472$; $p<0.01$) which denotes that emotionally intelligent adolescents do not constantly and obsessively focus on emotions and thoughts related to a negative event and can reframe negative thoughts and emotions in a constructive way. They are also able to direct their attention and energy to positive activities and interests without getting stuck in excessive thoughts, they can reframe negative thoughts and emotions in a constructive way. But at certain times, it is possible that instead of focusing on finding a solution, the individual may fall prey to rumination, a phenomenon that has the potential to trigger a downward spiral, gradually intensifying negative emotional states. In such cases, uncontrolled rumination can lead to a state of emotional blockage, where the person is unable to move past the negative event.

Moderate negative correlation with Blaming others ($r_s=-0.446$; $p<0.01$) means that teenagers who use this mechanism are often more aware of their own emotions and how their actions affect others, which can make them less likely to project their own mistakes or frustrations onto others. However, they may also have a tendency to project blame onto others for their own problems. For these teenagers, blaming others can become a way to avoid confronting their own emotions or to maintain a positive self-image.

The negative relationships identified associate high levels of Emotional Intelligence with low levels of use of CERQ maladaptive mechanisms.

Friedman's emotional maturity correlates substantially positively with adaptive mechanisms: Positive Refocus ($r_s=0.495$; $p<0.01$), Refocus on Planning ($r_s=0.584$; $p<0.01$), Positive Reappraisal ($r_s=0.5430$; $p<0.01$) and Perspective ($r_s=0.435$; $p<0.01$).

In addition, Friedman's Emotional Maturity has a significant negative correlation with self-blame tendency ($r_s=-0.542$; $p<0.01$), Rumination ($r_s=-0.509$; $p<0.01$), Catastrophizing ($r_s=-0.623$; $p<0.01$), and moderately negatively with the Blame others mechanism ($r_s=-0.424$; $p<0.01$).

Although adolescents with high emotional intelligence frequently resort to adaptive coping mechanisms, it is essential to emphasize that the adaptation process is not exclusively governed by it; a number of other factors also come into play that contribute significantly to shaping adaptive behavior. Thus, we confirmed hypothesis 2, according to which it is assumed that the level of coping mechanisms used by adolescents changes according to the variables of gender, age and the environment of origin.

Next, we present the comparative analysis of the distribution of the levels of manifestation of the coping mechanisms according to the socio-demographic variables: gender and environment of origin; the Mann-Whitney test was applied.

Table 2. Distribution of the manifestation levels of coping mechanisms according to the gender variable.

CERQ coping mechanisms	Male (N=110)	Female (N=110)	U	Z	p
	Average rank	Average rank			
Self-blame	110.05	109.95	5990.00	-0.13	0.897
Acceptance	122.15	98.85	4768.00	-2.81	0.005
Rumination	103.78	117.22	5311.00	-1.60	0.110

Positive refocusing	101.19	119.81	5026.00	-2.20	0.028
Refocus on planning	112.22	108.78	5861.00	-0.41	0.681
Positive review	119.25	101.75	5088.00	-2.07	0.039
Putting it into perspective	125.36	95.64	4415.00	-3.54	0.001
Catastrophizing	106.12	114.88	5568.00	-1.04	0.300
Blaming others	131.08	89.92	3786.00	-4.94	0.001

Note: *U* – Mann-Whitney test value, *Z* – standard value corresponding to the *U* value, *p* – associated statistical significance level.

Statistically significant differences were identified between boys and girls in the following coping mechanisms: A significantly higher manifestation level of Acceptance (average rank=122.15; $Z=-2.81$; $p=0.005$), Positive Reevaluation (average rank=119.25; $Z=-2.07$; $p=0.039$), Putting into perspective (average rank =125.36; $Z=-3.54$; $p=0.001$) and blaming others (average rank=131.08; $Z=-4.94$; $p=0.001$), in the case of boys. A much more pronounced degree of manifestation in the Positive Refocusing strategy (mean rank=119.15; $Z=-2.20$; $p=0.028$), in the case of girls.

Table 3. Distribution of levels of manifestation of coping mechanisms according to the variable environment of origin.

CERQ coping mechanisms	Urban (N=108)	Rural (N=112)	U	Z	p
	Average rank	Average rank			
Self-blame	131.96	89.80	3730.00	-4.99	0.001
Acceptance	95.26	125.20	4402.00	-3.61	0.001
Rumination	118.56	102.73	5178.00	-1.88	0.060
Positive refocusing	98.37	122.20	4738.00	-2.82	0.005
Refocus on planning	78.94	140.93	2640.00	-7.42	0.001
Positive review	80.50	139.43	2808.00	-6.97	0.001
Putting it into perspective	104.52	116.57	5368.00	-1.47	0.140
Catastrophizing	140.52	81.55	2806.00	-6.97	0.001
Blaming others	123.85	97.63	4606.00	-3.15	0.002

Note: *U* – Mann-Whitney test value, *Z* – standard value corresponding to the *U* value, *p* – associated statistical significance level.

Statistically significant differences were identified between adolescents depending on the environment of origin in the case of the following coping mechanisms: A significantly higher manifestation level of Self-Blame (average rank=131.96; $Z=-4.99$; $p=0.001$), Catastrophizing (average rank=140.52; $Z=-6.97$; $p=0.001$) and Blaming others (average rank=123.85 ; $Z=-3.15$; $p=0.001$), in the case of adolescents from the urban environment. A significantly higher manifestation level of Acceptance (average rank=125.20; $Z=-3.61$; $p=0.001$), Positive refocusing (mean rank=122.20; $Z=-2.82$; $p=0.005$), Refocusing through planning (mean rank=140.93; $Z=-7.42$; $p=0.001$), Positive reappraisal (mean rank=139.432; $Z=-6.97$; $p=0.001$) in the case of the rural environment.

Table 4. Correlations between coping mechanisms and age.

	Age
1 Self-blame	-0.382**
2 Acceptance	-0.178*
3 Rumination	-0.319**

4	Positive refocusing	0.327**
5	Refocus on planning	0.252**
6	Positive review	0.210**
7	Putting it into perspective	0.141*
8	Catastrophizing	-0.342**
9	Blaming others	-0.503**

Moderate and statistically significant positive correlations were observed between age and Positive Refocus ($r_s=0.327$; $p<0.01$), Refocus on Planning ($r_s=0.252$; $p<0.01$), Positive Reappraisal ($r_s=0.210$; $p<0.01$). Positive relationships associate high age level with a high level of use of adaptive coping mechanisms. Moderate and statistically significant negative correlations were observed in the case of Self-blame ($r_s=-0.382$; $p<0.01$), Rumination ($r_s=-0.319$; $p<0.01$), Catastrophizing ($r_s=-0.342$; $p<0.01$) and Blame of others ($r_s=-0.503$; $p<0.01$). Negative relationships associating a higher level of age with reduced levels of use of maladaptive coping mechanisms.

Next, we present in detail the results obtained from the ordinal logistic regression analysis for predicting the level of use of coping mechanisms according to gender, background and age.

Table 5. Results of the ordinal logistic regression analysis for the prediction of the level of use of the coping mechanism Self-blame according to gender, environment and age.

Self-blame	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	51.63	0.001	0.209 – 0.215	-0.09	0.25	0.14	1	0.711
Environment of origin (urban)				1.10	0.25	19.13	1	0.001
Age				-0.58	0.12	24.29	1	0.001

Binary logistic regression analysis applied to test the relationship between the manifestation level of Self-blame (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=51.63$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Self-blame. The predictive capacity of the model is moderate ($R^2=0.209 - 0.215$). The most important predictor is the environment of origin ($B=1.10$; $SE=0.25$; $Wald=19.13$; $p=0.001$) with a positive relationship indicating that adolescents from the urban environment show a higher level of self-blame than those from the rural environment, an aspect that confirms the difference identified in the analysis above. Another significant predictor is represented by age ($B=-0.58$; $SE=0.12$; $Wald=24.29$; $p=0.001$), a negative predictor in the sense of reducing the level of manifestation of Self-blame with increasing age. Regarding the gender difference, it does not show a differential capacity for the level of self-blame ($B=-0.09$; $Se=0.25$; $Wald=0.14$; $p=0.711$).

Table 6. Results of ordinal logistic regression analysis for predicting the level of use of the Acceptance coping mechanism according to gender, environment and age.

Acceptance	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	31.97	0.001	0.135 – 0.141	0.58	0.25	5.28	1	0.022
Environment of origin (urban)				-1.08	0.26	18.05	1	0.001
Age				-0.39	0.12	11.33	1	0.001

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Acceptance (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=31.97$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Acceptance. The predictive capacity of the model is low ($R^2=0.135 - 0.141$). The most important predictor is the environment of origin ($B=-1.08$; $SE=0.26$; $Wald=18.05$; $p=0.001$) with a negative relationship indicating that adolescents from the urban environment show a lower level of manifestation of Acceptance than those from the rural environment, an aspect that confirms the difference identified in the analysis above. Another significant predictor is represented by age ($B=-0.39$; $SE=0.12$; $Wald=11.33$; $p=0.001$), a negative predictor in the context of the reduction in the manifestation of acceptance as age advances. In terms of gender differences, they indicate variable capacity for acceptance control. ($B=0.58$; $Se=0.25$; $Wald=5.28$; $p=0.022$), as a positive predictor in the sense of a higher level of Acceptance in the case of boys than in the case of girls.

Table 7. Results of the ordinal logistic regression analysis for the prediction of the level of use of the coping mechanism Rumination according to gender, environment and age.

Rumination	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	28.68	0.001	0.122–0.126	-0.58	0.25	5.45	1	0.020
Environment of origin (urban)				0.29	0.24	1.42	1	0.233
Age				-0.53	0.12	20.43	1	0.001

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Rumination (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=28.68$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Rumination. The predictive capacity of the model is reduced ($R^2=0.122 - 0.126$). The most important predictor is age ($B=-0.53$; $SE=0.12$; $Wald=20.43$; $p=0.001$) with a negative relationship indicating that adolescents have a lower level of manifestation of Rumination with increasing age. Regarding the gender difference, it shows the differential capacity of the level of Rumination ($B=0.58$; $Se=0.25$; $Wald=5.28$; $p=0.022$), as a positive predictor in the sense of a lower level of Rumination in the case of boys than in the case of girls.

Table 8. Results of the ordinal logistic regression analysis for the prediction of the level of use of the coping mechanism Positive Refocus according to gender, environment and age.

Positive refocusing	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	34.22	0.001	0.144–0.148	-0.46	0.25	3.47	1	0.062
Environment of origin (urban)				-0.63	0.24	6.63	1	0.010
Age				0.50	0.12	18.63	1	0.001

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Positive Refocusing (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=34.22$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Positive Refocusing. The predictive capacity of the model is reduced ($R^2=0.144 - 0.148$).

The most important predictor is age ($B=0.50$; $SE=0.12$; $Wald=18.63$; $p=0.001$) with a positive relationship indicating that adolescents have a higher level of positive Refocusing with increasing age. Another significant predictor is represented by the difference in the environment of origin ($B=-0.63$; $SE=0.24$; $Wald=6.63$; $p=0.010$), a negative predictor in the sense of a lower level of manifestation in the case of adolescents from the urban environment. Regarding the gender difference, it does not show a differential capacity for the level of positive refocusing ($B=-0.46$; $Se=0.25$; $Wald=3.47$; $p=0.062$).

Table 9. Results of the ordinal logistic regression analysis for the prediction of the level of use of the coping mechanism Refocus on planning according to gender, environment and age.

Refocus on planning	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	73.54	0.001	0.284–0.293	0.12	0.25	0.21	1	0.648
Environment of origin (urban)				-1.96	0.28	49.95	1	0.001
Age				0.45	0.12	14.72	1	0.001

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Refocusing through planning (measured on a 7-point ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=73.54$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Refocusing through planning. The predictive capacity of the model is moderate ($R^2=0.284 - 0.293$). The most important predictor is the environment of origin ($B=-1.96$; $SE=0.28$; $Wald=49.95$; $p=0.001$) with a negative relationship indicating that adolescents from the urban environment have a lower level of manifestation of Refocusing through planning than those from the rural environment. Another significant predictor is represented by age ($B=0.45$; $SE=0.12$; $Wald=14.72$; $p=0.001$), a positive predictor in the sense of a higher level of manifestation determined by increasing age. Regarding the gender difference, it does not show a differential capacity of the level of Refocus on planning ($B=0.12$; $Se=0.25$; $Wald=0.21$; $p=0.648$).

Table 10. Results of the ordinal logistic regression analysis for the prediction of the level of use of the coping mechanism Positive reappraisal according to gender, environment and age.

Positive reappraisal	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	68.05	0.001	0.266–0.273	0.56	0.25	5.12	1	0.024
Environment of origin (urban)				-1.82	0.27	46.72	1	0.001
Age				0.41	0.11	13.24	1	0.024

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Positive Reappraisal (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=68.05$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Positive reappraisal. The predictive capacity of the model is moderate ($R^2=0.266 - 0.273$). The most important predictor is the environment of origin ($B=-1.82$; $SE=0.27$; $Wald=46.72$; $p=0.001$) with a negative relationship indicating that adolescents from the urban environment have a lower level of manifestation of positive reappraisal than those from the rural environment. Another significant predictor is

represented by age ($B=0.41$; $SE=0.11$; $Wald=13.24$; $p=0.001$), a positive predictor in the sense of presenting a higher level of manifestation with increasing age. Regarding the gender difference, it shows a differential capacity of the level of positive reappraisal ($B=0.56$; $Se=0.25$; $Wald=5.12$; $p=0.024$), a positive relationship that indicates a higher level of manifestation in the case of girls than in that of the boys.

Table 11. Results of the ordinal logistic regression analysis for the prediction of the level of use of the coping mechanism Putting into perspective according to gender, environment and age.

Putting it into perspective	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	22.82	0.001	0.099	1.02	0.26	16.07	1	0.001
Environment of origin (urban)			0.102	-0.26	0.24	1.18	1	0.278
Age				0.32	0.11	7.88	1	0.005

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Putting into perspective (measured on a 7-point ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=22.82$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Putting it into perspective. The predictive capacity of the model is low ($R^2=0.099 - 0.102$). The most important predictor is the gender difference ($B=1.02$; $SE=0.26$; $Wald=16.07$; $p=0.001$) with a positive relationship indicating that boys have a higher level of manifestation than girls. The explanation being that they are taught from an early age not to be overwhelmed by strong emotions and look at problems from a broader perspective to find effective solutions. Also, another significant predictor is represented by age ($B=0.32$; $SE=0.11$; $Wald=7.88$; $p=0.005$), a positive predictor in the sense of presenting a higher level of manifestation with increasing age.

Table 12. Results of the ordinal logistic regression analysis for predicting the level of use of the Catastrophizing coping mechanism according to gender, environment and age.

Catastrophizing	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	76.68	0.001	0.294	-0.34	0.25	1.82	1	0.177
Environment of origin (urban)			0.302	1.75	0.26	43.57	1	0.001
Age				-0.56	0.12	23.10	1	0.001

Binary logistic regression analysis applied to test the relationship between the level of manifestation of the Catastrophizing (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=76.68$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of the Catastrophizing. The predictive capacity of the model is moderate ($R^2=0.294 - 0.302$). The most important predictor is the environment of origin ($B=1.75$; $SE=0.26$; $Wald=43.57$; $p=0.001$) with a positive relationship indicating that adolescents from the urban environment have a higher level of manifestation of the Catastrophizing than those from the environment rural. Another significant predictor is represented by age ($B=-0.56$; $SE=0.12$; $Wald=23.10$; $p=0.001$), a negative predictor in the sense of presenting a lower level of manifestation with increasing age.

Table 13. Results of the ordinal logistic regression analysis for predicting the level of use of the coping mechanism Blaming others according to gender, environment and age.

Blaming others	Model fitting information		Pseudo R-square	Estimation parameters				
	RL $\chi^2(df=3)$	p	R ²	Estimate	SE	Wald χ^2	df	p
Gender (male)	90.61	0.001	0.338	1.20	0.27	20.53	1	0.001
Environment of origin (urban)			0.349	0.80	0.25	9.90	1	0.002
Age				-0.86	0.13	46.55	1	0.001

Binary logistic regression analysis applied to test the relationship between the level of manifestation of Blaming others (measured on a 7-step ordinal scale) and the independent variables: gender, background and age. The fit of the model is statistically significant ($\chi^2(df=3)=90.61$; $p=0.001$) which is why we will assume the research hypothesis regarding the impact of socio-demographic factors in determining the level of use of Blaming others. The predictive capacity of the model is high ($R^2=0.338 - 0.349$). The most important predictor is age ($B=-0.86$; $SE=0.13$; $Wald=46.55$; $p=0.001$) with a negative relationship indicating a reduction in the level of manifestation of Blaming others with increasing age. Another significant predictor is represented by the gender difference ($B=1.20$; $SE=0.27$; $Wald=20.53$; $p=0.001$), positive predictor in the sense of presenting a higher level of manifestation in the case of boys. This tendency not to own up to one's mistakes can become a way to avoid confronting one's own emotions or to maintain a positive self-image. Regarding the environment of origin, it shows a differentiating capacity of the level of Blaming others ($B=0.80$; $SE=0.25$; $Wald=9.90$; $p=0.002$), a positive relationship that indicates a higher level of manifestation in the case of teenagers from the urban environment.

Conclusions

It is widely accepted the idea that an increased emotional intelligence favors the adoption of proactive, constructive and effective approaches in managing difficult situations, at the expense of passive strategies, focused on emotional and less productive aspects. Emotional intelligence was positively correlated with effective problem-solving strategies, access to social support, cognitive appraisal ability and the ability to manage favorable emotional reactions [1, 3].

Research findings have validated the hypothesis that there is a significant link between the degree of emotional intelligence of adolescents and the coping methods they apply in the face of challenges. Therefore, it was concluded that adolescents with higher emotional intelligence tend to adopt adaptive coping strategies, such as reorientation on planning, positive reappraisal, positive reorientation and perspective-taking demonstrating the ability to objectively analyze circumstances and consider multiple perspectives. They keep calm and perceive challenges as opportunities for personal development, continuously learning from lived experiences. At the same time, they demonstrate the ability to redirect their attention to constructive activities, lessening the impact of negative events by reporting more serious situations. Thus, they do not let themselves be overwhelmed by emotions and remain in control of themselves in moments of tension. Also, these adolescents are less likely to resort to maladaptive mechanisms, such as self-blame, catastrophizing, rumination or blaming others. They exhibit a profound awareness of their own emotions and their influence on others, refraining from projecting their mistakes and frustrations onto others. Approach difficulties with resilience and calmness, effectively manage catastrophic thoughts and look for alternative solutions. Change negative thoughts into a constructive way and focus attention on positive activities, thus avoiding mental blocks. They understand the perspectives and feelings of others, accepting that they are not always responsible for negative situations, thus sharing the blame fairly.

Also, in the research, it was highlighted that with increasing age, there is a probability that adolescents will achieve higher levels of adaptive coping mechanisms - positive refocusing, refocusing on planning,

positive reappraisal and putting into perspective and decrease the level maladaptive coping mechanisms - self-blame, catastrophizing and blaming others.

Gender was found to be an influential factor in the use of coping mechanisms and findings indicate that boys tend to adopt adaptive coping strategies such as acceptance and perspective taking. As maladaptive coping mechanisms they tend to blame others. Instead, girls use the coping mechanism positive refocusing and rumination.

Regarding the environment of origin, it was observed that adolescents from the urban environment use the maladaptive coping mechanism of self-blame, catastrophizing and blaming others, instead, adolescents from the rural environment use adaptive coping mechanisms - acceptance, refocusing on planning, positive reevaluation and refocusing positive. Thus, according to the conclusions listed above, we can affirm the fact that the belief persists that the implementation of programs to improve emotional intelligence could have a profound impact on the way adolescents face challenges and adapt to changes in their environment.

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THE IMPACT OF SOCIALLY PRESCRIBED PERFECTIONISM ON PROFESSIONAL BURNOUT WITH CONSIDERATION OF GENDER DIFFERENCES: A STUDY AMONG IT SPECIALISTS IN MOLDOVA

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This article examines the relationship between socially prescribed perfectionism and professional burnout among IT specialists in Moldova, with a focus on analyzing gender differences in this correlation. The study is based on data collected using standardized surveys, including the Multidimensional Perfectionism Scale by Hewitt and Flett and the Burnout Assessment Tool (BAT). The results confirm the hypothesis that socially prescribed perfectionism significantly correlates with the level of professional burnout. Furthermore, it was found that gender differences influence this relationship, with men showing higher correlation rates between perfectionism and burnout. The article discusses both theoretical and practical aspects of the results, highlighting the need to consider gender differences when developing corporate programs aimed at reducing stress and preventing professional burnout. Recommendations are provided for HR departments of IT companies, emphasizing the importance of creating tailored support programs to reduce perfectionistic expectations and enhance employees' psychological well-being.

Keywords: *professional burnout, socially prescribed perfectionism, IT specialists, gender differences, psychological well-being, work-related stress, Moldova.*

IMPACTUL PERFEȚIONISMULUI SOCIAL PRESCRIS ASUPRA EPUIZĂRII PROFESIONALE CU CONSIDERAREA DIFERENȚELOR DE GEN: UN STUDIU PRINTRE SPECIALIȘTII IT DIN MOLDOVA

Acest articol examinează relația dintre perfecționismul social prescris și epuizarea profesională în rândul specialiștilor IT din Moldova, cu un accent pe analiza diferențelor de gen în această corelație. Studiul se bazează pe date colectate folosind chestionare standardizate, inclusiv Scala Multidimensională a Perfecționismului de Hewitt și Flett și Instrumentul de Evaluare a Epuizării (BAT). Rezultatele confirmă ipoteza că perfecționismul social prescris corelează semnificativ cu nivelul de epuizare profesională. În plus, s-a constatat că diferențele de gen influențează această relație, bărbații prezentând rate mai mari de corelație între perfecționism și epuizare. Articolul discută atât aspectele teoretice, cât și cele practice ale rezultatelor, subliniind necesitatea de a lua în considerare diferențele de gen la dezvoltarea programelor corporative destinate reducerii stresului și prevenirii epuizării profesionale. Sunt furnizate recomandări pentru departamentele de resurse umane ale companiilor IT, subliniind importanța creării unor programe de sprijin personalizate pentru a reduce așteptările perfecționiste și a îmbunătăți bunăstarea psihologică a angajaților.

Cuvinte-cheie: *epuizare profesională, perfecționism social prescris, specialiști IT, diferențe de gen, bunăstare psihologică, stres legat de muncă, Moldova.*

Introduction

Professional burnout is a phenomenon actively studied in many professional fields, including the high-tech information technology sector. Research conducted by Flett and Hewitt shows that perfectionism can significantly contribute to the development of stress and burnout, especially when individuals set unjustifiably high demands on themselves [2]. In the Republic of Moldova, where the IT sector is in the stage of intensive development, studying factors such as socially prescribed perfectionism becomes particularly important.

Perfectionism, as defined in the International Classification of Diseases (ICD-11), is the tendency to set excessively high standards for oneself and others, striving for flawlessness [5]. A person experiencing perfectionism often feels the need to present themselves as perfect or at least ideal, believing in their ability to achieve this standard. This striving for an ideal can act as psychological protection, helping to avoid pain, guilt, shame, and judgment. Perfectionism, particularly socially prescribed, is described as an individual's perception of external expectations for their professional performance [3]. Stoeber and colleagues argue that this type of perfectionism correlates with high levels of stress and psychological discomfort. Studies confirm that in environments with constantly increasing demands, such as the IT industry, the pressure on employees significantly increases [9].

In addition to perfectionism, gender differences also influence the level of professional burnout. Research by Purvanova and Muros showed that women in male-dominated fields such as IT often experience higher levels of stress and burnout [6].

These differences may be related to additional social expectations placed on women and the necessity of balancing professional and personal life.

In our study, we analyzed data collected from IT specialists in Moldova to identify the relationship between various forms of perfectionism and professional burnout. The results showed that among all forms of perfectionism, socially prescribed perfectionism has the most significant impact on the level of professional burnout. This emphasizes the importance of considering social expectations and pressures that may be imposed on employees in strategies for preventing and reducing burnout.

Understanding that external demands and expectations can significantly affect employees' psychological state requires further study and the development of targeted programs aimed at reducing stress and improving overall well-being in the professional environment. Additionally, it is assumed that gender differences can influence the level of experienced burnout and how perfectionism is perceived and affects individuals. Understanding these differences in the context of the Moldovan IT sector can enrich the academic knowledge base on this issue and provide practical recommendations for local companies and HR specialists.

The aim of this study is to analyze the relationship between socially prescribed perfectionism and professional burnout among IT specialists in Moldova, with a particular focus on studying gender differences. We aim to identify how various aspects of perfectionism correlate with burnout and determine whether there are significant differences between men and women in this aspect.

Within the framework of these objectives, we formulated the following *hypotheses*:

1. Socially prescribed perfectionism positively correlates with the level of professional burnout among IT specialists in Moldova.
2. Gender differences influence the relationship between socially prescribed perfectionism and the level of professional burnout.

Methodology and Research Strategy

The study was carefully designed to ensure its relevance and reliability. The preparatory stage involved developing a detailed research plan, which included the selection of validated diagnostic tools and clear criteria for participant inclusion.

Participation in the study was restricted to employees of the IT sector in Moldova to guarantee that the findings would address the specific needs and challenges of this professional field. Two standardized tools were used to measure the main variables:

1. The Multidimensional Perfectionism Scale developed by Hewitt and Flett (1991) [4], which evaluates three dimensions of perfectionism: self-oriented, other-oriented, and socially prescribed perfectionism. For this study, the socially prescribed perfectionism subscale was used to assess the perception of external expectations for achieving high standards.
2. The Burnout Assessment Tool (BAT) by Schaufeli, Desart, and De Witte (2020) [8], which measures burnout across dimensions such as emotional exhaustion, internal distancing, cognitive and emotional difficulties, and secondary symptoms.

Data Collection Procedures

All research procedures were conducted anonymously. Participants filled out online questionnaires hosted on the Google Forms platform, allowing data collection without disclosing respondents' personal information. Participation in the study was entirely voluntary, with guarantees of anonymity and confidentiality of all responses.

Sample Description

The study included 120 participants from the IT sector of the Republic of Moldova. The composition of the participants was as follows:

Gender: 58% men, 42% women.

Age groups:

18-24 years - 13%;

25-34 years - 39%;

35-44 years - 38%;

45-54 years - 7%;

55 years and older - 3%.

Position type: 78% specialists, 22% managers.

The participants were selected using a targeted sampling method to ensure relevance to the research objectives. The sample reflects the gender disparity in the IT sector, where men traditionally dominate. Age groups were chosen to represent key career stages in IT, ranging from entry-level professionals (18–24 years) to senior-level specialists and managers (35–44 years and above). All participants had at least one year of experience in the IT sector.

This detailed description ensures the representativeness and relevance of the sample to the goals of the study. In our study, particular attention was paid to two main variables: socially prescribed perfectionism and the level of professional burnout.

General Level of Professional Burnout

The general level of professional burnout was measured using the BAT scale developed by Schaufeli and colleagues. This scale assesses burnout through several variables, including emotional exhaustion, internal distancing, cognitive and emotional difficulties, as well as secondary symptoms on a scale from 1 (never) to 5 (constantly), including 33 items.

Socially Prescribed Perfectionism

Socially prescribed perfectionism refers to individuals' perception of others' expectations that they should meet high standards of performance and achieve impeccable results. This variable is measured by assessing the degree to which a person feels external pressure to be perfect and responds to this pressure by striving for unattainable standards. The assessment was carried out using the Multidimensional Perfectionism Scale by Hewitt and Flett, which measures self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism through 45 items. Participants' responses were recorded using direct statements on a scale from 1 (strongly disagree) to 7 (strongly agree) and reverse statements on a scale from 1 (strongly agree) to 7 (strongly disagree).

Data Collection and Analysis

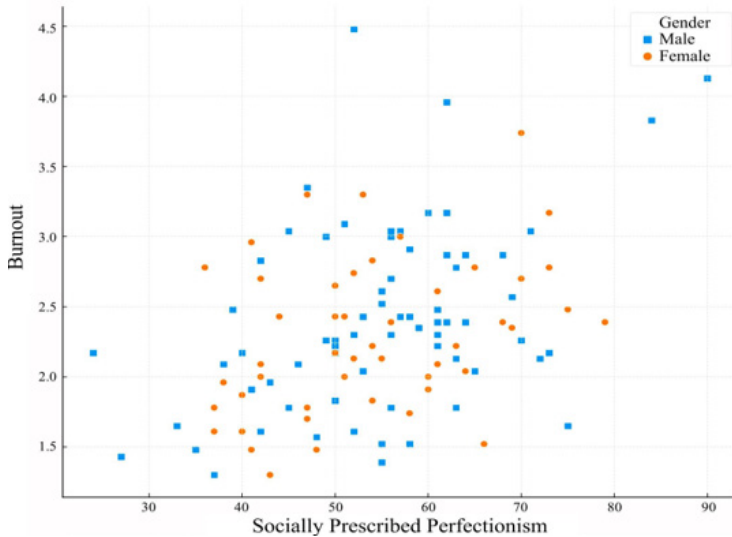
The questionnaires were distributed among IT specialists via email and social networks, ensuring convenient and quick data collection. Statistical methods, including correlation and regression analyses, were used to analyze the data, performed using the SPSS statistical package. These methods allowed us to assess the relationships between perfectionism and burnout and test the study's hypotheses.

Ensuring Reliability of the Study

To ensure the reliability of the results, procedures for checking the completeness and consistency

of the questionnaire responses were applied. The results were analyzed for internal consistency of the scales, confirming their suitability for analyzing the relationships between the studied phenomena.

Figure 1. Relationship between burnout and socially prescribed perfectionism by gender.



Results

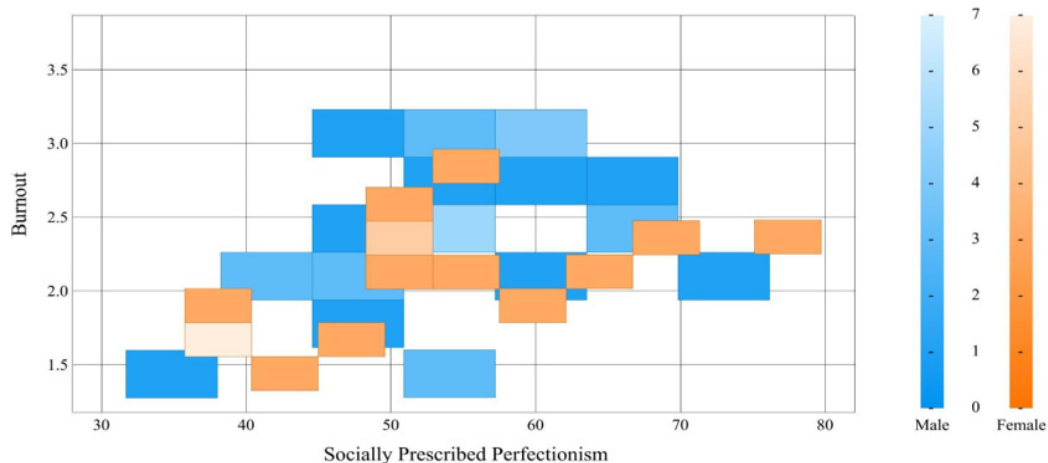
The scatter plot (Fig. 1) visually illustrates the distribution of burnout levels depending on the degree of socially prescribed perfectionism among men and women. The data show higher burnout levels for men compared to women.

Statistical analysis confirmed a significant positive correlation between socially prescribed perfectionism and professional burnout among IT specialists in Moldova. The correlation coefficient for men was 0.42 ($p < 0.01$), indicating a moderate positive relationship, while for women it was slightly lower at 0.37 ($p < 0.05$), also reflecting a positive correlation but less pronounced than for men. These findings highlight the link between

socially prescribed perfectionism and burnout, with notable gender differences.

The regression analysis confirmed that socially prescribed perfectionism explains 18% of the variability in the level of professional burnout among men and 14% among women. The cumulative histogram (Fig. 2) illustrates the distribution of burnout levels depending on the degree of socially prescribed perfectionism for both gender groups.

Figure 2. Distribution of burnout levels depending on the degree of socially prescribed perfectionism for men and women.



These results demonstrate that socially prescribed perfectionism affects professional burnout, with a stronger influence observed in men.

Discussion

The analysis of our study data confirmed the first hypothesis, indicating a significant positive correlation between socially prescribed perfectionism and the level of professional burnout among IT specialists in Moldova. This finding is consistent with the theory suggesting that striving to meet high social expectations can increase stress and contribute to burnout, highlighting the need for strategies to manage perfectionistic tendencies in the workplace [1, 7].

The second hypothesis was also confirmed by identifying gender differences in the degree of influence of socially prescribed perfectionism on professional burnout. Men showed higher correlation coefficients, which may reflect gender-specific expectations in the professional environment and differences in coping strategies for stress. Such data can form the basis for developing targeted programs to prevent burnout, taking into account gender characteristics.

Possible Explanations for the Found Relationships and Differences

Gender differences may be due to cultural and social factors that shape different expectations for men and women in the professional environment. Men may experience increased pressure related to achieving success and demonstrating competence, requiring further research to understand the dynamics of perfectionism in various gender and cultural contexts.

Discussion of Limitations and Suggestions for Future Research

Our findings are limited to the specific context of the IT industry in Moldova, which may reduce the generalizability of the results to other professions or cultural contexts. It is recommended to conduct similar studies in other countries and sectors to compare burnout and perfectionism levels in different cultural and professional contexts. It would also be useful to study other factors influencing professional burnout, including colleague support and organizational culture.

Conclusion

This study confirmed a significant relationship between socially prescribed perfectionism and professional burnout among IT specialists in Moldova, with notable gender differences. The findings highlight the importance of addressing gender-specific experiences with social pressure and perfectionism when designing stress management and burnout prevention strategies.

HR departments in Moldovan IT companies are encouraged to develop tailored programs that address these gender-specific challenges, including targeted training on managing expectations and stress, regular employee surveys to monitor burnout levels, and adaptive workplace support systems to enhance effectiveness.

Future studies in other countries and industries could further explore the universality of these patterns and deepen understanding of the role of corporate culture, organizational support, and socio-psychological factors in professional burnout. Additionally, examining individual coping strategies for perfectionism could aid in designing comprehensive programs to improve employees' psychological well-being.

The results contribute to the literature on professional burnout and offer practical insights for improving workplace well-being in the IT sector.

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THE ROLE OF ART THERAPY PRACTICES IN THE TEACHERS' WORK WITH PARENTS OF CHILDREN WITH CEREBRAL PALSY

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The article is devoted to the study of the role of art therapy practices in improving the interaction of parents raising children with cerebral palsy together with their other children. The author focuses her work on the fact that art therapy is an effective method of working with parents of children with cerebral palsy, which allows them to express emotions and feelings through creativity. The material contains a theoretical review of scientific and methodological literature on identifying the main problems of parent-child relationships in families raising children with cerebral palsy. The author highlights key difficulties of interaction between teachers and parents raising children with cerebral palsy, while paying attention to the inclusion of art therapy practices in the joint work of specialists and families. Art therapy practices can help teachers reduce parental expectations, help parents accept the characteristics of their children in an environmentally friendly manner, and generally stabilize the emotional background in the family. The work is interdisciplinary in nature, written at the intersection of special pedagogy and special psychology. The article will be of interest to specialists in the field of special pedagogy and special psychology.

Keywords: *childhood, parenthood, child-parent relationships, cerebral palsy, family, family relationships, pedagogical support, family support, art technologies, art therapy, art practice.*

ROLUL PRACTICIILOR DE ARTTERAPIE ÎN LUCRUL PROFESORULUI CU PĂRINȚII COPIILOR CU PARALIZII CEREBRALE

Articolul este dedicat studiului rolului practicilor de art-terapie în îmbunătățirea interacțiunii părinților care cresc copii cu paralizie cerebrală împreună cu ceilalți copii ai lor. Autoarea își concentrează munca pe faptul că terapia prin artă este o metodă eficientă de lucru cu părinții copiilor cu paralizie cerebrală, care le permite să-și exprime emoțiile și sentimentele prin creativitate. Materialul conține o trecere în revistă teoretică a literaturii științifice și metodologice privind identificarea principalelor probleme ale relațiilor părinte-copil în familiile care cresc copii cu paralizie cerebrală. Autorul evidențiază dificultăți-cheie de interacțiune dintre profesori și părinți care cresc copii cu paralizie cerebrală, acordând totodată atenție includerii practicilor de art-terapie în munca comună a specialiștilor și a familiilor. Practicile de art-terapie pot ajuta profesorii să reducă așteptările părinților, să-i ajute pe părinți să accepte caracteristicile copiilor lor într-o manieră prietenoasă cu mediul și, în general, să stabilească fundalul emoțional din familie. Lucrarea este de natură interdisciplinară, scrisă la intersecția dintre pedagogia specială și psihologia specială. Articolul va fi de interes pentru specialiștii din domeniul pedagogiei speciale și psihologiei speciale.

Cuvinte-cheie: *copilărie, parentalitate, relații copil-părinte, paralizie cerebrală, familie, relații familiale, sprijin pedagogic, sprijin familial, tehnologii artistice, terapie prin artă, practică artistică.*

The modern system of education and upbringing for children with various developmental disorders, including cerebral palsy, guarantees maximum possible

The modern system of education and upbringing for children with various developmental disorders, including cerebral palsy, maximizes the adaptation of children in the society. Nevertheless, achieving comprehensive personal, cognitive, and communicative development requires paying attention to the conditions in which each child is raised and the nature of parent-child relationships in the family.

Parents are the closest individuals to a child. The family shapes the child's personality and influences their intellectual, social and emotional development. Therefore, it is crucial to actively involve parents in various forms of cooperation and interaction with specialists to achieve the highest possible socialization outcomes for children. Parental care is especially important for children with cerebral palsy. However, parents themselves are in need of urgent psychological and pedagogical assistance. Many specialists overlook the significance of psychological and emotional state of parents raising children with disabilities. There-

fore, in organizing the interaction between specialists and families raising a child with cerebral palsy, it is important to separate the goals of improving the children's education and socialization status from those of supporting the parents. Research by E.S. Dyachkova, I.V. Karpenkova, E.M. Mastyukova, and other authors shows that the families of children with special needs are exposed to a constant psychological trauma, subjectively perceived as never-ending. Many families face social isolation, alienation, and a reduction or complete absence of social contacts. A significant number of parents lack the skills to support each other and their child. They lack competence in psychological and pedagogical matters [6; 7; 10].

I.I. Mamaichuk and L.M. Shipitsyna point out that all parents raising children with disabilities need specialist help and support. Today, this assistance is provided to the majority of those in need [10; 16]. Nevertheless, despite the significant amount of research in the field of social, pedagogical, and psychological support for parents of children with disabilities, there is still a need to explore new forms of interaction between specialists and parents, such as evaluating the effectiveness of incorporating art therapy practices.

The art therapy practices can be integrated at almost every stage of therapeutic and developmental programs, as well as in various forms of work with parents. Today, the most relevant forms of work for specialists with parents raising children with CP are as follows:

1. Individual consultations. Educators hold one-on-one meetings with parents to discuss the child's development and education. During these consultations, the educator can provide information on the child's specific needs, offer recommendations on how to apply methods and techniques of education, and respond to parents' questions.

2. Parent meetings (trainings, gatherings, round tables). At the trainings and seminars for parents, family members can learn about various methods and approaches to working with children, share experiences, and reinforce their interaction skills. Some trainings may include several specialists from different fields to provide consultative support. These trainings are helpful not only in improving parents' theoretical knowledge about the education and upbringing of a child with cerebral palsy, but also assist them in addressing personal psychological issues.

3. Parent support groups. A specialist can organize groups where parents communicate, share their experiences, and receive support and advice from other parents in similar situation. Often, informal communication is initiated in these groups during the preparation and implementation of sports, entertainment, and other events. In this atmosphere, parents can find understanding and develop a support network.

Art therapy is a direction in psychotherapy and psychological therapy based on the use of art and creativity [4]. It offers an opportunity to use various types of artistic activities (such as drawing, painting, sculpture, music, and dance) as a means of self-expression and self-analysis. Art practices help people express their emotions, convey experiences, explore their personality, and address psychological and emotional issues. They are widely used among various age groups and populations, including children, adolescents, and adults with various psychological and mental conditions [3].

I. A. Kopytin notes that art practices are especially important for parents who struggle with verbal communication and cannot fully express their feelings. The symbolic language of art and creativity allows for a more accurate expression of experiences and offers a new perspective on situations and problems, facilitating their resolution [8].

K. V. Novikova *et al.* notes art practices are effective in correcting anxiety, fears, and aggression due to being gentle on a person's awareness of their feelings and experiences, creating prerequisites for regulating emotional states. The authors believe that art practices represent specific techniques and methods implemented through artistic creativity, allowing individuals to actualize a psychologically traumatizing situation, understand their inner world, relax, and get rid of negative emotions [12].

The use of art practices by educators offers parents raising children with cerebral palsy a creative environment for expressing the emotional side of their personalities. Art practices are used in cases where a parent cannot clearly articulate to the educator the issues negatively impacting their raising of a child with cerebral palsy, establishing a favorable family environment, and maintaining positive parent-child relationships. Furthermore, by being introduced to art practices, parents receive an opportunity to enhance the effectiveness of parent-child interactions and relationships between spouses. These activities help parents

develop a deeper understanding of their children, their needs and abilities, and find creative approaches to solving problems and improving their communication skills with the outside world.

L. N. Azarova, L. N. Antilogova, K. V. Novikova, and other authors note that one of the key tasks of using art therapy practices in the interaction between educators and parents raising children with disabilities is to provide additional emotional resources to parents, improve their quality of life, develop essential parenting components, and improve their competencies. Various art therapy directions, such as visual art therapy, music therapy, sand therapy, etc., are widely described by authors in the context of psychological assistance to parents of children with cerebral palsy. All art therapy methods are multifunctional and can be applied to various tasks, ranging from social and psychological adaptation to personal capacity-building, providing an opportunity for adults to express their mental state through different forms of creative activity [1; 2; 12].

A. I. Kopytin points out that visual art and other manifestations of creative expression are universal mechanisms for restoring psychological homeostasis and adapting to changing environmental conditions at different life stages [8]. V. N. Nikitin suggests using such art therapy practices as therapy using visual and plastic art mediums (mask therapy, expressive art therapy), drama therapy („dell’arte therapy”, „two-faced Janus”), plastic-movement, and transpersonal voice therapy [11].

Using art therapy practices will be more successful if the range of problems parents face is studied before and after the psychological therapy work. It is necessary to preliminarily investigate the emotional state of fathers and mothers, their stress resilience, anxiety levels, and stress levels, and examine parent-child relationships and parenting styles. Additionally, it is important to conduct regular verbal interviews to identify the main factors influencing the psychological and emotional state of family members [5].

E. S. Dyachkova believes that the first stage of using art therapy practices in the work of specialists and parents is aimed at locating resources. The educator asks the parent to remember something that gives them resources and positive emotions. It can be a pleasant and peaceful place where the parent felt good harmony. It can be natural landscape or any other place that evokes positive feelings and associations [5].

A. I. Kopytin notes that meeting the simplest human needs at the initial stage. In this case, it is crucial for the educator to find out how to help the family if they have difficulties in meeting basic physiological needs (housing, food, etc.), finding safety and social approval. If necessary, the educator should facilitate preventative action [8].

Then, according to E. S. Dyachkova, the main stage of work follows, which includes addressing the emotional sphere. The application of art practices is associated with working through the trauma related to the birth of a special needs child. This choice of starting point is not accidental, as if this traumatic experience remains unresolved, it continues to affect various aspects of the parent’s life, reflecting in their actions and relationships [5]. At this stage, A. I. Kopytin recommends adjusting and strengthening a person’s psychological defense mechanisms by creating a positive image of the world and themselves, relying on personal resources [8].

The third stage of the program is characterized by the release of accumulated tension. The educator conducts activities aimed at creating an optimistic outlook, strengthening self-confidence, developing a sense of the ability to overcome difficulties, and forming a positive outlook of the future [5]. Long-term objectives are also addressed, including the development of coping resources and the formation of effective coping behaviors in the parent [8].

Thus, conclusion can be made about high relevance of the application of art practices in the work of educators with parents raising children with cerebral palsy. Art therapy practices are methods and approaches based on the use of creative activities and artistic expressions for pedagogical and psychological support and self-awareness enhancement. Incorporating these practices into the cooperation process between families and specialists contributes to creating a supportive and inspiring environment where parents can unlock their potential, develop parenting skills, improve relationships with their child, strengthen connections with specialists, and learn to express their needs for support more accurately.

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PSYCHOANALYTIC COUNSELING IN WORKING WITH INMATES: SYNTHESES OF INTERNATIONAL STUDIES

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The article addresses the topic of the implementation of psychoanalytic counseling in the prison environment, analyzing several established studies in the field. The literature review reveals that psychoanalytic counseling requires modifications to meet the distinct needs of prisoners, given the influence of the prison environment on the therapeutic dynamics and the psycho-emotional characteristics of the beneficiaries. From a therapeutic perspective, research in the field highlights the importance of empathy and the assurance of a safe communication environment, thus making it possible to explore the deep emotions of the beneficiaries. Also, the consideration of cultural factors in therapy is crucial to improve the understanding of psychological and social factors affecting inmates' behavior. In this study, we emphasize that psychoanalytic interventions in the prison context can attenuate deviant behaviors and assist in social reintegration, when individualized approaches are developed and implemented.

Keywords: *psychoanalytic counseling, inmates, prison environment, trauma, emotional regulation, rehabilitation, social reintegration, empathy, setting.*

CONSILIEREA PSIHANALITICĂ ÎN CAZUL DEȚINUȚILOR: SINTEZE ALE STUDIILOR INTERNAȚIONALE

Articolul abordează subiectul implementării consilierii psihanalitice în mediul carceral, analizând mai multe studii consacrate în domeniu. Analiza literaturii de specialitate relevă faptul că consilierea psihanalitică necesită modificări pentru a răspunde nevoilor distincte ale deținuților, având în vedere influența mediului penitenciar asupra dinamicii terapeutice și caracteristicile psiho-emoționale ale beneficiarilor. Din perspectivă terapeutică, cercetările în domeniu subliniază importanța empatiei și a asigurării unui mediu de comunicare sigur, făcând astfel posibilă explorarea emoțiilor profunde ale beneficiarilor. De asemenea, luarea în considerare a factorilor culturali în terapie este esențială pentru îmbunătățirea înțelegerii factorilor psihologici și sociali care afectează comportamentul infractorilor. În acest studiu, subliniem faptul că intervențiile psihanalitice în context penitenciar pot atenua comportamentele deviante și pot ajuta la reintegrarea socială, atunci când sunt elaborate și implementate abordări individualizate.

Cuvinte-cheie: *consiliere psihanalitică, deținut, mediu carceral, traumă, reglare emoțională, reabilitare, reintegrare socială, empatie, cadru.*

Introduction

Psychoanalytic counseling in working with inmates involves several theoretical and technical aspects that address the unique challenges and needs of this population. This therapeutic approach must also be adapted to the institutional context of prisons, where traditional office practices may not be feasible, and psychoanalytic concepts fundamental to the field of psychoanalytic counseling such as transference, countertransference, and the framework, likewise require a review and perhaps a readjustment. In the context of the complexity of the prison environment, its impact on the relationship between the counselor and the beneficiary becomes a particularly relevant topic in forensic psychotherapy. Recent studies emphasize the importance of understanding not only the interpersonal dynamics but also the emotional and cultural influences that affect both inmates and therapists. An adapted psychoanalytic approach is essential to respond to the specific needs of inmates, given the systemic and psychological challenges encountered in the prison environment. This paper analyzes the impact of the prison environment on the counselor-beneficiary relationship, highlighting the need to integrate psychoanalytic concepts with a deep understanding of the socio-cultural and historical context of each individual. Also discussed is the importance of developing empathic listening skills and creating a safe space for expressing emotions, which are crucial in the therapeutic process. Through a synthesis of specialized literature, this article aims to explore the challenges and

opportunities in psychoanalytic counseling of young recidivists, thus emphasizing the need for personalized interventions that contribute to their rehabilitation and social reintegration. However, the analysis of specialized literature reveals that psychoanalytic counseling, based on the theoretical foundations of psychoanalysis and its technical tools, offers significant therapeutic resources in working with this category of beneficiaries.

Several arguments on the relevance of psychoanalytic counseling in prison settings

A review and synthesis of studies on psychoanalytic counseling applied to recidivist youth inmates reveals a comprehensive approach to addressing the complex psychological needs of this particular demographic. Numerous researches explore the effectiveness of psychoanalytic interventions in reducing the deviant behaviors of recidivist young inmates, although psychoanalytic counseling specific to this group is less present in the specialized literature.

Delinquency has been a central interest in psychoanalysis since Sigmund Freud, investigated the link between criminal behavior and human psychology. Freud (1915), according to Hoffmann (2009), believed that psychoanalytic therapy can be successful in the case of criminals with a well-developed superego, suggesting that unconscious desires for self-punishment can be the basis of minor crimes committed by young people. However, Freud noted that this theory is not universally applicable, there are also criminals without remorse, who justify their deviant behavior based on a conflict with social norms [Ibidem]. Hoffmann (2009) argues that in the carceral environment, psychoanalytic approaches focus on the unconscious processes that manifest in the daily life of therapeutic communities and psychotherapy [4].

Burnett et al. (2005) highlight the importance of early preventive interventions and the identification of risk factors in increasing the effectiveness of psychotherapy and counseling for reducing problematic behaviors and supporting the resistance process. They show that psychotherapy and psychoanalytic counseling promote behavioral change and help reduce recidivism by treating underlying problems at an early stage [1].

In carceral settings, psychoanalytic approaches need to be concerned with the unconscious processes that manifest in therapeutic communities. McWilliams (2011) highlights the particular difficulties in working with individuals who present with psychopathic traits, a category often found among prisoners. Psychopaths display a profound lack of empathy and often distort the therapeutic process to their advantage. To manage these challenges, McWilliams suggests firm and consistent strategies centered on setting clear boundaries and maintaining continuous vigilance on the part of the therapist. This allows for the prevention of therapy diversion and redirecting the patient towards internal goals for change. Establishing a stable therapeutic alliance is a major challenge with psychopaths, as they tend to manipulate and engage superficially in interpersonal relationships. McWilliams (2011) recommends that therapists provide a structured and predictable framework that encourages the minimal collaboration necessary to conduct therapy. Although the therapeutic alliance may remain at a superficial level, setting clear and measurable goals focused on behavior change can facilitate therapeutic progress, the author maintains. In working with prisoners who display psychopathic traits, a thorough understanding of their emotional deficits is essential. Psychopaths display a significant lack of emotional depth and empathy, which makes long-term change difficult. McWilliams (2011) highlights that therapists need to adjust their expectations, focusing on developing a minimal awareness of the impact of the patient's behavior on those around them, even if changes in empathy remain limited. Finally, the American psychoanalyst points out that progress in therapy often depends on the patient's ability to learn self-control and manage impulses. Although changes are usually slow and gradual, even small steps toward empathy and self-control can have a significant impact on reducing violent and deviant behavior [7].

Subsequent studies, such as the one conducted by Mariamdaram and Ishak (2012), demonstrate that group psychoanalytic therapy sessions can reduce depressive symptoms in youth inmates, suggesting a positive correlation between depression management and improvement in general behavior [6]. Stavros (2018) adds that psychoanalytic interventions must consider the social impact of detention, including the effects of incapacitation and discouragement, which can influence the success of therapy [14]. In this sense,

personalized interventions become essential, as shown by the study by Guerra et al. (2014), who emphasize the importance of recognizing the unique experiences of each young inmate to create effective therapeutic programs tailored to their needs [3]. Current literature suggests the need for additional research evaluating the long-term effectiveness of psychoanalytic counseling by analyzing the impact on recidivism rates, social reintegration, and psychological well-being of inmates.

Issues inherent to psychoanalytic counseling in working with inmates

The impact of the prison environment on the counselor-beneficiary dyad

The theoretical aspects of this approach emphasize the importance of understanding the impact of the prison environment on both the therapist and the inmate. This includes recognizing emotional identification with inmates and the potential for countertransference, where therapists might fear or retaliate against inmates' aggressive impulses, as shown in their research by H. Osofsky and M. Osofsky (2009) [9]. One of their conclusions shows that psychoanalytic concepts are crucial in working in a maximum security prison, helping to effectively communicate and understand the impact of the prison environment on both inmates and correctional officers. The authors analyze the complexity of prison environments, emphasizing the importance of emotional identification with prisoners and highlighting the need to address countertransference issues to ensure ethical and effective professional intervention in this context. In the study "Like Father, Like Son: A Psychoanalytical Approach to Interviewing in Extreme Circumstances", the authors study the information obtained from interviews conducted with correctional officers and inmates at the Louisiana State Penitentiary, Angola [9]. The paper emphasizes the significance of using psychoanalytic concepts in borderline situations, emphasizing their importance for a better understanding of intrapsychic and interpersonal dynamics. The study also highlights the need for empathy and creating a safe space that facilitates authentic and effective communication in extreme situations. Thus, their research highlights the transformative impact of engaging in challenging interviews, highlighting the personal development, empathy, and meaningful insights that result from interacting with individuals in extreme situations.

Capitalizing on the beneficiary's cultural background

The integration of cultural context into psychoanalysis has gradually evolved, marking a transition from an individualistic model to one that recognizes cultural and relational influences on the self. Sanville (2000) was among the first to emphasize the need to move from an individual-centered psychoanalysis to an approach that includes interpersonal relationships and cultural context in therapeutic dynamics. „in the multicultural society which is increasingly ours, few of us are purely representative of one culture” [12, p. 428].

Subsequently, psychoanalysis was criticized for its Western ethnocentrism, being accused of neglecting cultural and racial dimensions [5]. In this context, the need for a reassessment was highlighted, recognizing the importance of adapting psychoanalytic methods to local cultural norms to enhance the effectiveness of therapy, as was demonstrated in India, where the gap between psychoanalysis and Indigenous cultural values was a major obstacle to therapeutic effectiveness [13]. Along these lines, cultural context has become a fundamental element in psychoanalytic practice, promoting the integration of patients' cultural narratives and expressions to reflect cognitive and emotional diversity [16, 17]. This approach facilitated the deep exploration of social influences on defense mechanisms and cultural symbolism, better managing traumas and dissociations in a specific cultural setting [9]. Later, Sommers-Flanagan (2018) argued that traditional psychoanalytic methods must be adapted to include the historical and cultural aspects of each individual, highlighting the shortcomings of classical psychoanalysis in adequately addressing these essential dimensions [14].

Ethical dilemmas in psychoanalytic counseling of inmates

Forensic psychotherapy, as described by Farrall (2005) in the review of the book „Life within Hidden Worlds: Psychotherapy in Prisons” by Williams-Saunders, (2001), involves the adaptation of psychoanalytic methodologies to the prison environment, confronting systemic difficulties such as the absence of intimacy and the imperative of therapeutic neutrality and confidentiality, which are frequently undermined in the carceral context [2]. The main focus of the work of Williams-Saunders, (2001) cited by Farrall, (2005) revolves around the exploration of psychoanalytic counseling, a specific form of therapy dedicated to the

exploration of the unconscious and its significant impact on human behavior, especially within the confines of the prison environment [2]. This therapeutic approach consists of dialogue-based sessions, commonly known as „talking cures”, to uncover deep-seated emotions and thoughts that can play a critical role in shaping the behavior of incarcerated individuals. Williams-Saunders (2001) aims to provide a detailed analysis of the functioning of psychotherapy in the prison environment, providing essential information for prison staff to understand the complexity of the work of psychotherapists in these environments. It also explores the many challenges encountered, including the lack of private spaces for therapeutic sessions and unexpected transfers or removal of prisoners, which can significantly affect the continuity of the therapeutic process. Furthermore, the paper provides a detailed analysis of the complexity of role conflicts frequently encountered by therapists in the penitentiary environment. They face the dilemma of balancing the function of facilitators of psychological healing with security responsibilities, which generates increased levels of anxiety and tension among inmates. Ethical dilemmas are also discussed at length, particularly regarding the viability of adhering to the principles of „absolute confidentiality” and “therapeutic neutrality” in the restrictive and supervised context of prisons. The paper suggests re-evaluating the concept of total confidentiality and emphasizes the need for therapists to navigate a multifaceted ethical spectrum in the context of addressing deviant behaviors and underlying psychological dynamics. In addition, it provides valuable insights into the psychodynamic factors underlying acts of aggression and misconduct in the penitentiary environment, clarifying the therapeutic process of people involved in criminal activities and emphasizing the importance of integrating crime-oriented interventions into the comprehensive framework of therapy [2, 18].

Building a narrative about the beneficiary's history

Oliveira et al. (2020) argue that psychoanalytic counseling can facilitate the reconfiguration of subjective identity, allowing individuals to reassume their central role in their own existential experiences [8]. Particularly valuable aspect in a prison context, where inmates often experience feelings of helplessness and alienation. The practical implications of this work are complex and varied. An essential aspect highlighted is the development of listening skills, with an emphasis on empathic and non-judgmental listening, as an integral part of the therapeutic process. Through active and unbiased listening, counselors can access a deeper understanding of patients' intrapsychic conflicts and difficulties, contributing to an intervention more tailored to their needs. This type of interaction fosters a genuine and deep therapeutic connection, facilitating extended psychic exploration and a strengthened therapeutic relationship. Furthermore, psychological counseling is presented as a catalyst for personal and social change. By giving people a safe space to discuss their problems, counseling allows them to explore new perspectives and solutions through dialogue. This process can facilitate the emancipation of the individual, catalyzing profound changes at the personal level and contributing to an extensive dynamic of social transformation. Through personalized counseling approaches, Oliveira et al. (2020), emphasize in their study the importance of considering each individual's unique historical and personal context. Adapting therapeutic strategies according to the context and individual experiences increases the effectiveness of the psychological intervention, facilitating a more relevant approach with a deeper impact on the therapeutic process [8].

The importance of increasing accessibility to psychological counseling services is emphasized, highlighting the significant role of psychological services in public contexts, the study argues in favor of increased access to counseling resources for the entire population, thus including the category of young recidivist inmates. The integration of these services is essential to broaden the scope of mental health support and to respond to the variety of individual needs within society. In addition, immediate support through psychological counseling is highlighted as essential for addressing urgent mental health issues and providing timely interventions. This rapid response can have a significant impact on people in crisis, providing them with essential support in times of greatest need [8].

Recent studies on the effectiveness of psychoanalytic therapy in the case of patients with Post-Traumatic Stress Disorder, caused by serious trauma, such as those carried out by Özildirim et al. (2023), indicate that similar methods, such as psychoanalytic counseling, may be beneficial for youth inmates with traumatic histories, even in the presence of certain methodological constraints. The study highlights the potential

advantages of applying psychoanalysis to this specific patient segment, despite research design limitations such as the absence of a control group and randomization [10].

The theoretical approach to psychoanalytic counseling intended for young prisoners who relapse requires a detailed understanding of the prison context, the adjustment of traditional methods of intervention and the focus on the psychological dynamics specific to each individual and their needs, to encourage personal development and reduce inappropriate behavioral manifestations.

Conclusion

Therefore, psychoanalytic counseling for young inmates is a complex and necessary approach that responds to the specific challenges faced by this vulnerable population. The analyzed studies emphasize the importance of adapting traditional psychoanalytic concepts to the prison context, highlighting the impact of the prison environment on the therapeutic relationship and the need to integrate cultural and historical aspects in psychotherapeutic practice. Also, the effectiveness of psychoanalytic interventions in reducing deviant behaviors and in supporting the rehabilitation and social reintegration process is confirmed. Therapists must develop empathic listening skills and create a safe space for the expression of emotions, thus facilitating authentic and deep communication. In addition, the accessibility of psychological counseling services needs to be expanded, given the crucial role of these interventions in supporting the mental health of young prisoners. Finally, future research should focus on long-term evaluation of the effectiveness of psychoanalytic counseling to ensure tailored and relevant interventions that contribute to reducing recidivism and promoting the psychological well-being of incarcerated youth.

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THE IMPACT OF TEAMWORK ON THE MOTIVATION PROCESS AND ACADEMIC INVOLVEMENT OF STUDENTS

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This article presents the results of a quantitative study conducted to highlight the importance of teamwork in the academic environment, particularly in the current context defined by the transition to new educational formats because of the pandemic and post-pandemic period. Amid these changes, achieving and maintaining the same level of motivation, collaboration, and academic engagement, essential for successful learning environments, has become challenging and difficult. The analysis of preferred working methods of students revealed that teamwork has a favorable impact on increasing intrinsic motivation for knowledge and experiencing stimulation, on extrinsic motivation for identification and regulation, as well as on academic engagement of students. We believe that the findings of this research have significant practical value for the educational process, enabling educators to identify teaching and assessment methods based on the premise that teamwork significantly contributes to enhancing the motivation process and academic engagement behavior of the students.

Keywords: *academic engagement, intrinsic motivation, extrinsic motivation, teamwork.*

IMPACTUL LUCRĂRII ÎN ECHIPĂ ASUPRA PROCESULUI DE MOTIVAȚIE ȘI IMPLICAREA ACADEMĂ A ELEVILOR

Acest articol prezintă rezultatele unui studiu cantitativ realizat pentru a evidenția importanța muncii în echipă în mediul academic, în special în contextul actual definit de tranziția la noile formate educaționale din cauza perioadei de pandemie și post-pandemie. În mijlocul acestor schimbări, atingerea și menținerea aceluiași nivel de motivație, colaborare și angajament academic, esențial pentru mediile de învățare de succes, a devenit provocatoare și dificilă. Analiza metodelor de lucru preferate ale studenților a relevat faptul că munca în echipă are un impact favorabil asupra creșterii motivației intrinseci pentru stimularea cunoașterii și experienței, asupra motivației extrinsece de identificare și reglare, precum și asupra angajării academice a studenților. Considerăm că rezultatele acestei cercetări au o valoare practică semnificativă pentru procesul educațional, permițând educatorilor să identifice metode de predare și evaluare pe baza premisei că munca în echipă contribuie semnificativ la îmbunătățirea procesului de motivare și a comportamentului de implicare academică al studenților.

Cuvinte-cheie: *angajament academic, motivație intrinsecă, motivație extrinsecă, lucru în echipă.*

Introduction

In recent decades, research conducted in the fields of developmental psychology and educational psychology has highlighted that the educational process is the most complex tool for individual development, guiding individuals toward performance, helping them achieve their goals, and ensuring a high quality of life [1, 3, 10, 16].

In the current educational context, there has been a noticeable decline in the level of student engagement in the educational process, especially in recent times, which have been marked by the transition to new educational formats, adopted globally due to the pandemic and post-pandemic periods. Both direct observations and research in this field have shown that in new educational environments such as virtual, online, or hybrid formats, maintaining the same level of motivation, collaboration, and academic engagement has become challenging, creating pressure for both teachers and students [2, 12].

Recent research on motivational aspects and academic engagement has highlighted several issues related to perceptions influenced by the pandemic crisis, during which many educational institutions implemented significant changes in response to the measures imposed by the new situation. Although studies have shown that these changes have affected both psychological well-being and participation in the educational process, by decreasing motivation to engage in study, it remains unclear whether the decline in motivation and aca-

ademic engagement can be explained by the organization of students' study and work methods, which in turn were impacted by the changes and adaptation to new educational formats [13, 17].

In this context, through the conducted research, we aim to highlight the differences in motivation and academic engagement based on students preferred working methods: individual or team-based work.

Aspects of Student Motivation and Academic Engagement

To acquire the skills and competencies necessary to meet contemporary challenges, student academic engagement increases the likelihood of achieving both educational and personal goals. Thus, academic engagement is a key indicator in shaping graduates, enabling them to accumulate and possess the knowledge and skills that are appropriately reflected by obtaining a bachelor's degree [10].

Academic engagement is an indicator of the extent and intensity with which a participant in the educational process becomes involved in various activities characteristic of the learning process. This construct has two components: academic identification and academic participation, making it more than just attending classes and acquiring knowledge [11, 16].

In the context of studying student academic engagement behavior, the aspect of motivation is one of the most important aspects, with research focusing on the connection and impact of different types of motivation on learning behaviors in general. According to the self-determination theory proposed by E. L. Deci and R. M. Ryan in 1985, motivation is not a unidimensional concept and must be analyzed through three facets: intrinsic motivation, which refers to voluntary participation in an activity without internal or external pressures; extrinsic motivation, which involves participation in an activity due to external or internal pressures; and amotivation, or the absence of motivation [4].

The opinion of these researchers is further supported and developed by subsequent studies in the field of motivation, which elaborate on the three dimensions [5-7]. In 1992, R. J. Vallerand and his collaborators presented a model with three components of intrinsic motivation: intrinsic motivation to know – characterized by concepts such as curiosity, the need for knowledge, and understanding; intrinsic motivation to accomplish – defined by the attempt to reach high standards or create something; and intrinsic motivation to experience stimulation – marked by enthusiasm and the desire to experience positive feelings through action.

Regarding extrinsic motivation, R. J. Vallerand and his collaborators also detail this concept, presenting three aspects of extrinsic motivation: external regulation – characterized by involvement in an activity for rewards; introjected regulation – where actions are gradually internalized by the individual; and identified regulation – where behaviors are valued and perceived as personal choices. A final aspect within this theory is the lack of motivation, or amotivation, characterized by the absence of a link between actions and outcomes, often associated with the phenomenon of learned helplessness [18, 19, 20].

In the context of associating the motivational dimension with those of individual development, one of the most recent approaches is proposed by C. S. Dweck in 2017, who supports a unified theory of motivation, personality, and development, building on the theory of R. M. Ryan and E. L. Deci. The approach underlying this theory stems from the idea that these three constructs lead to specific objectives that individuals need to fulfill their needs. In the process, a series of beliefs, emotions, behaviors, and tendencies toward action are generated, which are associated with the motivational dimension [8].

J. A. Fredricks and his collaborators indicated in their 2004 study that academic engagement continues to be a major subject of interest, as science remains essential in driving innovation in the economy and society. It was concluded that academic engagement tends to characterize more scientifically productive individuals, suggesting that it is complementary or even instrumental to academic research activities. This engagement is positively correlated with the mobilization of research funds and resources. Such behavior appears to be driven more by autonomous, individual characteristics, such as intrinsic motivation, and less influenced by the characteristics of the academic environment, which relate more to extrinsic motivation [9].

In 2021, a research team led by M. Perkman conducted a meta-analysis on academic engagement, reviewing the existing literature from the past decade in this field. The conclusions highlighted that academic engagement is also influenced by the behaviors of peers in the academic environment, along with the disci-

plinary characteristics of the academic setting. An important aspect of the research, considering its practical value, is the conclusion that academic engagement is positively associated with the subsequent scientific productivity of students [15].

Research Methodology

The purpose of this research is to identify the differences that arise in the motivation process and the academic engagement process of students, based on their preferred mode of study and work, comparing individual versus team settings. The proposed research objectives are to highlight the differences present in various aspects of the motivational process between students who prefer studying and working in teams versus those who prefer individual study and work, and to evaluate the potential differences in academic engagement levels between students who prefer to study and work in teams compared to those who prefer to work individually.

Measurement instruments

To collect the necessary data for the research, the scales used were combined into a single questionnaire, along with items designed to gather the socio-demographic data of the respondents. The two instruments which we used for measuring the constructs analyzed in the research are: the Academic Motivation Scale and the Academic Engagement Scale.

The Academic Motivation Scale (AMS-C 28) was developed by R.J. Vallerand and his colleagues in 1992 and is sourced from the Research Central platform, which provides the translation and adaptation from the original scale. This scale serves as an instrument based on self-determination theory, measuring the three levels of the motivational process: intrinsic motivation, extrinsic motivation, and amotivation [20]. The internal consistency coefficient for this questionnaire was calculated based on the data obtained from the studied sample, yielding a value of 0.895, which indicates an appropriate level of internal consistency for the 28 items of the questionnaire.

The second instrument applied is the Academic Engagement Scale, developed by S. Zhang and collaborators, and obtained from the Research Central platform, translated and adapted from the original source. The scale was developed to assess students' academic engagement [22], and the calculation of the internal consistency coefficient when applying the test to the studied sample indicates a value of 0.885, which corresponds to good internal consistency of the applied instrument.

Research Sample

The data used for this research were collected from a sample composed of 149 students in their first, second, and third years of undergraduate studies at the Faculty of Psychology and Educational Sciences of Hyperion University in Bucharest. The sample consisted of 125 female respondents, representing 84% of the group, and 24 male respondents, representing 16%. The average age of the subjects is 32 years. Regarding the distribution by year of study, 82 respondents are first-year students, accounting for 55% of the sample; 47 respondents are second-year students, making up 32% of the sample; and 20 respondents are third-year students, representing 13% of the sample.

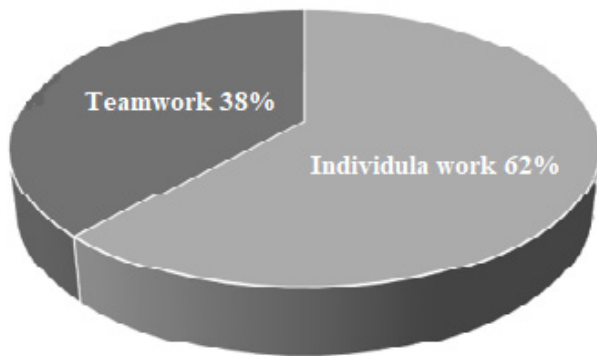
Results Obtained

To achieve the proposed research objectives – specifically, highlighting the differences in motivation between students who prefer teamwork and those who prefer individual work, as well as assessing the possible differences in academic engagement between students who prefer to work in teams versus those who prefer to work individually – we formulated the following research hypotheses:

Hypothesis 1: There is a difference in intrinsic motivation among students based on their preferred study and work mode.

Hypothesis 2: There is a difference in extrinsic motivation among students based on their preferred study and work mode.

Hypothesis 3: There is a difference in academic engagement among students based on their preferred study and work mode.

Fig. 1. Preferred Work Mode of Students in the Studied Sample.

Using the items from the developed questionnaire, we identified the composition of the research sample based on the preferred study and work modes of the students, namely: individually or in teams. The results are presented in Figure 1.

The data analysis reveals that 62% of the students in the research sample prefer to study and work individually, while only 38% prefer to study and work in teams.

Verification of the value distributions for the variables analyzed in the study indicated that these distributions deviate significantly from the normal distribution curve. The obtained results are presented in Table 1.

Table 1. Results of the Normality Test.

Variables	Normality Test Kolmogorov-Smirnov	Normality Test Shapiro-Wilk
Academic engagement of students	P = 0,013	P = 0,001
Intrinsic motivation for knowledge	P = 0,000	P = 0,000
Intrinsic motivation for achievement	P = 0,000	P = 0,000
Intrinsic motivation for experiencing stimulation	P = 0,000	P = 0,000
Extrinsic motivation for identification	P = 0,000	P = 0,000
Extrinsic motivation for introjection	P = 0,000	P = 0,000
Extrinsic motivation for regulation	P = 0,000	P = 0,000

Considering the results obtained from the analysis of the distribution of values for the dependent variables studied, we concluded that it is necessary to apply non-parametric statistical tests to verify the three working hypotheses [14, 21].

To test the first hypothesis, we applied the Mann-Whitney non-parametric test to determine whether there are differences in intrinsic motivation for knowledge, achievement, and stimulation between students who work individually and those who prefer studying and working in teams. The results obtained are presented in Table 2.

Table 2. Differences in Types of Intrinsic Motivation Based on Work Mode.

Variable	Value U	Mean Ranks (mr)	Sum of Ranks (Σ)	Significance (P)	Differences
Intrinsic motivation - knowledge	2115,50	mr 1 = 69,49 mr 2 = 83,89	$\Sigma 1 = 6393,50$ $\Sigma 2 = 4781,50$	P = 0,041	Presence of differences
Intrinsic motivation - accomplishment	2177,50	mr 1 = 70,17 mr 2 = 82,80	$\Sigma 1 = 6455,50$ $\Sigma 2 = 4719,50$	P = 0,082	Absence of differences
Intrinsic motivation - experience stimulation	1901,50	mr 1 = 67,17 mr 2 = 87,54	$\Sigma 1 = 6179,50$ $\Sigma 2 = 4995,50$	P = 0,005	Presence of differences

Note: 1 – individual work mode, 2 – teamwork mode.

Continuing with the verification of the second hypothesis by applying the non-parametric Mann-Whitney test, we checked whether there are differences in the extrinsic motivation of identification, introjection and regulation between students who prefer to study and work individually compared to those who prefer to study and work in the team. The results obtained are presented in table no. 3.

Table 3. Differences in Types of Extrinsic Motivation Based on Mode of Work.

Variable	Value U	Mean Ranks (mr)	Sum of Ranks (Σ)	Significance (P)	Differences
Extrinsic motivation - identification	2058,00	mr 1 = 68,87 mr 2 = 84,89	Σ 1 = 6336,00 Σ 2 = 4839,00	P = 0,025	Presence of differences
Extrinsic motivation - introjection	2289,50	mr 1 = 71,39 mr 2 = 80,83	Σ 1 = 6567,50 Σ 2 = 4607,50	P = 0,192	Absence of differences
Extrinsic motivation - regulation	2005,00	mr 1 = 68,29 mr 2 = 85,82	Σ 1 = 6283,00 Σ 2 = 4892,00	P = 0,016	Presence of differences

Note: 1 – individual work mode, 2 – teamwork mode.

To test the last hypothesis, we applied the non-parametric Mann-Whitney test to identify whether there are differences in academic engagement between students who work individually compared to those who work in teams. The results obtained are presented in table no. 4.

Table 4. Differences in Academic Engagement of Students Based on Mode of Work.

Variable	Value U	Mean Ranks (mr)	Sum of Ranks (Σ)	Significance (P)	Differences
Academic engagement	2107,50	mr 1 = 69,41 mr 2 = 84,03	Σ 1 = 6385,50 Σ 2 = 4789,50	P = 0,044	Presence of differences

Note: 1 – individual work mode, 2 – teamwork mode.

Discussions

The results of this research highlighted the fact that there are statistically significant differences in some of the facets of intrinsic motivation between students who prefer to study and work in a team compared to those who prefer to work individually. Concretely, differences were revealed in the intrinsic motivation for knowledge and in the intrinsic motivation for experiencing the stimulation, while no statistically significant differences were revealed for the intrinsic motivation to achieve. Analyzing the average of the ranks obtained, we observe that students who prefer teamwork report a higher level of intrinsic motivation for knowledge and intrinsic motivation for experiencing the stimulation, having a higher level of positive feelings in the process of working together with colleagues during the time of the activity of learning and exploring new aspects and knowledge.

From the point of view of extrinsic motivation, the obtained results highlight the fact that the extrinsic identification motivation and, respectively, the extrinsic regulation motivation are at a higher level in students who work preferentially in teams, while the extrinsic motivation of introjection shows no differences significant between the two groups of students analyzed. These results highlight the fact that students who prefer to work in teams engage more in the activity, to obtain the rewards of completed goals, compared to students who work individually. Similarly, students who work in teams engage more in activities with peers, experiencing this engagement as chosen rather than imposed, identification being a self-determined type of extrinsic motivation.

One of the significant results obtained from this study pertains to the validation of the third hypothesis, which indicates that teamwork contributes to a stronger engagement of students in the academic environment. According to the results, the level of academic engagement among students who prefer to study and work in teams is significantly higher than that of students who prefer to work individually.

The explanations we formulate regarding the results obtained are based on the premise that teamwork stimulates and motivates students more effectively than individual work, through the connections that form between team members as they work together to achieve shared goals. These cognitive and emotional connections serve as powerful motivational factors, positively influencing the academic engagement of students.

Conclusions

In recent years, there has been a noticeable decline in academic engagement, partially attributed to the transition to new educational formats necessitated by the pandemic and post-pandemic periods. The results obtained from this research on the impact of teamwork on the motivation and academic engagement of students highlight that collaborative work yields significantly superior outcomes. Specifically, the study indicates that teamwork fosters a higher level of motivation and academic involvement compared to individual work.

We conclude that certain aspects of intrinsic and extrinsic motivation – specifically intrinsic motivation for knowledge and stimulation, as well as extrinsic motivation for identification and regulation – along with academic engagement, show higher values among students who prefer to study and work in teams. This underscores the idea that teamwork provides multiple benefits for personal development through the educational process.

These findings are significant for their practical implications in the academic environment, helping educators identify new teaching and assessment methods. The conclusions drawn from this research indicate that teamwork significantly enhances students' motivation and academic engagement.

Although the study was limited by a relatively small number of participants and the focus on a specific group of students from a single faculty, it outlines a potential future research direction. This could involve diversifying the sample and increasing its size to validate and refine the results obtained.

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BORIS DÂNGA – PERSONALITATE STRATEGICĂ A ÎNVĂȚĂMÂNTULUI NAȚIONAL (100 de ani de la naștere)

In memoriam, marele Învățător al poporului, Boris DÂNGA, născut în anul 1923, la 6 decembrie, în satul Curleni, județul Orhei, absolvent emerit al Liceului Teoretic de băieți „Vasile Lupu” din Orhei. Debutază, după anii 1945, în calitate de profesor de limba și literatura maternă – limba română la școala din Bravicea, apoi își începe cariera prodigioasă în calitate de director, inspector școlar în orașul Călărași, la școala medie nr. 1 (azi, Liceul Teoretic „Boris DÂNGA”) – unde a activat mai bine de trei decenii – devenise această instituție, mediul reformelor de învățământ, model de bază sau pilot al Institutului de perfecționare a cadrelor didactice din Republica Moldova; totodată, devenise prima instituție de învățământ preuniversitar acreditată de Ministerul de resort, condusă de Domnia sa. Prin urmare, ani la rând Boris Dânga a condus Universitatea populară de propagare a cunoștințelor pedagogice, s-a aflat în fruntea Școlii tânărului director, a fost membru al prezidiului societății pedagogice republicane, autor de manuale școlare etc.

Muzeul de Istorie a Învățământului din Republica Moldova (str. M.Kogălniceanu 60, Chișinău) a organizat o întrunire a comunității pedagogice „*In memoriam lui Boris DÂNGA, un secol de la naștere*”. Grație acestui eveniment, la invitația directorului Valeri Volcov, doctor în științe pedagogice, în colaborare cu cadrele științifico-didactice universitare de la Departamentul Științe ale Educației, Facultatea de Psihologie, Științe ale Educației, Sociologie și Asistență Socială, Universitatea de Stat din Moldova, am participat la comemorarea nobilei personalități din domeniul educației.

Din istorisirea participanților la eveniment despre nobila personalitate a lui Boris DÂNGA, au fost reliefate următoarele idei pedagogice:

- personalitate atât de complexă, viguroasă și măreață a unui OM, care te copleșea prin omenia lui, a unui PEDAGOG cu stil democratic;

- DIRECTOR modern de școală, care a știut să trăiască și să gândească la timpul viitor (de exemplu, în viziunea acestui mare pedagog: „*un conducător de școală este un om cult și bine instruit, un om cu imaginație, cu valori, care atunci când e cazul, poate să se transpună în rolul învățătorului și al elevului*” – confirmă Simion Musteață, dr. conf. univ., muzeograf);

- conceptor al cultului CĂRȚII (lecturii) printre colegi și elevi;

- promotor al ENCICLOPEDIIEI științifice în rândul cadrelor didactice și manageriale (de exemplu, distinsul pedagog argumenta necesitatea cercetării științifice: „*De aceea căutăm să fim mereu la curent cu ultimele realizări ale științei, să studiem experiența înaintată a celor mai bune școli din raion, republică și țară. Școala este scena, unde învățătorul își trăiește întreaga viață, nu ne rămâne decât să ne dedăm din plin acestei vieți, pentru că alta nu există*”) etc.

Rămânem convinși despre mărturiile valoroase - ale muzeografilor, directori de instituții, colegi, elevi absolvenți, participanți despre nobila personalitate Boris DÂNGA, calitățile didactice și manageriale privind învățământul modern ale căruia considerăm necesar a fi implementate și valorificate în cadrul disciplinei universitare *Istoria pedagogiei*.

Boris DÂNGA este un pattern psihopedagog, moștenirea căruia va dăinui peste ani, în tezaurul evoluției învățământului modernizat din Republica Moldova.

Veronica Clichici,

doctor în științe pedagogice, lector universitar

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