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В НАУКЕ И ОБРАЗОВАНИИ

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В статьях сборника представлены результаты теоретических исследований и экспериментальной работы в области образования, педагогической и психологической науки, физического воспитания и спорта; раскрываются педагогические, психологические, медико-биологические, социально-экономические и нормативно-правовые аспекты систем образования, физической культуры, спорта и туризма, приводятся примеры использования инновационных технологий обучения и спортивной подготовки.

Предназначен для специалистов в области педагогики, психологии, физической культуры и спорта.

Сборник издается в соответствии с оригиналом, подготовленным редакционной коллегией при участии издательства.

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1. ACTUAL PROBLEMS OF PEDAGOGY, PSYCHOLOGY AND EDUCATION

O. V. Avdeychik, V. A. Struk, A. S. Antonov, V. A. Goldade

PROBLEMS OF THE IMPLEMENTATION OF NEW EDUCATIONAL MODELS IN HIGHER EDUCATION

The problems of implementation of new educational models in higher education are considered. It is shown that the proposed model "University 4.0" in higher educational institutions of the post-Soviet space has no prospects for implementation due to the discrepancy of intellectual support for the main activities of universities.

Consider the problems and prospects for the implementation of new educational models in higher education.

Currently, the predominant part of the universities of the post-Union states is at the stage of implementation of the "University 2.0" model due to an imperfect research base, the lack of qualified scientific schools recognized by the world scientific community, the practical absence of a significant reserve of innovative products with a high degree of implementation, protected by patents for inventions of the leading countries of the world, imperfection of the organizational infrastructure and Regulatory and legal support for the process of commercialization of high-level developments, primarily in the field of basic NBIC-technologies. Therefore, the "University 4.0" model proposed in [1] without bringing models 2.0 and 3.0 to a significant, rather than formal, embodiment is inconsistent with the real situation of economic and social development of post-Union states and does not have sufficient grounds for consideration in practical methods embodiment in the educational society. The inadequacy of the proposed model is confirmed by the state of the industrial complex of Belarus and Russia, in which the share of innovative high-tech industries is no more than 10–15%.

The authors of the work indicate that when universities move towards the "University 4.0" model, "... the level of "redistribution" of talents and knowledge is increasing: more and more surplus value is produced on the campus of the university, and not transferred to the economy in the form of "semi-finished products": specialists and general knowledge" [1, p. 6]. In our opinion, with regard to the key components of innovative development – specialists" and "knowledge [1] to semi-finished products [1], there is an insufficient level of intellectual potential of the authors of the study [1], who probably do not have proven practical experience in implementing their own developments in the field of vocational training (economics) and competencies in accordance with their official duties.

The structure of the "University 4.0" model proposed by the authors contains a number of trivial components – the environment of teaching staff and students, entrepreneurship in the masses, work with new markets, and a number of conceptual provisions that are in contradiction with the functional goals of higher education [1]. For example, the statement that the university is not a supplier of personnel, but a source of knowledge about the future indicates a simplified understanding of the concept of intellectual potential, since knowledge, including about the future, is not formed independently outside the personnel, but is the result of systematic research activities of highly qualified specialists in the framework of project research, including in the interests of the business community. Capitalization of knowledge can be carried out within the framework of the current regulatory legal documentation governing the management of intellectual and industrial property objects, including in the form of alienation of rights within the framework of licensing agreements. Intellectual and industrial property rights belong to their developers (organizations, institutions, individuals, etc.), so there can be no question of any appropriation of intellectual property rights [1] by universities 4.0.

The proposed structure of model 4.0 is formalized in its components, incorrect in terms of the conceptual terminological apparatus used and cannot be perceived by the university society as a conceptual direction for the transformation of domestic universities. In our opinion, this model manifests a desire to embody the concept of econocentrism in all spheres of the existence of societies, to subordinate the criterion of achieving maximum profit to the spiritual and moral components of creative individuals with a pronounced intellectual potential and a conscious desire for harmonious development.

The authors of the work [1] propose directions for changing the goal-setting of universities in the knowledge economy. In our opinion, the directions of transformation of universities in accordance with the proposed model 4.0 are essentially different from similar areas characteristic of universities of model 3.0, which are indicated in a number of publications [2–4]. This aspect indicates the artificiality of the proposed model, the absence of characteristic differences of the fundamental type, which would make it possible to assess its validity and the prospects for implementation. In fact, model 4.0 is an analogue of model 3.0 when manipulating by developers the terms used in describing modern trends in the functioning of higher education at a new stage of economic development of societies: start-ups, stakeholders, entrepreneurial competencies, business community, innovation ecosystem, etc. At the same time, the authors, in our opinion, unreasonably highlight the importance of the policy of working with the community of graduates [1], entrepreneurial values [1], entrepreneurial competencies without analyzing the realities that have developed in the higher education of the post-Union states, the prevailing characteristic of which is low intellectual potential, which is not able to ensure the implementation of the modern educational process based on high-level knowledge.

Trends in the internationalization of universities and the increase in mobility of students and teachers do not contribute to the development of the innovation ecosystem at the regional and state levels due to problems with adapting the professional skills acquired at foreign universities to the realities of the domestic economy, which operates in a different regulatory legal field and conditions for financing innovation activities. Development of an innovation ecosystem, which, according to the authors of the work [1], implements the policy of knowledge and technology transfer, is not a short-term action implemented within the framework of the next regulatory document or decision of the governing bodies, but is the result of a long process based on the formation of intellectual susceptibility in the determining part of the members of societies [2–4], that is, a conscious readiness for the development and implementation of applied innovative developments of a certain functional purpose. A similar component, characterized by the formation of the "knowledge economy", is currently in the stage of formation both in university societies and in their environment.

Analysis of the features of the implementation of the "University 3.0" model in technologically developed countries indicates the decisive role of patent and licensing activities in the implementation of the commercialization of universities. The examples of universities successfully implementing model 3.0 (MIT, university of Singapore, etc.) given in [1] clearly indicate the presence of an effective research base that scientific schools have formed as a result of systematic project activities, with a confirmed level of novelty of the results obtained, protected by a significant number of patents with high status.

Comparative analysis indicates that the entire set of domestic universities and academic institutions does not develop a comparable number of patentable high-level innovations with a low level of funding for research activities, the size of which does not exceed 350-450 million US dollars per year, which is significantly lower than the annual costs of effective foreign universities (MIT, University of Singapore, Stanford University, etc.) [1].

Based on the analysis of trends in innovation activity, the key directions of the implementation of innovation policy in relation to Russian universities [1] are considered. The "key directions for the implementation of innovation policy in relation to universities" considered in [1] have a more than 10-year deadline for implementation, but the authors do not provide any information confirming their effectiveness. the formalized implementation of these "directions" without the availability of an appropriate scientific base, confirmed by the development of innovative projects with novelty and relevance confirmed by international patents, did not allow Russian universities, even at the federal level, to achieve conceptual changes in their activities to implement model 3.0.

In the domestic higher school, there have been no fundamental transformations to intensify innovation activity in the last decade, as evidenced by the low level of patent and licensing activities to protect the priority and implementation of the results of research projects. Significant hopes are pinned on the transformation of universities within the framework of the "National Technology Initiative" (NTI) [1], which states that ... the transformation of Russian universities into the format of "Universities 3.0" or "NTI University" is aimed at the formation on the basis of universities of integrators (in the short term, until 2018) and innovation hubs (in the long term, until 2030) for networks of NTI markets [1, p. 7]. In our opinion, the formalized approach to the implementation of the "University 3.0" model is indicative – with the actual inconsistency of the "key directions for the implementation of innovation policy" over the past 10–12 years, the authors [1] pin significant hopes on the potential for the transformation of universities within the framework of the national technology initiative project.

The model "NTI University" proposed by the authors [1], as well as the previously considered model 4.0, is a set of terms that characterize innovative activity without defining practical conditions for their implementation in the educational space formed in the post-Union states. These areas characterize the intentions to find talents, develop their up to professionals, conducting fundamental and applied research, the presence of effective relations with the business community, the ability to commercialize, etc., are the traditional manipulation of generally accepted terms without defining methodological approaches to the implementation of the indicated areas.

In a similar style, the levels of inclusion of universities in the "National Technology Initiative" (NTI) are proposed. The proposed logic of including universities in NTI and transforming them in the direction of "University 4.0" [1] seems to us to be a formalized enumeration of well-known provisions that are widely discussed in literary sources that consider various aspects of the practical implementation of innovation activities [2–8].

It should be noted in the context of this formalized logic that for the "search for talents", "the formation of research competencies", "entrepreneurial competencies" and other components, it is necessary to create an intellectual basis, that is, high intellectual potential and abilities to implement it in the professional activities of all participants in the innovation process at the stage of educational, research, development, managerial, patent-licensing and other components of the life cycle of innovative products [2–4]. Declaring any elements of logic, for example, in the form of "new markets and infrastructure" or "market companies" (start-up's) is no more than an imitation of the results of scientific research that are not of interest to specialists.

The tasks formulated in [1] on the way to the implementation of the "University 4.0" model are mainly declarative in nature, are not justified by purpose, are not defined according to the conditions for achieving the functioning of higher education in real conditions. In our opinion, a set of such tasks, formulated with incorrect application of the conceptual and terminological apparatus, is a typical bureaucratic work similar to the resolutions of party and Soviet bodies. The Soviet period, in which the very fact of the adoption of such a document is considered a guarantee of its unconditional implementation. It is obvious that to offer the university a model 4.0 without confirming any effectiveness of models 2.0 and 3.0 is unreasonable and incorrect, taking into account the real state of universities in Russia and other states of the post-Soviet space. Such declarative models of transformation of universities in accordance with the requirements of the knowledge economy are destined for the fate of other similar developments in the creation of an innovative structure for technology transfer, clustering on the basis of regional universities, the implementation of the Bologna educational process, etc.

It is obvious that without changing the approaches to the creation in universities of a system of intellectual support for innovative activity based on the integration interaction of institutional components of societies at the regional and state levels, the successful implementation of the "University 3.0" model in the domestic higher school is not possible.

Analysis of trends in the formation and development of the knowledge economy in countries with different levels of technological development shows the presence of various methodological

approaches to increasing the role of scientific knowledge in socio-economic functioning. Countries with a high level of technology are striving to implement the "University 3.0" model by intensifying the research activities of universities, implementing the concept of start-up's on an expanded scale while ensuring their intensive patent activity. The main trend in the activities of universities in such countries is the commercialization of research results in order to obtain the maximum economic dividends. In the countries of the post-Soviet space, models for the development of universities as centers for creating human resources for various sectors of the economy with a high level of intellectual potential are being implemented, ensuring sustainable innovative development of a business entity. The task of the national higher school is not a formal copying of the university's development models adopted in technologically developed countries, but the development of original models aimed at the formation of a person with a high level of professional skills and harmonization, taking into account the peculiarities of the formation of national educational and cultural traditions.

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TRENDS IN THE DEVELOPMENT OF EDUCATIONAL INSTITUTIONS OF HIGHER SCHOOL

The analysis of the main trends in the transformation of higher education in countries with different levels of socio-political and economic development has been carried out. It is shown that the mechanical transfer of models adopted in countries with a high level of technology does not allow the universities of the post-union state to fully realize the benefits due to national, cultural and other traditions that ensure the formation of individuals with a high level of professional knowledge and harmonious development. The trends in the formation of the "University 4.0" model, focused on the economic-centric development of universities, are considered. The inconsistency of methodological approaches to the implementation of this model in the educational space of states formed within the framework of a single educational and economic limits is shown.

The modern economy, positioned as a "knowledge economy" [1], is based on an increase in innovative products for various functional purposes, developed on the basis of scientific results of the modern level. One of the central places in the knowledge economy is acquired by universities – functional institutions that train qualified personnel for all industries that determine sustainable socio-economic development on the basis of systematic scientific research, the results of which are used both in the educational process and as objects for the implementation and achievement of commercial benefits [2–15]. At the same time, different levels of technological development of states, differences in personnel, cultural, religious and other traditions characteristic of societies belonging to modern socio-political systems make significant adjustments to methodological approaches to the implementation of the new role of universities in the knowledge economy. This aspect involves the development of principles for increasing the importance of universities in the new economy, taking into account the prevailing ideas in society about their goals and objectives.

The purpose of this study was to analyze the main trends in the development of higher education within the framework of the requirements of the new post-industrial economy.

Results and discussion. In literary sources analyzing the changing role of universities in the economic functioning of societies, it is noted that "... *the frequency of interactions between universities, industry, and government has been critically increasing over the past half-century. These relationships represent a "triple helix of innovation" implemented by universities, industry, and the state, which is described in the works of Henry Etzkowitz*" (emphasis is ours – O. A., V. S., A. A., V. G. [2, p. 3, with reference to [10–13]]). In our opinion, universities permanently interact with the institutional components of socio-economic systems ("industry and government" according to [2]), due to the fulfillment of their fundamental mission – the training of highly qualified personnel for various branches of economic, administrative, social activities in accordance with the strategy of functioning and progressive development. Therefore, in the modern economy, positioned as a knowledge economy, not "... the "frequency" of interactions between universities and components of society is increasing, and the contribution of universities to the development of "knowledge-intensive innovations" is increasing due to the transformation of knowledge obtained as a result of systematic research project activities into practical applications with high demand for the business environment, the system of industrial production, management and the social sphere. This process is realized as a result of the integrational interaction of intellectual potentials, material, technical, technological and personnel base of research (Academy of Sciences), educational institutions (Universities) and industrial business entities (Industrial Enterprises), the essence and methodological principles of implementation of which are set forth in our research, carried out in the early 2000s and summarized in a number of monographs [14–16]. The "triple helix of innovations", proposed in the works of Henry Itskowitz [10–13], is essentially similar in purpose to the integration interaction of the main institutional components of socio-economic systems (Academy of Sciences, Universities, Industrial Enterprises) proposed by us in percolation and mutual diffusion of intellectual resources in a cluster structure focused on the implementation of an innovative strategy of functioning.

It is noted that there is a change in trends in the world university environment [2], "the expansion of the penetration of the higher education system into society (life – long – learning)", which led to the formation of "a new role of universities in the world [2, 6, 7]. In our opinion, the functional role of universities in societies has not changed, since initially they represent educational centers for the formation of relevant knowledge of qualified individuals with a pronounced desire for permanent development and improvement both in professional and moral aspects.

The "trends of the world university environment" noted in [2], first of all, emphasize the decisive role of the intellectual component in the form of knowledge with a high degree of relevance, which allows for the "restructuring of universities" [2] in the direction of commercialization of the scientific results obtained, to occupy a leading position "in world rankings" [2], to implement the concept of "education through life" ("life – long – learning") [2], to ensure the educational process with the use of modern information technologies, taking into account the increasing mobility of students and the increase in the share of distance learning. Universities with low intellectual potential in the absence of effectively

functioning scientific schools, a developed infrastructure for the implementation of project research activities with the availability of modern personnel and equipment cannot fully compete with the higher education system of European countries, North America and the South Asian region.

It is believed that "... *modern universities are the core of the knowledge society, the most important channel for technology transfer*" (emphasis ours – O. A., V. S., A. A., V. G. [8]). In the work of G. Itskovitz [10] the entrepreneurial academic model of a modern university is defined as "teaching, research and economic development of entrepreneurial activity". The characteristic of "modern universities as the core of the knowledge society, the most important channel for technology transfer" [2] refers mainly to the regional societies of technologically developed countries (for example, the so-called "Silicon Valley"), since the knowledge society, which determines the characteristic development of the economy, is in the process of formation with significant differences for different states, especially for states with the so-called transition economy. At the same time, the world's leading universities with established scientific potential are indeed "institutions that play the role of innovation hubs within the framework of the national innovation system." This is evidenced, first of all, by the number of innovative solutions developed, the novelty of which is confirmed by a large number of patents for inventions [2]. Domestic universities have not developed an effective infrastructure for creating innovative products with high demand by the business community and economic entities of the industrial sector of the economy, therefore, patent and licensing activities are largely formalized and are not a priority activity of the teaching staff and service specialists who assist in the commercialization of intellectual and industrial products. Property.

It should be noted the prevalence in the "academic model of a modern research university", proposed by G. Itskovitz, an educational component that ensures not only the effective functioning of the knowledge economy through the training of "innovatively receptive specialists" [2] ("knowledge workers") [14], but also its own research infrastructure for the permanent generation of products of intellectual activity with high potential commercialization.

There is an increase in the economic efficiency of universities in technologically developed countries. For example, "... *the return on every million pounds sterling invested by the UK Treasury in higher education amounted to 1.3 million pounds sterling in the form of investments in other sectors of the country's economy*" (emphasis is ours – O. A., V. S., A. A., V. G. [3]). To implement effective innovation activities, universities must have a formed infrastructure with a long experience of practical project work in the presence of scientific schools in priority areas of development in accordance with the adopted strategy. Such experience, characteristic not only of universities in the UK, but also of other EU countries, North America, Canada, etc., does not have sufficient grounds for implementation in the higher school of Belarus, which includes 51 universities, a significant part of which has been formed and functioning over the past 30 years without sufficient scientific and personnel support. Therefore, the formal transformation of Belarusian universities into the "University 3.0" model by mainly creating individual components of the innovation infrastructure will not allow achieving any significant economic results due, first of all, to the lack of a portfolio of innovative developments with a high degree of completeness and readiness for implementation in a specialized production of an industrial enterprise with practical experience in project activities.

The paper [2] notes that even in technologically advanced countries, for example, the United States ,... *universities today are just entering the path of capitalizing their knowledge, learning to commercialize the results obtained in the framework of interaction with the business community and the state, to manage the intellectual property as efficiently as possible. Universities at the current time are ready to participate in the process only as developers or executors*" (emphasis ours – O. A., V. S., A. A., V. G. [2, p. 4]). It should be emphasized that the process of implementing the qualifications of specialized specialists, obtained in the form of knowledge in the educational process at the university and used by them within the framework of their powers (competencies) in the functioning of business entities of various purposes and departmental subordination, which ensures the achievement of economic efficiency (called in [2] "capitalization of their knowledge"), occurs permanently throughout the entire period of existence of higher educational institutions, as it is an integral part of their function embedded in the strategy of creation.

The paper [2] formulates the signs of a new role of universities in the knowledge economy, which consist in the fact that "... *Firstly, the contribution of modern universities to the innovative development of the country is increasingly determined by the importance of the intellectual property being created and commercialized. Secondly, modern universities are institutions of society that best solve the task of translating knowledge into intellectual capital through the use of resources of globality, openness, dynamism, a constant influx of active youth. Thirdly, universities no longer only fulfill orders for research and development, but they themselves are actively creating technologies and technology companies. Fourthly, universities today are becoming leaders and centers for the creation of new technological industries*" (emphasis is ours – O. A., V. S., A. A., V. G. [2, p. 5]). In our opinion, all the "competitive advantages of universities" listed in [2] are well-known and traditional, since universities have traditionally interacted in the educational society with the possibility of participation of teachers and students in the educational process in various universities located in developed countries, in modern universities specialists of different countries and professional interests fruitfully carry out educational and research activities. Multidisciplinary research projects for a number of decades have been an effective form of convergence of NBIC technologies, systemic research activities carried out by universities with high ratings have always been and are a potential for intellectual development of specialists, including "in new fields of knowledge and professions" [2].

Considering that "research competencies" are the prerogative of model 2.0 universities, the authors make a fundamental methodological error, since the task of modern universities is not to form competencies, but to systematic scientific activities with the participation of the main human resources potential, without which the implementation of the "3.0" and "4.0" (?) models is impossible. Erroneous, in our opinion, is the attribution to the model "University 3.0" as the main components of the creation of "market companies ("start-up's")" and "entrepreneurial competencies", since without the presence of intellectual potential in the form of intellectual and industrial property objects protected by high-level patents, these components are formalized criteria for assigning universities to a new model without changing the essential content of their activities.

The definition of model 4.0 universities as developers of "new markets and infrastructure" [2], in our opinion, destroys their fundamental goals, which are to form and develop the intellectual potential of specialists to demonstrate their creative abilities in professional research, educational, managerial, social or other activities. Universities are centers for the formation of high-level knowledge and relevance for the comprehensive development of individuals within their professional competencies and existence in the social sphere. Empowering universities to form "new markets and infrastructure" unreasonably separates them from the current system of economic activity of regions and states, including the functioning of industrial production and social security sectors within the framework of the state strategy for sustainable socio-economic development.

The fundamental function of universities is to create the prerequisites for the progressive development and effective functioning of all institutional components of the state society, and not just their own, even when receiving significant economic dividends. Universities ensure the harmonization of the functioning of institutional components due to the diffusion and percolation of intellectual resources in various forms of their manifestation in the social environment.

The proposed model "University 4.0" seems to us to be an artificially formed concept, since universities have always "implemented the function of a provider of knowledge about the future." Universities, in accordance with their basic function, cannot be a "leader in the development of high-tech industries" [2], since this aspect of activity is the prerogative of the state, which determines the development strategy and methodological principles of its implementation with the participation of socio-economic, technological, personnel, information development, cultural, national, religious and other traditions. The allocation of universities to institutions that determine the trends of state development in favor of the implementation of the implemented concepts of political correctness, multiculturalism, tolerance, communicativeness, etc., in our opinion, contributes to a decrease in national intellectual potential to the detriment of socio-economic and political development.

Analysis of literary sources devoted to the problems of transformation of higher education clearly indicates the need to change the intellectual support of the educational process.

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APPLICATION OF EMOTIONAL COMPONENT IN MUSIC EDUCATION OF PRIMARY SCHOOL CHILDREN IN CHINA

Until recent years, students have mental health problems, which has sounded the alarm for us. In music education, it is also a good way to correctly guide students to appreciate positive music and use music to coordinate psychological problems. Mental health usually refers to a positive and healthy mental state. It should be analyzed from physical, psychological, social, behavioral and other factors, not only to see whether it has organic or functional abnormalities, but also to see whether it has subjective discomfort, and whether it has socially recognized unhealthy behavior. For many years, enough attention has not been given students' mental health problems.

It has become obvious that the reform of the general education system, which is currently being carried out, can lead to significant success if it is based on its modernization, taking into account the specifics of regional educational programs.

For many decades, the national and cultural values of the peoples have turned out to be unclaimed by pedagogical science and practice. As a result, some of the youth began to clearly break through such phenomena as social apathy, cosmopolitanism, ethnically leveled consciousness, threatening the people with the loss of national identity.

One of the ways to revive the original culture of peoples is the musical and aesthetic education implemented within the walls of a general education school, where, along with ensuring the continuity of national musical pedagogy, its universal moral potential is revealed.

In modern socio-cultural conditions, among the many issues related to musical education in China, the problem of introducing children to national musical art as part of world culture is especially acute. The implementation of the tasks of the spiritual development of the younger generation implies the need to update research in the field of theory and practice of musical and aesthetic education in the process of implementing the national-regional component. This is understandable, because the students' diversified study of the best examples of the musical creativity of their native land will lead them to comprehend the deep interconnections of musical culture with its history and way of life [1].

The educational possibilities of music were recognized by the outstanding minds of the past. The significance and strength of musical influence on a person was noted by the ancient philosophers Aristotle, Pythagoras, Plato; medieval Muslim philosophers Avicenna, Farabi. Enlighteners, philosophers, writers G. Hegel, I. Goethe, D. Diderot, G. Lessy saw humanistic meaning in genuine musical art ng, F. Schelling, F. Schiller and others. The importance of music in the formation of personality is emphasized in their studies by foreign and domestic educators.

Analysis of the theory and practice of teaching national musical art at schools, that its current level does not meet modern requirements for teaching and raising children: there is insufficient use of the ethno-cultural and ethno-pedagogical potential of national music; in the practice of the modern general education school, there has not been a holistic vision of the problem of using the traditions of national music, multi-genre traditions, the spiritual heritage of the peoples of the PRC, and the level of professional training of teachers for the implementation of the national-regional component is still low [2].

In the modern contemporary society, young students, as a unique social group, are psychologically under great pressure, and the pressure of school entrance examination is in the main position. They are in the development stage of rapid changes in body and mind. They are physically and psychologically immature, and their mental endurance is relatively poor. They are prone to psychological contradictions, psychological conflicts and various psychological diseases. However, school leaders and teachers often lack the theoretical guidance of mental health education in the tense teaching, and it is more difficult to formulate education strategies that conform to the laws of the physical and mental health development of every student. After the new curriculum reform, music education, as a compulsory course in high school, should pay great attention to the function and role of music education in mental health. As an ordinary high school music teacher, we should actively use music to regulate and change some students who are mentally unhealthy. This paper discusses the relationship between music education and mental health, the role of music education in mental health and how to develop music education in mental health education [2].

Music education is an important content and way of implementing mental health education. Music is the art of expressing feelings directly. Music comes from the heart, so it can move with emotion. Music makes people feel through people's hearing. Its beautiful melody is easy to stimulate people's deep feelings. When a person is in sorrow, discontent, depression and pain, music can let people's emotions be controlled and dispersed, unlock the complex in their hearts, so as to express their feelings, purify their hearts, and help them maintain a healthy psychology. Music can also be used as a way of reasonable catharsis. When you are unhappy or too excited, you can choose some songs to sing loudly or enjoy some different styles of music, or choose some music to dance.

The implementation of mental health education has improved the level of students' mental health and also promoted the development of students' overall quality, which has also created good conditions for learning music and music activities. Music education has an obvious function of mental health education and is an auxiliary means of mental health education. Music education should serve mental health education, and should also be integrated into mental health education and promote the implementation of mental health education. At the same time, mental health education also puts forward an urgent requirement for us to speed up the pace of music education reform, and points out the development direction of music education reform.

School music curricula and pedagogies can be considered as embodiments of mainstream values and cultural interests. However, music of Chinese ethnic minorities has not been well-incorporated into the school teaching materials, and the representation of ethnic music in the wide-used textbooks is often tokenized and politicized. Besides, the pedagogies applied to teaching ethnic music tend to be oversimplified [3].

Teaching materials often reflect interests of the dominant group in a society, and thus, contribute to social reproduction and the reinforcement of social hierarchy However, in the music textbooks that are widely used in elementary and middle schools, authentic minority music rarely exist. Instead, the alleged minority music taught in schools were composed after the establishment of the PRC in 1949 by the Han musicians, who were in charge of designing music textbooks. These newly created music, which feature a combination of traditional folksong styles with lyrics that are reinvented, have been represented in a way that could easily mislead students into believing the originality and authenticity of these music. Besides, knowledge associated with minority music and cultures are insufficient compared to the content that centers the Han cultural heritage. While music incorporated into school teaching materials reflect the ideology of the dominant group, minority music are significantly marginalized in school music curricula [3].

Another salient issue with music teaching materials is that the representation of ethnic music tends to be tokenized and politicized. Cultures should not be viewed as static, since they are constantly in the dynamic process of changing. Nevertheless, Chinese minority cultures are reduced to a limited number of symbols in the music classroom. For example, music specifically selected to represent ethnic cultures distort reality by portraying ethnic minority people as always happy and satisfied with their lives. Images of grassland and horses are always associated with Mongolian songs, while the traditional musical instrument, the dongbula lute can be easily related to Xinjiang music. These stereotyped representations of minority music not only give rise to misunderstandings and distorted perceptions about ethnic minority people among students, but also reinforce ethnic stereotypes [3].

Furthermore, classroom music that aims at representing ethnic minority cultures is, to a large extent, politicized. Patriotic themes explicitly indicated in some of the music included in the teaching content. It was suggested that "revolutionary folk songs," which refers to the adapted traditional ethnic music that "praise socialism, communism, the government and its policies," make up the majority of repertoires incorporated into school teaching materials. While sustaining the unity of the nation has been the utmost goal for the government, music selected to represent ethnic minorities fail to celebrate cultural pluralism, but rather serves as a means for disseminating political propaganda.

The oversimplified music pedagogies applied to the teaching of traditional ethnic music, which greatly limits students' experience with learning ethnic music, is another challenge facing school music education. In China, music teaching at elementary and secondary level mainly takes the form of music appreciation and singing, and there is rarely any in-depth connection made to the cultural backgrounds from which the music originates. Even though learning to play ethnic musical instruments is encouraged by the Minister of Education, owing to a lack of music teachers' education and limited credit hours for instruction, students scarcely have opportunities to learn to play these musical instruments. The tokenized and politicized representation of ethnic music, coupled with the oversimplified music pedagogies, remain major challenges facing school music education in China.

Music can help to treat common psychological diseases of students. In clinical psychological research, it has been shown that music has a certain function of curing diseases. The main objects of

music therapy are three types: first, children or adolescents with developmental disorders in physical and mental functions. The therapist can use music to rehabilitate these children's physical and mental functions and nervous functions. The second is psychological patients who have maladaptive performance in language, emotional communication and other aspects. The technique of "music dialogue" is generally used in the process of psychotherapy. The specific method is to gradually let the patient transition from music performance to language performance. Third, people with emotional disorders. Music can make their feelings diffuse, and their nerves and emotions tend to calm down. The goal of treatment is to rationalize the individual's emotion and adapt the individual to the surrounding environment [4].

Music helps to improve bad emotions and cultivate healthy emotions. Music can promote the wriggle of people's emotions and the transmutation of their hearts, and can quickly and effectively stimulate people's psychological and physical movements, thus producing different emotions, emotional reactions and body effects. Students at school, especially middle school students, have great emotional instability and are not good at self-regulation, so they are particularly prone to cause various emotional distress, and even lead to suicide or crime in serious cases. Therefore, in school mental health education, it is very effective and feasible to use music activities to strengthen students' emotional adjustment.

Music can help eliminate some interpersonal barriers and promote individual self-expression. In the safe interpersonal environment of collective music activities, people can express their inner emotions, feelings, ideas and thoughts through the language and non-language factors of music. Music can regulate students with various psychological disorders, so that they can obtain a sense of success and a good sense of happiness in music activities.

Music helps cultivate students' spirit of unity and cooperation. Music activities are usually collective activities. This process of joint participation often helps to establish a good and close team cooperation relationship and further create a harmonious social environment for oneself. Participants should learn the ability and skills to cooperate and get along with others in the process of music activities. This cooperation ability in music will eventually be generalized and transferred to their daily life. In addition, the charm and pleasure of music will also attract those socially withdrawn students to participate in the social activities of music, which can change their self-closed state.

Music helps to improve students' interest, develop their intelligence and innovative thinking, and cultivate their innovative ability. Brain physiological science tells us that the human brain is composed of two hemispheres, the right brain is the perceptual and artistic brain, which mainly plays the role of processing rhythm, melody, music, image and fantasy, that is, creative activities. Music activity is the best way to develop the right brain. It can not only reduce the burden of the left brain, delay aging, prevent and treat various physical and mental diseases caused by excessive use of the left brain, but also play a huge role in developing students' imagination and creative thinking ability.

First of all, we should recognize that education is an activity to improve people's knowledge and skills, affect people's ideological and moral character, and also a purposeful and planned influence on educators' body and mind. It is also an ideological education activity. We should also fully recognize the importance and status of music education and music activities in school psychological counseling. From the perspective of their students, we should formulate practical music teaching plans and firmly establish the view that music education is an important content and effective way of mental health education. Then, according to the music curriculum standard of the new curriculum reform, combined with the actual situation of our school and the limited music education resources, a new curriculum in line with the law of music education and the requirements of quality education is formulated, so that music education can better serve the mental health education, and let music education truly play the role of mental health education.

Secondly, schools should guide, guide, assist and serve in psychological counseling to promote the growth and development of every student's body and mind. In music education, we should vigorously carry out campus music cultural activities and strive to create a strong atmosphere for music education and music activities. In order to improve students' psychological quality and promote

their physical and mental health, we should strengthen the development of school music activities, make the content of extracurricular music activities more colorful and diversified, and truly integrate music education into mental health education.

Finally, we should do a good job in psychological counseling, respect and understand students from their point of view, find ways to guide them with music, respect the principle of students' subjectivity, teach students according to their aptitude, and also guide students according to the principle of overall development. We should also get ready, start from yourself, improve your professional ability and psychological level, improve your ability to engage in psychological counseling, develop a good habit of self-regulation with music for every student around you, and constantly summarize experience, so as to better improve the teaching quality, better integrate music education into mental health education, and better adapt to mental health education teaching.

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U. A. Beizerau, Li C.

INNOVATIVE TECHNOLOGIES AND METHODS
OF ORGANIZING EDUCATIONAI PROCESS AT HEI

While science education popularizes scientific knowledge, it also conveys the spirit of science, which provides nourishment for the growth of the creative spirit. This article firstly explores what innovation and the creative spirit are. Secondly, it analyses how science education contributes to the good development of the spirit of innovation. Innovative technologies and methods of organizing educational process at higher educational institutions (universities, colleges, institutes) are discussed.

Human society has entered an information society that requires the spirit of innovation. The development of science, the advancement of technology, the prosperity of nations is increasingly dependent on innovation. The development of science and technology, and the prosperity of the country are increasingly dependent on innovation. As an important venue for nurturing the spirit of innovation and disseminating scientific knowledge as an important forum for the cultivation of the spirit of innovation and the dissemination of scientific knowledge, science education has a special mission in nurturing the spirit of national innovation. As an important forum for the cultivation of the spirit of innovation and the dissemination of scientific knowledge, science education has a special mission in fostering the spirit of national innovation.

The word "innovation" is derived from the Latin word "Innovare", which originally had three meanings: first, to renew; second, to create something new; and third, to change. In our country, in the Southern History. Posthumous Biography. Shang. The term 'innovation' is mentioned in Song Shi Zu Yin Shu Yi, i.e. 'Bo Zi is not the first son of Lu Hui A.D., but still has to test the other palace. Now, as the consort is a member of the high class of the heavenly order, she should be innovative."

The word 'innovation' in this book means to create and create something new. The Modern Chinese Dictionary explains innovation as 1. "To put aside the old and create the new". 2. To refer to creativity: new ideas." In other words, "innovation" refers to the act and expression of abandoning the old in favour of the new [3].

Innovation is a challenge to tradition, a challenge to old things. It is the transcendence of something old. It builds on what has been done before and incorporates positive and discard what is old and outdated, pushing things It is a challenge to tradition. It is therefore important to have a comprehensive innovation is an activity that is based on new ideas. It is an activity in which the subject uses known information to produce It is the production of new ideas or new things, based on known information, for a certain purpose. Therefore, innovation is not a simple division of the past, but rather the pursuit of new laws and doctrines based on scientific abandonment, inheritance and borrowing. New laws, new doctrines, new methods, etc.

"The term "innovative spirit" is different from "innovation", which is a verb in the sense that it is an action, a series of activities, of the subject, whereas "innovative spirit" is a noun in the sense that it is a series of activities of the subject, while "innovative spirit" is a noun. It is a kind of temperament or spiritual quality that the subject embodies in its innovative activities. It is a kind of temperament or spiritual quality embodied in the subject's innovative activities. In the book "The New Encyclopedia of Chinese Teachers" (secondary education volume), edited by Mr. Ye Lan, considers 'innovation spirit' is the initiative to transcend real conditions and to create new material or spiritual products. The quality of creativity Therefore, "a person with a creative spirit must be courage to think and do, the courage to create a new way, the ability to open up to think and do what no one has thought and done before" [3].

As we can see from the above, the "spirit of innovation" refers to the spirit of people who, in the face of the external world, do not keep to their ways, keep exploring, dare to go where no one else has gone before, inspire people to break free from their constraints, not be satisfied with the status quo, understand the world from a new perspective, use new methods, and face the world with a positive, open and progressive attitude. It mainly includes curiosity, interest in inquiry, desire for knowledge, sensitivity to new things, and a persistent pursuit of truth, and the persistent pursuit of truth, innovation and enterprise.

The spirit of innovation has an irreplaceable and important value. It is the spiritual impetus for mankind and society to move forward. It is the spiritual driving force behind the continuous advancement of mankind and society. Therefore, innovation is the soul of a nation's progress. The spirit of innovation is the soul of a nation's spirit, innovation is the innovation is the inexhaustible driving force for the prosperity of a nation. The spirit of innovation is the spiritual source of national progress.

The driving force behind the scientific development of innovation. Science education provides the human and knowledge base for innovation. The process of science education promotes the development of an innovative spirit in the following aspects:

The sense of innovation is not innate. Innovation is closely linked to curiosity and interest. The stronger the curiosity and the stronger the interest, the stronger the internal drive to promote innovation. The ancients said, "Those who know are not as good as those who are good, and those who are good are not as good as those who are happy. "It can be seen that curiosity and interest are the cornerstones of innovation".

In science education, not only are the results of science disseminated but also, in activities such as science experiments and scientific investigations that integrate science and fun in the science classroom. Often presenting knowledge in a vivid and imaginative way, in the science classroom is often a lively, varied and colorful experience. The science classes are often lively, varied and informative, and include not only the latest scientific achievements but also knowledge that is closely related to life. In the science and technology activities, small experiments, productions and inventions allow students to through these activities, students can observe and understand the mysteries of nature The students are able to observe and understand the mysteries of nature through these activities, verify scientific results through hands-on experiments, and In science education, students can feel the joy

of discovery and In science education, students can feel the joy of discovery and experience the thrill of "foresight" and "foresight" in learning. In the science classroom the teacher and the textbook are no longer a proxy for truth. The teacher and the students discuss problems together. In the desire to innovate is ignited in this open atmosphere and, as a result, science education stimulates students' curiosity and interest to a greater extent. Interest, generating a strong motivation to innovate, giving full play to their students' creative potential to the fullest extent, unleashing their creative Students are able to explore new problems and seek new breakthroughs. This will enable students to develop a positive sense of innovation [1].

If creative awareness is the starting point for innovation, then innovative thinking is the guarantee that innovation will be realized. How can new problems be solved correctly and how can new and unique approaches be applied after they have been identified? This requires the right kind of thinking. Therefore, innovative thinking is the key to the whole innovation. The core of innovative thinking is to think differently, to look for differences, to think from a multidimensional perspective and the core of innovative thinking is to think differently, to look for differences, to think from multi-dimensional perspectives and different sides of a problem.

The process of science education often does not require students to uniformity, uniqueness and standardization in the process of inquiry. In the process, teachers often discuss with students' questions that do not have a single answer questions, expanding students' thinking from multiple perspectives and the teacher often discusses with the students the questions that have non-unique answers, expanding the students' thinking from multiple perspectives. For example, in the primary school science magnet size test, teachers encourage students to use a variety of methods to test the magnetism of a magnet. In the experiment, teachers encourage students to design different experiments (students can put the magnet vertically). Students can put the magnet upright or flat to test (students can place the magnet vertically or horizontally to test the magnetism of various parts of the magnet) and choose different experimental (some choose large head pins, some choose paper clips, etc.), and they also suggest different guesses about the results of the experiment (some students think that the middle of the bar magnet is magnetic). Some students thought the middle of the bar magnet was the strongest, others (some students thought the middle of the bar magnet was the strongest, others thought it was two levels strong, etc.). It is through this flexible approach to science education that customer service is enhanced. This is the way in which science education can be flexible and students to think differently and increase their fluidity, independence and adaptability. fluidity, independence and adaptability. This leads to a substantial improvement in their creative thinking. This leads to a substantial improvement in their creative thinking [2].

The perceptiveness and scientific discernment possessed by the subject discernment are of great importance to the ability to innovate. The more insightful and discerning the more insightful and discerning the subject is, the more quickly he or she will be able to identify the more insightful and discerning the subject is, the more quickly he or she will be able to grasp the main issues and find solutions to problems. Thus, intuition, insight and scientific discernment perception, insight and scientific discernment are key factors in students' ability to innovate. The more perceptive and discerning the subject is, the more quickly he or she can grasp the main issues and find solutions to them.

Science education is invaluable in developing students' insight and scientific science education is invaluable in developing students' insight and scientific discernment. In science education students learn the skills, methods and ethos of scientific research. They learn the skills, methods and spirit of science, the values of science, the rigor of and rigor of thinking, so that students not only know how to do scientific They learn not only how to conduct scientific experiments, but also how to analyze facts, gain insight into things, identify what is right and wrong, and learn from them. The students will not only know how to do scientific experiments, but also how to analyze facts, see things, distinguish the right from the wrong, make sense of them. The students will be able to identify and seize opportunities. The students will also be able to improve their ability to deal with complex situations and the students will also be able to improve their ability to deal with complex situations and discriminate and to be able to identify things in a clear, rational and scientific manner.

The students will be able to identify and solve problems in an innovative way, and gradually develop their own creative abilities. The students will also be able to develop their own creative abilities [1].

The creative personality is the psychological basis for one's innovation and invention, and is a necessary, good and lasting personality quality for creators. The results of a long-term study of a large number of children by the American psychologist Puseymon show that most people with a strong innovative spirit are confident, motivated and have strong perseverance. Therefore, in order to cultivate a good innovative personality in students, we should focus on cultivating self-confidence, positive optimism, practicality, rigorous learning and indomitable character and rigorous, indefatigable and hard-working. The students should be confident, positive and optimistic, practical, rigorous, indefatigable and hardworking.

Science education creates the right atmosphere for students to exercise their will and develop good qualities. Science is a very difficult activity in itself and many scientific achievements cannot be made overnight, but often require a long process to achieve. Similarly, in science education, the process of experimentation to observation to analysis to conclusion is not always smooth and students often encounter setbacks or failures. Students need a positive attitude to face them, a rational mind to analyze them, and a strong will to persevere. It is this experience in research that develops the strong will necessary for innovation, and students learn to observe, analyze and deal with problems in the right way. The students learn to observe, analyze and deal with problems with the right attitude [2].

In science education can develop scientific habits of mind, establish a rigorous and rational scientific attitude, develop students' vision fields, generate a spirit of innovation and develop good creative skills. Thus, gaining a better understanding of the world and gradually developing the innovative this will lead to a better understanding of the world and the development of the character and qualities needed for innovation. Science education provides the necessary ground for the formation and development of an innovative spirit. Science education provides the necessary soil and sufficient nutrients for the formation and development of an innovative spirit. It also paves the way for innovation to move forward.

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U. A. Beizerau, V. N. Dvorak

INTERNATIONALIZATION OF HIGHER EDUCATION: TRENDS AND QUALITY

The article is devoted to the analysis of the key quality indicators in the activity of institutions of higher education in the conditions of internationalization of the higher education. Quality indicators of activity of institutions of higher education are considered through a prism of institutional approach. The results received in the analysis of cases in a number of the European countries are described. The article discussed the development of international higher education, the analysis of factors influencing institutions of higher education as drivers for the development of the economies of countries. The dynamics of growth in the number of students in countries and regions of the world has been studied.

Governments of countries are increasingly considering education as one of the main factors contributing to the economic development of countries. In addition, increasing competition requires continuous improvement in the quality assurance standards of their education systems.

Another factor that increasingly determines the international importance of countries is the impact of the state of their research base. This work confirms the strong empirical evidence that internationally produced research is of great value (citation of studies was used as a measure of quality) – not least because it provides solutions to global problems and benefits to more than one country. Nobel Prizes are increasingly being awarded to researchers working in a country other than their country of birth. More than 60 percent of the laureates received education or research abroad. Particular importance is attached to the role of countries with emerging market economies. In parallel with their growing importance to world trade, they have become increasingly popular research destinations for scientists and have witnessed a significant growth in the scientific industry, the pace of international scientific cooperation and the registration of international patents. To maintain a high level of teaching and research, to meet the needs of the domestic and international student audience, on the one hand, and to meet global research challenges, on the other hand, significant and continuous investments in education are needed.

The current state of affairs speaks of an opportunity to better apply research excellence to commercial activities, which is an underutilized resource for generating domestic investment and research revenue from local and multinational corporations.

The internationalization of education and science is a critical goal for most higher education institutions for many reasons. These are raising quality standards and rankings, attracting the best students and faculty, generating revenue, pushing the frontiers of knowledge through research, and promoting internal diversity.

Over the past 20 years, the rapid growth in the number of students in institutions of higher education and the international mobility of students in the world has followed the growth of world trade and has outpaced the growth rate of world GDP by many times [6].

This growth is increasingly seen by national governments as a means to achieve national priorities and promote economic growth.

This study examines four major trends in international higher education: international student mobility flows and the demographic and economic factors that influence them; the emergence of new models of global partnerships in the field of higher education, including partnerships in the field of training and awarding academic degrees abroad; internationalization of the research sphere; commercial research activities undertaken by higher education institutions in various countries in response to declining investment in higher education in a growing number of countries.

In order to obtain an accurate forecast of international student flows, special attention is paid to global higher education enrollment rates and their projected growth in the near future. In addition, out-of-country and out-of-country student mobility rates were studied in order to determine how many students from each country of origin would study abroad and to determine the appropriate areas of study.

In 2019, the number of students in higher education institutions in the world reached more than 210 million people. Only four countries – India, China, USA and Russia – have a combined share of 45% of the total number of students in higher education in the world. Other emerging market countries with significant HEI enrollments include Brazil (over 7 million), Indonesia (over 6 million), Iran (over 5 million), South Korea (over 4 million).) and Turkey (more than 4 million people) [7].

One of the key features of the global higher education sector is the growth of student mobility at the international level. Their number has risen from 800,000 in the mid-1970s to over 4.5 million in 2017. However, the global average outbound mobility ratio (the number of tertiary students participating in mobility divided by the total number of tertiary students) has remained fairly stable since the early 1990s, at just over two percent per year [7].

The main countries-suppliers of students participating in international mobility are India, China, South Korea, Germany, Turkey and France. However, while China and India together account for 29 percent of the global HEI student population, they only account for 21 percent of the total

international student population, mainly because they have lower outbound mobility rates than the global average.

Outbound mobility rates vary considerably across countries, from 50 percent for Botswana and 30 percent for Trinidad and Tobago and Mauritius to less than one percent for the UK, US, Australia, Russia, Indonesia, Philippines, Egypt and Brazil. Countries such as Hong Kong (China), Singapore, Ireland, Nepal, UAE and South Korea have higher average global outbound mobility rates, as do many European countries due to high mobility within Europe [2].

The main host countries for foreign students are the USA, Great Britain, Australia, France, Germany, Russia, Japan and Canada. Together, these countries host 60 percent of the total number of international students. Other countries are playing important and increasingly significant roles at the regional level: South Africa; Singapore, Hong Kong and Malaysia (Southeast Asia) and South Korea (Northeast Asia).

Countries such as China and Malaysia have much larger incoming student flows than indicated in the UNESCO data. In addition, transnational education programs are becoming increasingly popular around the world among both local and international students; however, data on the number of international students remains incomplete.

Different sources use different methods for determining and counting the number of international students. they take into account various forms of international higher education.

Recognizing the current and growing future role of some Asian countries (as well as the Gulf States) as hubs of education with an increasing influx of higher education students, thereby competing more with traditional destination countries, is critical to understanding how the global landscape of higher education education will look like in the next decade.

Here we define the key concepts and their application to attitude towards higher education. They should be next operationalized and brought into line (adapted) to existing realities, since these concepts and concepts are still quite wide, and only certain elements of them are completely relevant, so this fact must be taken into account in this empirical research. The main regulatory elements in higher education are laws, local regulations, political strategies. In more detail, this is politics and normative regulation in the field of quality assurance, funding and resources. Internationalization, globalization, Europeanization are an integral part of the main legislative and regulatory acts, which are guided in their activities by institutions of higher education. For example, these acts govern the activities of foreign universities in the territory of this state. However, it is not uncommon for specific national policies to apply positive attitude towards internationalization in higher education, which, certainly implies and takes into account the ideas of globalization and Europeanization. The influence of this direction in national politics may be different in intensity and strength in different countries. Especially if the universities have a significant institutional autonomy, and if this policy does not carry such a mandatory character as laws [3].

Moreover, international, European and global development can have an impact on the national legal and regulatory framework, which, therefore, over time changes under the influence of development. Following the line of explanation leading to the first expectations of development of legislation, regulatory framework, it is important to study changes taking place at the supranational level. European Union is one of the main players in the international markets in supranational level. Several aspects and levels need to be taken into account with respect to legal framework and policy. In general, in all states there is national legislation governing higher education. As a rule, these regulations include certain issues related to globalization, Europeanization and internationalization and their application in a particular country. All these documents belong to the so-called "national" level. Legislative and other regulations, policies at the level European Union, CIS and other international associations of countries belong to the so-called "supranational" level. Significant the reservoir for research are documents related to the Bologna process, as well as European cooperation programs in areas of education and science. Quality is a core value and a key indicator in higher education. The quality of higher education is usually controlled by mechanisms for ensuring the quality of education, prescribed in special legislation, rules, regulations, etc. at the national level. For

the first time formally education quality assurance policy emerged in the early to mid 1980s, although not in all European countries. Europeanization, globalization and internationalization certainly contribute their own adjustments to the national quality control systems of higher education. First of all, internationalization is one of the aspects to be taken into account when evaluating quality, since the default is the statement that currently time high quality education and research require presence of an international component and international orientation. Further, ensuring the quality of education, in addition to the national one, can must have an international or regional component. As examples include the Joint Quality Initiative, which is a derivative document of the Bologna Declaration. Joint Bologna Initiative for Quality Assurance education is an informal system for ensuring control quality and accreditation of undergraduate and graduate programs in Europe. Such initiatives should lead to the formation international standards to be used in systems quality management of universities in Europe and the world [4].

If these changes are international, global and European level will continue to influence systems of quality management and setting international standards in sixteen areas of higher education, it is likely that universities will be under pressure of regulatory and regulatory factors. This will make the HEIs make changes in their quality management systems, respectively, and in the work with applicants, graduates and employers. Universities may (and usually do) have additional funding sources other than the state budget. For most HEIs, the processes of internationalization, globalization and Europeanization is an additional opportunity to receive extrabudgetary funding and other sources of financing. The main way for now was to attract students studying for a fee. In the aspect of internationalization, many universities from different countries compete in the international market of educational services for attracting international students who can make a significant contribution to the budget of the HEI by paying tuition fees. The second source of financial resources for universities are international grants from transnational corporations, foundations, or grants allocated under the European programs of regional and international cooperation. Normative and cultural-cognitive components, as it was mentioned earlier, explain that norms and values in many ways have a serious impact on the activities of institutions of higher education and its members. Some of the institutional elements representing the normative and cultural-cognitive components higher education, closely adjoin and overlap each other, therefore, they are considered in pairs. The main institutional elements in these components are changing norms, values and traditions, influenced by internationalization, Europeanization and globalization. Norms, values and traditions of higher education institutions, according to institutional theory influence the activity of universities and their constituents in certain situations, as well as and traditions formed in these institutions. It is necessary take into account when conducting an empirical study the environment of cases and their history in internationalization, Europeanization and globalization.

There are several logical explanations for internationalization in higher education. They vary by country, region and time. Recent studies show that in general, economic explanation becomes more important, but it is necessary to distinguish between cooperative and competitive approaches used by universities that are forced to respond to the challenges of internationalization, Europeanization and globalization. Cooperation (collaboration) is a counterbalance to competition, at the same time these manifestations are combined – the same universities often are both partners and competitors. Another the most debated question is whether higher education public or private property or product. This discussion related to issues arising in connection with the application of the agreement on free trade. Therefore, this problem is also important take into account in research. Quality, in the sense of achieving academic excellence, has always been a core value of higher education. Nevertheless, defining and measuring quality in higher education is sufficient problem task. Just as in the case of the described phenomena (globalization, Europeanization and internationalization) does not exist a unified definition and approach to quality in higher education. The discussions reflected in the publications on this issue, show that there are several aspects of quality that depend on considering quality as a balance of the contribution of resources received results and processes. Harvey and Green see quality as "the exception perfection, full compliance with the goal, which can be measure with money and transform. It is often perceived that

internationalization has a positive impact on quality higher education. Claims linking internationalization and quality are usually based on the expectation that international cooperation and exchange of students, teachers and researchers, raised to critical mass will contribute to quality change through the exchange of experience, the study of foreign languages, exchange of ideas. On individual, project, institutional and even at the systemic level, international cooperation, according to eighteen researchers, will make a significant positive contribution in the quality of processes and results [5].

However, internationalization can also negatively impact on the quality of higher education. For example, if the teacher forced to conduct classes in a foreign language that he knows insufficiently, the quality of knowledge gained by students from this teacher, will be low. Some researchers have proposed several structures for highlighting differences between different disciplines (fields of knowledge) and grouping of teachers according to the given areas. Braxton and Hargens for example, describe a number of similar structures. Often disciplines are divided into applied and theoretical. The disciplines are also divided into sections knowledge that they study [2].

Bettcher speaks of the need classify academic disciplines on two grounds: 1) the subject of their research (area of knowledge), and 2) the social structure (operationalization). Thus, there are four categories disciplines: exact / theoretical, humanitarian / theoretical, exact / applied, humanitarian / applied [1].

The goals of the organization are realized through its policies, strategies action and development, mission. It is generally accepted that under the policy is understood as the achievement of certain goals when using certain means and elections over a certain period of time. Previous studies have shown that internationalization in higher education occurs for various reasons and reaches different purposes. Political Approaches Described in Publications Organization for Economic Cooperation and Development (OECD) can be considered the most complete and reliable, because analyzed main factors (economic, political, educational and cultural) in the complex. Therefore, the approaches used by the OECD used for operational purposes. They originally used to describe national policies in approaches to internationalization in cross-border education. However, they can also be useful in describing institutional policy and approaches to internationalization in higher education, and national systems of higher education. Internationalization in the national education system is one of the parties cross-border education. Students coming to study nineteen in a certain state, contribute to the experience of international cooperation of this institution of higher education, its students and teachers. Since both of the above manifestations of internationalization are closely interrelated, it is obvious that and approaches to the study of these manifestations will be similar. Furthermore, it can rightly be said that the national politics has a significant impact on universities. HEIs evaluate internationalization in the same way as government officials, at the same time they have other reasons for internationalization. When it comes to approaches to internationalization, their description includes an analysis of tools to achieve goals. Publications made by the OECD describe four political approaches-goals. This is harmonization (mutual understanding), migration of qualified specialists, increase in profitability, capacity building. All of them have some distinctive traits. These four approaches overlap and, to some extent, can be seen as different ways achieving the same goals.

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E. A. Dey

ABOUT TEACHING NUMERICAL METHODS
ON THE SPECIALTY "COMPUTER PHYSICS"

The article is devoted to actual aspects of the lecture course, methods of organizing and conducting laboratory works and computer testing of knowledge in the framework of teaching the discipline "Numerical Methods in Physics" for students of the specialty "Computer Physics" at the Faculty of Physics and Information Technology.

Specialty 1-31 04 08 "Computer Physics" with Qualification "Physicist. Programmer" [1] has been operating at the Faculty of Physics and Information Technology since 2016. During this time, a certain experience in organizing the educational process and teaching individual academic disciplines has been accumulated.

The discipline "Numerical Methods in Physics" is studied by second-year students of the specialty "Computer Physics" as part of a component of a higher education institution for two semesters. The purpose of studying the academic discipline "Numerical methods in physics" is the formation of systematized knowledge, skills and competencies in the field of computer methods for solving problems in physics, higher mathematics and mathematical physics [1]. A distinctive feature of the course is the complex nature of the issues studied, since knowledge of physics, mathematics, and programming is used in solving each problem.

Computer physics is characterized by its subject and research method. The defining elements are the construction of a computer model and the conduct of a computer (computational) experiment.

Modeling is the process of establishing a correspondence between the model and the object under study, studying the properties of the model and transferring the results to the real object. A model is an artificial object, the studied properties of which are similar to the properties of a natural object. A mathematical model is a system of mathematical relationships (equations, inequalities, initial and boundary conditions) formulated on the basis of physical laws. In some cases, this system of relationships can be solved analytically and the answer can be obtained in a closed form (as a formula), but in most cases, numerical methods are required to obtain a solution.

Numerical methods are methods for obtaining a result by performing arithmetic operations on numbers. This requirement leads to the need to redefine such operations of mathematical analysis as integration and differentiation. In this case, the numerical analogues of these operations always give a result that differs from the exact one. The result of solving the problem using numerical methods always has an error. It is important to be able to evaluate and control this error.

A computer model is a program that implements numerical methods for solving the equations of a mathematical model using dialog elements for entering data and setting parameters, as well as using graphical tools for displaying results.

A computer model is used to carry out systematic calculations in order to obtain detailed information about the system. In this case all parameters of the problem are fixed, except for one,

which is subject to regular changes in the area under consideration. Based on the calculation results, a theoretical analysis of the physical properties of the system is performed. In this respect, the use of a computer model corresponds to the technology of a real physical experiment and can be called a computer or computational experiment.

It should be noted that most textbooks on numerical methods are aimed at students of a mathematical profile. Therefore, the course provides for the nature of the presentation, designed for physics students, that is, combining the accessibility of the presentation with a reasonable degree of mathematical rigor and direct connection with the solution of physical problems. The sequence of studying individual topics is determined, firstly, by their logical connection, and, secondly, by the gradual complication of the mathematical formulation and software implementation of numerical algorithms.

The first section of the course is called "Basic Numerical Methods and their Implementation in C# in Visual Studio" and is devoted to the study and software implementation of basic numerical methods: data interpolation, calculation of definite integrals, solving nonlinear equations and their systems, solving differential equations and their systems, solving systems of linear algebraic equations, data approximations, solving integral equations.

The choice of the sequence of studying individual methods makes it possible to obtain or study new numerical methods based on those already studied. For example, numerical integration methods are obtained on the basis of linear and quadratic interpolation methods, and methods for solving integral equations are formulated on the basis of the studied numerical integration methods.

The lectures on each numerical method provide a detailed theoretical derivation of the calculated ratios, graphic illustrations of the quantities used in the formulas, writing the method algorithms using pseudocode, deriving theoretical estimates of the error or convergence conditions.

The text of the guidelines for the performance of laboratory work contains questions for preparing according to the lecture notes, a task for the software implementation of the numerical method indicating the necessary elements of the program design, tasks for performing a sequence of calculations using the program and processing the results. Each task has a part common to all students and a part containing an individual variant.

Almost every new numerical method is studied first by solving a test problem and comparing the numerical result with the exact one, which makes it possible to feel and study the behavior of the numerical solution, to determine the practical order of convergence of the numerical method. To obtain an exact solution of test problems, the previously studied theoretical methods of courses of mathematical analysis and differential equations are used, which ensures the formation of a close relationship between theoretical and numerical approaches in computer physics.

Further, the numerical method is used to solve an applied physical or mathematical problem. In this approach, the use of a computer is not opposed to traditional methods of analytical (theoretical) problem solving, but complements them, allowing you to connect educational material with specific applications, brought to a numerical result. Carrying out detailed calculations makes it possible to comprehensively study the properties of a physical system within the framework of a computational experiment.

Individual variants of assignments for laboratory work are largely formed on the basis of previously studied disciplines. Calculation of integrals, solution of nonlinear equations, solution of differential equations is used to solve problems from various branches of physics; interpolation methods, the method of least squares are implemented to process data from real physical experiments or tabular data from reference books. In many cases, tasks contain questions that require actions to study the properties of a numerical method or a physical system using the created program.

The second section of the course is called "Numerical solution of equations of mathematical physics by finite difference and finite element methods" and is devoted to the study of technology for solving boundary problems for second-order differential equations, solving a one-dimensional heat equation using explicit and implicit finite-difference schemes, solving a one-dimensional wave equation, solving Laplace and Poisson equations on the plane, implementation of solutions in Mathcad and Matlab computing systems.

As a computer tool for studying and applying numerical methods for studying physical processes and systems, the Mathcad computing environment is used, which makes it possible to perform the necessary symbolic transformations, implement the studied numerical methods using by himself composed program blocks, quickly obtain a numerical solution to the problem and build two- or three-dimensional graphs of the solution. Very useful is the ability to create animation of graphs of one or two variables, which allows to visualize the development of the process under study in time.

The theoretical foundations of the finite element method are presented in the Galerkin approach based on the introduction of finite element shape functions and the method of weighted residuals. All stages of the finite element method and their software implementation in solving one-dimensional boundary value problems for second-order differential equations are considered in detail. For two-dimensional boundary value problems of partial differential equations, analytical expressions and properties of shape functions for rectangular and triangular finite elements are derived and a system of linear equations is obtained.

The final laboratory works are devoted to the numerical solution of equations in partial derivatives by the finite element method using the PDETool tool of the Matlab computer mathematics system, which allows to set the shape of the region, the equation and boundary conditions in an interactive mode [2].

In the course of solving a specific problem, the student has the opportunity to repeatedly observe the development of the physical process on the screen of a personal computer and study the influence on it of the initial parameters set in the dialogue mode. Working with a numerical solution in the mode of a computer experiment allows to explore the physical system from different points of view, and the analysis of the results obtained contributes to the qualitative assimilation of the physical side of the issue.

Each laboratory work has a theoretical and practical part. The theoretical part involves a written answer to the theoretical questions listed in the text of the work, with the derivation of calculation formulas. The implementation of the practical part consists in creating a program, performing the necessary calculations and preparing a report. The report on laboratory work is accepted in electronic form. The work is considered completed when both the theoretical and practical parts are completed.

The current control of students' knowledge is carried out using computer testing on each topic using the Moodle system, as well as directly in the computer class during the preparation and performance of laboratory work. When controlling knowledge in the disciplines of the physical and mathematical profile, the most significant and currently insufficiently developed component is the test of knowledge of formulas. Test tasks are designed in such a way as to carry out such a check to a certain extent. For this, various forms of questions are used: with the choice of one or more answers from the proposed ones, for correspondence, entering a text answer, and others [3]. A detailed analysis of the test results provided by the Moodle system allows the teacher to identify typical students' mistakes and discuss them in lectures.

In general, it can be noted that the study of this course forms the necessary mathematical, physical, algorithmic and practical basis for the subsequent study of special courses, course and diploma work related to the use of numerical methods in solving physical problems.

Further development of the content of the discipline "Numerical Methods in Physics" for students of the specialty "Computer Physics" is associated with the selection of more interesting problems from the point of view of physics, as well as with the expansion of the set of studied and implemented numerical methods.

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E. V. Drobyshevskaya

DIARY THERAPY AS A MEANS OF PRESERVING PSYCHOLOGICAL HEALTH OF THE INDIVIDUAL IN PROFESSIONAL ACTIVITY

The article is devoted to the topical issue of maintaining working capacity, improving performance in professional activities, as well as preserving the psychological health of the individual. The article presents the results of a study aimed at identifying the psychological features of professional deformation of employees. The results of the study of ideas about the nature of psychological determinants of the development of professional deformation of workers of extreme activity profile are described. Conclusions are made that allow a new look at the specifics of manifestations, the nature and factors contributing to the emergence of professional deformation. The article describes one of the methods of prevention of occupational deformation, namely diary therapy as a means of preserving the psychological health of the individual.

The article is addressed to specialists in the field of professional development and occupational health, psychologists, as well as persons whose professional activity is associated with an extreme profile of activity.

Psychological health of a person, the quality of his life and social well-being are currently a priority in scientific research. The state of health, both somatic and psychological, largely determines the effectiveness of professional activity. However, professional activity itself also has a significant impact on the state of human health.

Modern science, in all its directions and branches, strives for a single global concept, building interdisciplinary connections in order to ensure the preservation of human potential. The problem of improving the working capacity, professional efficiency of the individual is now one of the central ones in psychological science. Every manager is interested in maximizing the personal and professional potential of his employees, because this will allow his organization to achieve the necessary result. The concern of the world scientific community about the problems of preserving intellectual potential is also caused by the fact that humanity suffers both somatically and psychologically. Statistics tell us that most of the diseases known to man today are getting younger, and some of them generally become a disease of young people of working age (alcoholism, drug addiction, and other non-chemical addictions), which once again makes us think about the future. Today we can talk about the deterioration not only of people's physical health, but also of its other aspects: psychological, social and spiritual health.

The problem of people's health is a challenge to modern science, including psychological science, since many theoretical and practical problems remain unresolved to preserve and strengthen all aspects of health. Psychological health of a person, the quality of his life and social well-being are currently a priority in scientific research. The state of health, both somatic and psychological, largely determines the effectiveness of professional activity. However, professional activity itself also has a significant impact on the state of human health. The principle of unity of consciousness, activity and personality confirms the fact that, on the one hand, professional activity contributes to the formation

of professionally important personality qualities, and on the other hand, it carries a great potential for personal disorders.

The modern labor market is characterized by its variability and diversity, while placing increased demands on the specialist. Despite the success of scientific research, at present a person has not reduced the time spent on his professional activity. Rather, on the contrary, in some areas, employees began to spend more time at the workplace, spending their personal time on solving professional problems. Such a long and intense concentration on the subject of work inevitably affects the content of a person's consciousness. As S. P. Beznosov writes, "the peculiarity of the subject of labor inevitably has its effect on the human psyche, forms or deforms the psyche of the subject of professional activity" [1, p. 67].

Let's focus in more detail on the role of professional deformation in the process of professionalization of an employee. The path of professional development of each future specialist includes several stages, namely, as E. A. Klimov wrote, three chronological periods:

– pre-professional development (from birth to 11–12 years; stages of early childhood, preschool childhood, primary school age from 7–8 to 11–12 years are distinguished);

– choice of profession (from 11–18 years old);

– proper professional development (19–60 years) [2, p. 45].

The passage of this path is accompanied by crises of professional expectations, which is an unsuccessful experience of adaptation to a socio-professional situation. The reasons for this may be difficulties of professional adaptation (building relationships with colleagues of different ages, mastering a new leading activity – professional; mismatch of professional expectations and reality).

Professionalization is a holistic continuous process of becoming a specialist's personality, which begins from the moment of choosing a future profession and ends when a person stops active work. Each of the stages of professional development involves a number of difficulties that need to be overcome. However, the stage most susceptible to changes in the personality structure is the stage of proper professional development [3, p. 87].

In the process of professionalization, a person faces a specific set of contradictions, namely, the degree of correspondence between a person and a profession. The discrepancy between the expectations of the relative future profession and the real picture of professional activity often leads to crisis phenomena at the very beginning of the professional path of the future specialist. An important point in the prevention of these phenomena during the period of professional adaptation is the work on the formation of a realistic position of students, future specialists.

The concept of "professional deformation", for all its "obviousness", still remains insufficiently conceptualized, that is, there is still no clear and generally accepted definition of it. Various authors often use similar concepts, in many respects close to the concept of "professional deformation", but at the same time reflecting some difference. The term "professional deformation" in modern research is understood as negative changes in the personality of an employee caused by prolonged performance of the same job or provoked by contradictions in work (at the level of goals, values, motives) by various unfavorable working conditions that negatively affect both the effectiveness of the work performed and various relationships arising both in in the process of professional activity (with colleagues, management, visitors), and in relationships outside of work (with family, friends, various other people).

The results of our comprehensive study of the psychological determinants of the development of professional deformation indicate that changes occur in the structure of a professional's personality according to a number of basic characteristics: individual psychological, professional activity, social, as well as psychophysiological. We were able to identify a number of factors that have a significant impact on this process:

– individual psychological level: weak motivation of emotional return in the profession; moral defects and disorientation of the individual; tendency to emotional rigidity;

– professional and activity level: mainly negative emotional field; extreme conditions (the need to make quick and extremely responsible decisions); increased responsibility; danger to one's own health and life;

– social level: definitely accepting communication (communication with people in acute conditions, as well as a collision with rudeness, manipulation, which leads to frustration and frustration);

– psychophysiological level: professional burnout syndrome; intense perception and experience of the circumstances of professional activity.

To study the influence of independent variables (individual psychological; social; psychophysiological; professional activity), referred to in this case as factors, on the dependent variable (employee personality), we used R. Fischer's one-factor analysis of variance. Based on the results of factor analysis, a working scheme of factors influencing the development of professional deformation was compiled. Let's consider the results of statistical processing of indicators (Table 1).

Table 1 – Results of the study of factors influencing the development of professional deformation using R. Fischer's one-factor analysis of variance

Attribute level	Individual-psychological	Professional-activity	Social	Psychophysiological
Factor	1. Age; 2. Gender; 3. Emotional barriers in interpersonal relationships; 4. Formation of a specific type of personality.	1. Content and conditions of professional activity; 2. Work experience.	1. Marital status; 2. Behavior in a conflict situation.	1. Neuropsychic stability; 2. Professional burnout.

The presence of the above mentioned unfavorable psychological factors, individual and personal determinants can increase the influence of negative manifestations of professional activity. So, there is often a situation when an employee under the influence of stress loses the ability to perform effective professional activities without losing a sense of professional duty.

Focus group is a modern method, one of the qualitative methods of socio-psychological research, which is a group focused (semi–standardized) interview (R. Merton, G. Herzog). During the focus groups, psychological diagnostics of respondents was also carried out using the methodology "Maclean's Scale of Organizational Stress (SCO)" adapted by N. E. Vodopyanova, in order to measure susceptibility to organizational stress.

Organizational stress is understood as mental stress associated with overcoming the imperfections of organizational working conditions, with high loads when performing professional duties at the workplace in a specific organizational structure (in an organization or in its subdivision), as well as with the search for new extraordinary solutions in force majeure circumstances.

In order to obtain qualitative data on the nature and specifics of the phenomenon of "occupational deformation", we conducted a study on the basis of the Gomel Regional Tuberculosis Clinical Hospital. The study included three meetings in three different groups – a men's group, a mixed group, and a women's group. The male group included six respondents aged 35–50 years. The mixed group included six respondents aged 28–34 years. The women's group consisted of six respondents aged 35–50 years. The information was processed using content analysis.

According to the results of the diagnosis of susceptibility to organizational stress (the method "Maclean's Scale of organizational stress (SCO)" adapted by N. E. Vodopyanova), we can draw the following conclusions: among the representatives of the male group, high susceptibility to organizational stress was demonstrated – 33%; high tolerance – 33%; mixed group – high susceptibility to organizational stress was demonstrated – 71.4%; high tolerance – 0%; women's groups – high susceptibility to organizational stress demonstrated – 33%; high tolerance – 0%.

A comparative analysis of the indicators of five subscales showed that the representatives of the three groups experience the greatest difficulties in the category of "Behavior flexibility", which indicates a narrow variability of behavioral reactions, poor adjustment to the conditions of a problematic situation, a high role in the behavior of stereotypical reactions, which can significantly complicate the performance of professional tasks. Representatives of the male group, in particular, have high scores on the "Breadth of interests" scale, which indicates that there is a concentration of all vital interests only on professional activity, the absence of hobbies and other activities leads to the appearance of professional deformation. Representatives of the female and mixed groups are united by the complexity in the field of "Activity and productivity".

Based on the results of the content analysis of the data obtained, the following conclusions can be drawn: a male group consisting of experienced medical workers whose experience exceeded ten years, they emphasized the separation of the concepts of professional deformation and emotional burnout, the difference in their nature and, most importantly, in their influence on the personality and professional activity of the doctor. They consider professional deformation as an inevitable part of professional formation, that is, professionalization of a specialist, considering it as a way of psychological adjustment to stay in a constantly affecting pathological environment (constant stay in a situation of emotional stress, death of patients, etc.).

The women's group identifies the concepts of professional deformation and emotional burnout. The women's group experienced the greatest difficulties in answering questions about how individual work was preferred as a preventive measure, in contrast to the men's, who actively singled out group work. The most disadjusted group were representatives of a mixed group, an employee with no more than 5 years of work experience (high susceptibility to organizational stress – 71.4%), in this regard, we consider it necessary to draw the attention of managers to the risk of forming workaholism as a form of socially dangerous behavior for representatives of the younger generation of specialists.

However, according to the results of our research, we received information that indicates not only negative changes in the personality of a specialist (this is the interpretation of the term that prevails in the views of modern authors), but also professionally useful, that is, we are talking about professionalization of a person, her adaptation to his chosen profession.

Therefore, one of the most important tasks of psychological support of professional activity of employees is the development and implementation in practice of programs for the development of personal resources as a means of psychological prevention and correction of professional deformation. In this regard, we consider it important to consider the manifestations of professional deformation in the context of the entire personality of the employee, in his personal qualities, motivation, points of support can be found to overcome negative phenomena.

Diary therapy (by K. Adams) is a written therapy focusing on the inner experiences, thoughts and feelings of the writer. This type of therapy uses reflexive writing, which allows the writer to gain mental and emotional clarity, confirm experiences and come to a deeper understanding of himself [4, p. 25].

The method of keeping a "structured diary" was created by A. Progoff. The exercises of the diary serve as a system of supports for self-exploration, revision of one's own life history, while the receptivity to one's own "internal process" is strengthened and the adjustment to the dialogical dimension of life takes place. Now A. Progoff's intensive diary therapy is used in group and individual work with people experiencing life crises and transitional periods.

A. Progoff experimented a lot in his therapeutic work with different forms of diary keeping, and found that an unstructured diary did not fulfill its functions – to serve as a reflecting surface for the internal process of any person. The diary should have a sufficiently clear structure so that specific procedures can be identified, described and transmitted [5, p. 133].

Working with a diary as a method of psychological self-help goes beyond the medical model of psychotherapy. The diary becomes a kind of description of personal and spiritual development, a reflecting surface on which the form of subtle spiritual movements is manifested, and their specificity and direction become visible to a person. Life events turn out to be related to our values, intentions, desires, etc. in the time sequence of our preferred history. The events of the past are also being

reviewed. As this work progresses, an additional meaning appears in life. A person gets an awareness of what previously went beyond the zone of immediate development for him, something that was not possible to know before. Starting to work with a diary, a person achieves two goals: places the moment of the present in a broader perspective of the past and the future, and at the same time establish contact with the values, meanings and guiding principles of his life. At the same time, by placing themselves in this way in relation to the flow of their lives, mastering various techniques and techniques of working with a diary, people get a tool that they can use in the future. A broader, multidimensional perspective becomes available, opening up a space of possibilities.

Working with the diary, each person can move at a comfortable speed, at his own pace. Mastering the work with the diary, a person reviews his life history, establishes contact with the "inner movement of life" and adjusts himself to its harmony. A diary is a tool for harmonizing a person's life. In general, based on the results of the study and testing of the diary therapy method developed by A. Progoff, it can be concluded that this method has a great transformative potential. In conclusion, we note that at the moment work is underway to create a method of diary therapy for employees of various industries within the framework of their professionalization, which will be based on the principles of analytical psychology and the principles of a narrative approach.

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V. N. Dvorak, A. A. Petelina, J. Yu, X. Wang

DEVELOPMENT OF ADOLESCENTS' EMOTIONAL INTELLIGENCE BY MEANS OF MUSIC

The ability to manage your experience is the main essence of emotional intelligence. The skill of using empathy is also important in this aspect, since it is with the help of this technique that a person can understand the feelings of other people. Regarding the information received about the emotional situation, the individual can draw adequate conclusions and determine his strategy of behavior, which is also necessary for the full functioning of the described ability. Due to the specific usefulness of this phenomenon of the human psyche mentioned above, a number of researchers argue that emotional intelligence is a criterion for success in various fields of activity (R. Bar-On, D. Goleman, D. Mayer, P. Salovey, etc.). The components of emotional intelligence listed above actualize the need for the multilateral development of this ability. There is a large number of methods for the formation of this skill, but the most interesting are the special techniques for improving emotional intelligence with the help of musical works.

Actualization of the emotional sphere of an individual in the process of life is a fairly popular topic in modern psychological science and pedagogy. However, today much more importance in education is given to intellectual abilities than to emotional responsiveness to the experiences of people around or the observed situation. Inadequate formation of the human sensory area and the lack of interaction between emotions and the intellect leads to traumatic consequences for the psychological state, since the intellect does not properly analyze internal and external influences, resulting in an inadequate assessment of what is happening [1, p. 5].

Adolescence is characterized by biological and social changes in a person's life. In the prefrontal cortex, an intensive structural and functional reorganization takes place, as a result of which its connections with other areas of the brain change. Due to these changes, the child's psyche is characterized by increased emotional reactions, which increases the adolescent's sensitivity to the influence of society and provide emotional responsiveness to certain events. These neurophysiological changes are expressed in increased interest in peers and more productive involvement in social events.

Emotions, in their essence, are a specific phenomenon of the psyche, which primarily demonstrate the experience of a person, as well as his attitude to the world and his own worldview. There are many classifications of emotional reactions. According to A.N. Leontiev distinguishes three types of emotions: affects, directly emotions and feelings. Affects are short-term experiences. Emotions, in comparison to affects, are longer and express the individual's value judgment to an object or situation. Feelings are a specific combination of emotions associated with some object [2, pp. 49–50].

In the presence of low emotional intelligence, a person may have a poorly expressed ability to self-control in a sensual sense, to understand the emotions of other individuals, as well as to distinguish and differentiate their own emotional reactions, which significantly hinders adequate communication with the surrounding society.

With the help of characteristic musical means, a person is able to model specific emotional experiences, which is a specific foundation for the successful formation of emotional intelligence. The development of emotional intelligence through musical techniques has a very productive effect on the ability to differentiate one's own emotions. The skill of empathy is also updated, since the developing ability of a teenager to understand the composer's emotions embedded in a piece of music later helps to understand the interlocutor's emotions in the course of communication. It is also important to develop the skill of controlling one's own emotional reactions, since in this case the ability to deliberately demonstrate a certain emotion plays a significant role [3, p. 98].

In the process of studying these characteristics of emotional intelligence, candidate of pedagogical sciences N.A. Rybakova in her scientific works developed her own method of emotional-associative interpretations, the essence of which is to improve emotional intelligence through music using associative thinking.

O.N. Rybakova notes that the individual perception of a certain artistic image is of great importance for the development of emotional intelligence by means of music. The image itself in musical art consists of two components: invariant and variable. They allow a person to show their emotional experiences through the perception or performance of a particular piece of music. The first one is characterized by an adequate interpretation of the artistic image of a particular work, which was conveyed by the composer, from the standpoint of his own life experience. The second is an individual subjective assessment by an individual of a particular piece of music. It is with the help of the variable component that the interaction between the composer and the person who perceives or performs the work takes place, during which a holistic creative image is created [4].

The results of a theoretical study of the topic of the influence of music on emotional intelligence showed that the main factor of influence is the intonational component of musical works. Of particular importance in this matter is the possibility of expressing one's own emotions during the performance of musical compositions and the presence of a certain life experience of the individual.

As a number of authors note, the relationship between musical works and emotional intelligence in a teenager is characterized primarily in the level of development of the emotional-sensory sphere of the child, his temperament, communication skills and upbringing, since it is with the help of these

characteristics that a productive perception of musical works takes place. With the help of empathy and the ability to feel the intonation component of works, worldview and the level of abilities for social interaction, there is an individual perception of various musical works.

Based on the foregoing, our correctional program is based mainly on the development of emotional intelligence through music, which allows the individual to develop emotional responsiveness in interpersonal and intrapersonal terms.

For the successful development of emotional intelligence by means of music, a special correctional program was created, which includes passive and active perception of musical images, work with associations, self-expression through creative improvisation, group discussions, visualization and reflection.

The purpose of the correctional program was chosen: increasing the level of emotional intelligence in adolescents by means of music, creating favorable conditions for the psychological support of participants, teaching adolescents empathy towards other people, developing the skills to use the received emotional information to solve problems, teaching techniques for regulating their own emotions, forming adequate assessment of their own emotional feelings.

When developing the program, we modified the methods of N. A. Rybakova, V. V. Kovaleva, T. N. Obraztsova, T. I. Smirnova, V. Yu. Bolshakova, L. F. Ann, I. V. Vachkova, M. Kipnis, E. V. Sidorenko, O. V. Evtikhova, K. Fopel, N. V. Tseng and A. G. Gretsov.

This program is a series of group and individual lessons. The age of participants in the correctional program is about 14–16 years. Duration 3–6 months (depending on intermediate diagnostic results). The frequency of classes is 1–2 times a week. The duration of the lesson is 1.5–2 hours. The number of students in a group is 10–15 people. The results are shown in Table 1.

Table 1 – The results of the study of emotional intelligence after the correction program

Components of emotional intelligence	Efficiency test data using G-test signs	Efficacy test data using the Wilcoxon T-test
Interpersonal emotional intelligence (according to the questionnaire EmIn D. V. Lyusin)	G=3, p=0,00014	T=10,5, p=0,000034
Intrapersonal emotional intelligence (according to the questionnaire EmIn D. V. Lyusin)	G=4, p=0,000090	T=24, p=0,000023
General emotional intelligence (according to the questionnaire EmIn D. V. Lyusin)	G=3, p=0,00014	T=21, p=0,000017
Integral emotional intelligence (according to the method of N. Hall for assessing "emotional intelligence" (EQ questionnaire) adapted by E. P. Ilyin)	G=3, p=0,00014	T=13,5, p=0,000008

Checking the effectiveness of the described correctional program showed that the dynamics of the development of emotional intelligence by means of music and its components is confirmed at a statistically significant level (the results are illustrated in Table 1). The expected result of the correctional program was confirmed.

The results of this study can be applied to the use of psychological support for adolescents in order to increase the level of emotional intelligence. The developed program will be useful for teachers of additional education as part of the development of students' understanding of the musical image, as well as for performers of works on stage.

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V. N. Dvorak, A. A. Petelina, D. Sun, M. Yao

GENDER FEATURES OF EMOTIONAL INTELLIGENCE

This scientific work is devoted to the study of such an urgent problem of modern psychological science as emotional intelligence and its gender characteristics. The authors formulate the basic concept of emotional intelligence, consider the historical aspect of this ability of individuals, study the differences in this phenomenon of the human psyche in the gender area, and also analyze the research carried out in this area.

The formation of scientific knowledge about emotional intelligence is rapidly improving. This fact is characterized by the presence of large-scale studies in various areas of manifestation of this ability. One of the topical issues of studying the relationship between emotions and intelligence is the analysis of its gender characteristics. The gender aspect is mainly of interest because it reflects the impact on human behavior of certain socio-cultural and biological factors.

Scientific research on emotional intelligence began to be carried out only at the end of the 20th century. The formation of this term was preceded by a large number of diverse theories and concepts, but the formation of the main foundation for improving scientific hypotheses took place in ancient times. The control of feelings and the correct setting of the mind was one of the main tasks of that period, which had an educational character and was expressed in the form of moralizing. For example, the laws of Hammurabi, Orthodoxy (where the mind becomes of great importance in accepting the truth, but it is meaningless if it exists without interaction with the heart) and Aristotle's Rhetoric (in this book, the author discusses not only the problem of beauty, but also studies in detail the affects).

Along with the development of knowledge about psychology, beliefs about the functioning of the intellect and emotions in general change dramatically, but for a long time they have been studied separately. A large number of hypotheses regarding intelligence are created, for example, the two-factor theory of Ch. Spearman, and later the concept of L. Thurstone is developed, the main statement of which was the idea of human intelligence as a certain sphere of mental operations, which includes 7 types of potencies. The assumption of the versatility of the manifestation of intelligence was later reflected in the works of H. Gardner, where he argued about the plurality of its properties. However, he considered the intellect not as a separate area of the functioning of the human psyche, but as a special integrated phenomenon that includes intrapsychic and personal abilities.

In the period of the 1970-1980s, a position was put forward that emotions are one of the subsystems of consciousness. F. Danesh puts forward the idea of the existence of a relationship between cognitive processes and emotions, and L. Spitz emphasizes that emotions are in some way ahead of thought processes.

The term "emotional intelligence" was introduced in 1986 by V. L. Payne. Nevertheless, the global study of this phenomenon began with the scientific work of J. Meyer and P. Salovey, where the first model of emotional intelligence was described [1].

A great contribution to the popularization of this issue was made by D. Goleman, who devoted a separate book to this phenomenon of the human psyche. In his book, Goleman analyzes various characteristics of emotional intelligence, and also formulates his interpretation of this concept. The author defines emotional intelligence as a special ability to control one's own emotions and develop motivation for activity. It should be noted that D. Goleman includes five abilities in emotional intelligence expressed in empathy, maintaining relationships with people, designing certain actions to achieve a goal, managing one's emotions and finding cause-and-effect relationships between one's emotions [2].

The influence of the social factor on the manifestation of the gender aspect of emotional intelligence. The social factor is represented by a complex of certain samples that regulate the mental activity of an individual in various activities, as well as by the peculiarities of education. Of no small importance in this case is the absence or presence of parents' attitude to the child's compliance with the required criteria for a certain gender role [3]. This assumption is confirmed by many scientists. I. N. Andreeva argues that stereotypes play a decisive role in the differences in emotional intelligence, and also notes that expression is fully associated with the ability to control one's emotions. However, conscious regulation of emotions is accompanied by suppression.

Regarding expression, many studies show that boys and girls explain their negative emotions differently. Men associate their behavior with the circumstances of a certain situation, and girls, on the contrary, with personal characteristics [1]. Such specific reactions to I. A.'s own outbursts of anger. I. A. Furmanov explains the influence of social stereotypes on a person. The essence of these standards is the assertion that girls should not demonstrate aggressive behavior expressed, for example, in fights. The consequence of this belief is the use of different models of aggressive behavior: men more often use physical aggression, women – indirect [4].

The influence of the biological factor on the manifestation of the gender aspect of emotional intelligence. Differences in the structures of the brain play an important role in the basis of biological factors influencing the emotional intelligence of a person [3]. A. S. Anokhin and O. A. Tokarev indicate in this matter the importance of the limbic system, cortical control, the physiological reactivity of the body and the characteristics of higher nervous activity [5]. As a result of a detailed study of the relationship between intelligence and emotions, it was determined that all its properties depend on the activity of the cerebral hemispheres. A number of researchers argue that the right hemisphere of the brain is responsible for the perception of the emotional reaction of others. The voluntary emotional response is controlled by the left temporal lobe of the brain, while the involuntary response is controlled by the right lobe.

Regarding the problem of structural features of the cerebral hemispheres that affect the functioning of emotional intelligence, an empirical study was carried out by L. K. Antropova, V. Yu. Kulikov, and A. A. Osintseva. According to their data, the emotional intelligence of women is much higher than that of men. However, the authors note that the intrapersonal properties of emotional intelligence and its rational component are better developed among male representatives, while the emotional component prevails among female representatives, which is more expressed in interpersonal relationships. As a result, it was also revealed that the emotional intelligence of both sexes depends to varying degrees on the activity of the right and left hemispheres of the brain [3].

Gender differences in emotional intelligence. In his book *Gender Psychology*, S. Berne gives a detailed assessment of the influence of social factors on the difference between this phenomenon of the human psyche between men and women. Considering the emotional state in two areas (empathy and expression), S. Berne concludes that differences in the manifestation of these characteristics are mainly associated with stereotypes that steadily regulate human behavior throughout life. At the same time, the author emphasizes that in most scientific works there is a great emphasis on identifying differences rather than similarities [6].

The differences between a man and a woman are emphasized by N. Eisenberg, linking this fact with the more intensive growth of girls in adolescence, explaining this by the fact that girls mature morally earlier than boys. Another difference is noted by T. P. Gavrilov in terms of the fact that such forms of empathy as empathy and sympathy are tolerated by children of both sexes in different ways, for example, in relation to peers, empathy was more manifested in girls, while sympathy dominated in boys. However, in a similar situation with adults and animals, empathy was more manifested in boys, and sympathy in girls [7].

Yu.V. Davydova, revealed that in terms of "understanding emotions", girls scored much higher than boys. The author emphasizes that throughout the entire teenage period, the development of the emotional sphere in girls is more quantitative than qualitative [8].

Conclusion. Analysis of the gender aspect of emotional intelligence is very popular in modern psychological science. This fact is explained by the presence of a large number of studies on this issue, as well as the intensive development of theoretical concepts of this topic. However, I.N. Andreeva claims that in terms of studying the phenomenon described above, there are a lot of contradictions due to the use of various methods in experiments, and, so far, only the assertion is known that the understanding of emotions in girls is much better developed than in boys. The rest of the differences are more of a qualitative nature. Men and women, for the most part, experience certain events in the same way, but explain them differently. Most often this happens because of gender roles and stereotypes, which, in most cases, regulate a person's life [1].

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E. E. Koshman

FORMATION OF ECOLOGICAL CULTURE OF HIGH SCHOOL STUDENTS IN THE CONDITIONS OF PROFILE EDUCATION

The article discusses the structure of the ecological culture of high school students in the context of specialized education, reveals its components, functions, approaches. Attention is focused on the design and use of various pedagogical technologies to solve the problems of teaching, educating and developing the personality of students.

In the course of its development, mankind has accumulated a complex of various problems, among which one of the key places is occupied by the global environmental crisis. Among the most important causes of the environmental crisis, the following can be distinguished: extremely low environmental culture of society, gaps in environmental education, environmental incompetence of many specialists in various fields of production, etc. Therefore, the environmental crisis cannot be considered only as a result of some single mistake, an incorrectly chosen strategy technical or social development. This is a reflection of the deep crisis of culture, thinking and activity, covering the whole complex of the relationship of people with nature, society and with each other. It becomes more and more clear that changes in technology, economic and social relations are not enough, it is necessary to revive the intellectual potential of Belarus, increase the level of environmental culture of the individual and society.

The global problems of our time force a person to look for ways to save human civilization in the future. This led to the need to intensify environmental science and improve the effectiveness of environmental education and upbringing of the younger generation. In the Concept of continuous education of children and young students in the Republic of Belarus, a new social requirement has been put forward to one of the central places – the formation of an ecological culture of the individual. In this regard, the most important pedagogical task of the modern school is the purposeful formation of the ecological culture of students. School education in the modern period has a global task – the education of an environmentally literate, cultured person who is able to find the right solution to the problem of the relationship between nature and society, man and the environment. The program notes that the upbringing of the ecological culture of the individual is determined by the universal significance of nature for man and society and includes knowledge about the components and their relationships in the «man–society–nature» system, as well as a moral and aesthetic attitude to nature [1, 2].

At present, ecological culture is one of the valuable social standards (patterns of activity). How important this field of activity is becoming for humanity as a whole is evidenced by the fact that recently many prominent figures of our time have begun to turn to it more and more often, seeing the negative aspects of scientific and technological progress, such as academicians A. D. Sakharov, B T. Likhachev, N. N. Moiseev and many others. The beginning of everything was laid at the end of the 19th – beginning of the 20th century by the works of K. E. Tsiolkovsky, V. I. Vernadsky, Teilhard de Chardin, E. Zyus, A. L. Chizhevsky, N. A. Berdyaev and many others, who in the 80-1990s – 1990s were supported and developed in fundamental pedagogical research on environmental education by I. D. Zverev, I. T. Suravegina, A. P. Sidelkovsky, E. A. Turdikulov, A. N. Zakhlebny, I. V. Tsvetkova and many others.

In many scientific and methodological works devoted to this topic, the term "ecological culture" is widely used. In the scientific and methodological literature, the study of ecological culture is carried out in two aspects: firstly, being part of a general culture, ecological culture is a process associated with the development, building up of knowledge, methods of activity, technologies and experience of interaction between man and nature, as well as the transmission of these values in the reproduction system from one generation to another in the form of moral imperatives. Secondly, ecological culture is the result of upbringing, education, expressed in the ability of a person to achieve harmony in relations with the environment. From this point of view, ecological culture can be considered as part of a general culture, reflecting the criterial means, methods and results of human interaction with the environment, expressed in increasing the efficiency of natural and artificial system genesis in human activity [3]. The activity nature of culture in general is directly related to the process of development of ecological culture in particular.

Considering culture as a set of values, knowledge, norms, samples, ideals, ways of thinking, it should be noted that the model of the ecological culture of the personality of high school students should be «designed» in such a way that the most diverse and comparable measurements are possible, characterizing the degree of approximation of students to normative characteristics of human ecological activity.

Under the ecological culture of high school students, we understand a part of the general culture of the individual, the integrative basic personal quality of which specificity lies in the harmoniously developed need-motivational, thought-activity, cognitive, axiological and activity-behavioral spheres

that provide environmentally sound interaction of students with the outside world (natural and social environment, people, oneself) [4].

On the basis of modern theoretical and methodological research and based on the content and essence of environmental activity, the following components of the ecological culture of high school students can be distinguished: need-motivational, cognitive, axiological, thought-activity and activity-behavioral. The normative structure of the content of these components is logically conditioned, complete, systemic and sufficient for students to carry out natural human activity. It should be noted that all structural components of ecological culture are formed in close unity, which makes it possible to avoid a gap between the consciousness and behavior of students, word and deed, beliefs and activities [4].

The ecological culture of high school students is characterized by the following functions: motivational-incentive, cognitive, nature-protective and nature-saving, co-evolutionary, creative-transformative and developing. The functioning of the ecological culture of the individual is carried out through its constant reproduction and implementation in the educational process and social practice. As a cultural phenomenon, this type of personality culture develops through the mechanism of inculturation, i.e. due to the integration of new culturally significant artifacts (environmental values) [5]. For cultural and value activities, the process of inculturation is a fundamental mechanism in the development of the ecological culture of high school students and includes three levels of formation of the ecological culture of the individual. These include: spontaneous-empirical, reproductive and productive.

The considered theoretical construct of the ecological culture of high school students is the object of transformation in the projected educational process. A successful solution to this problem is possible if the educational process aimed at the formation of an ecological culture of high school students is based on modern pedagogical axiology and environmentally significant values. The value bases of ecological education for high school students should be: humanization and humanitarization, spiritual and moral values, creativity, environmental responsibility, values of environmental ethics, biocentrism, coevolution, ideas of nature and culture conformity of education. In accordance with this, the procedural part of environmental education in the context of sociocultural evolution is to make new environmental values personally significant for students at the senior level of school education [3].

Modern theoretical provisions make it possible to characterize the phenomenon of the process of development of the ecological culture of high school students as a complex interconnected system of its relations to the natural and social world, to itself. The main content of the process of formation of ecological culture is to create conditions that encourage students to consciously master these relations, to choose moral positions in understanding the uniqueness and originality of everything that exists on earth, the perception of the natural world as a human habitat.

The formation of the ecological culture of high school students is carried out on the patterns of organization of the educational process associated with its internal structure: target, need-motivational, content, operational-activity, emotional-volitional, control-adjusting and evaluative-effective. Based on these provisions, the process of forming an ecological culture, as an integrative personal quality of students, includes the following: the formation of students' need to develop a particular quality; their inclusion in active cognitive activity to master knowledge about the essence of the quality being formed, the ways of its manifestation and the development of appropriate feelings, views and beliefs; practical formation of skills, habits and habits of behavior associated with the developed qualities; development of abilities to manifest strong-willed efforts to overcome the difficulties and obstacles encountered associated with the observance of certain norms of behavior.

The most effective process of development of ecological culture of students is carried out on the basis of cultural and activity approaches. Recently, in environmental education and upbringing of students, scientists are increasingly using a cultural approach in their research, which is based on the position that the environmental education of schoolchildren is understood as a purposeful entry into the context of culture with the help of a teacher and the development of the ability to live in a modern society, consciously building a life worthy of a man. This approach is the methodological basis for the content of environmental education. It allows you to make culture the content of education, and

self-education the process of cultural comprehension and cultural creativity. The activity approach is connected with the consideration of activity as a cultural and historical form of activity for the transformation of nature and society. From the standpoint of an active approach, the possibilities of cognition and transformation of the surrounding world are determined, first of all, by the means and methods of our thinking and activity. The implementation of cultural and activity approaches as a methodological basis in the process of forming the ecological culture of high school students in the educational process is carried out through the principles that specify them [3].

A widespread and effective pedagogical tool in the educational process of a modern school is a technological approach, i.e. designing and using various pedagogical technologies to solve the problems of teaching, educating and developing the personality of students. According to the definition of O.S. Anisimov, technology is a description of the characteristics of the means and methods of their application, necessary for the transition of the source material (object) of activity from one intermediate state to another, up to the final product. The essence of game design activity lies in the fact that it is a set of certain design actions initiated by educational and environmental needs, aimed at the knowledge, reproduction and creative solution of practice-oriented tasks implemented in the form of projects.

The results of the research confirm that the «project method» to a certain extent helps to implement the ideas of subjectness, subject-subject relations, collective mental activity, and reflexivity in the educational process. Thanks to the pedagogical possibilities of the «project method», the student can learn: to argue his position; oppose the opinion of the interlocutor; pose a problem, tasks; find solutions; plan, analyze, predict; work independently with literature; be a responsible partner, respect the opinion of the interlocutor; be a leader and performer; take a creative position [4]. An analysis of the literature shows that the «project method» is universal and can be applied at all levels of school education and in the process of teaching various school subjects. However, the historical experience of applying this method in the domestic and foreign schools convinces us that it is impossible to evaluate any of the methods as the only true one and replace all the others with it. Only by maintaining a balance in the arsenal of teaching methods, a modern teacher will be able to competently solve the tasks. In our study, this method was the main one in designing the pedagogical technology for the formation of the ecological culture of high school students, but was used in close conjunction with the information-task form of teaching/teaching in school practice. Note that the implementation of this method was carried out in game modeling.

In terms of content and procedure, the formation of the ecological culture of high school students in the process of game design seems to us to consist of five stages, containing the characteristics of the means, forms and methods of activity, focused on the formation of a certain component of the ecological culture of students, closely interconnected with a holistic pedagogically transformed phenomenon. Based on these theoretical and methodological foundations, we have identified the main stages of pedagogical technology, which reflect the strategic plan for transformative pedagogical activity. These include the following: propaedeutic-diagnostic, scientific-cognitive, practical-activity, integration-synthesizing and final-effective. It should be noted that each stage is characterized by a goal, technological characteristics and an intermediate result, which in general allows you to get the result and achieve the goal.

The developed pedagogical technology is realizable and reproducible in educational practice at the senior school level, subject to a number of conditions that ensure the effective implementation of the designed purposeful pedagogical process. The following are such necessary and sufficient conditions: personnel, organizational and managerial, scientific and methodological, educational and methodological, psychological and logistical support. It should be noted that these conditions form a system of resource support for the effective operation of the designed pedagogical technology.

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E. E. Koshman

GAME FORMAT PROJECTING IN EDUCATION

The article discusses the essence of active teaching methods and their classification. The structure of game design, its specific features and potentialities are revealed. Attention is focused on the fact that the method of game design is universal and can be applied at all levels of school education and in the process of teaching various school subjects.

The paradigmatic and theoretical and methodological foundations in the humanitarian sphere impose certain requirements on the modernization of education in the modern school. In recent decades, the problem of developing basic approaches to improving education in society has been sharply discussed in the scientific and methodological literature. The main goal of education is the development of a creative, independent, responsible personality capable of mastering and transforming the world, creating new forms of social life and culture in general. In the studies of a number of authors (A. A. Verbitsky, S. A. Gabrusevich, A. I. Zhuk, N. N. Koshel, Yu. E. Krasnov, V. N. Sternberg), the effectiveness of forms and methods of active, interactive, game-modelling, innovative, problem-based and creative learning for students. Along with this, the authors recommend using research, design, design and other teaching methods. Information methods and techniques of the program-algorithmic type in the activity methodological system have a secondary, auxiliary, additional character and are in demand as needed. With this approach, group, individual, club forms of education, a variable composition of students, and the widespread use of forms of creative organization of educational and cognitive activity are provided.

The term «active teaching methods» in pedagogical theory and educational practice appeared on the basis of reflection on the manifestation of the activity of the student (subject) in the educational process, creating conditions for his creative development. According to the ideologists of this approach, active learning methods in education are methods of activity aimed at self-development of subjects of activity. Active teaching methods, the researchers note, unlike traditional methods, contribute to the development of increased activity (sustainable and long-term) of students, based on their motivation and emotionality; intensification of the educational process; activation of students' thinking; joint activities of the teacher and students; education of a creative character; independent development of solutions based on the constant interaction of students and teachers in the process of dialogic and polylogical forms of organizing the educational process; the manifestation of the reflexive self-organization of the teacher and students in joint educational activities; development of abilities of self-organization and self-management [1].

The most common in modern pedagogical theory is the classification of active teaching methods proposed by a number of authors (O. S. Anisimov, A. A. Verbitsky, S. A. Gabrusevich, A. I. Zhuk, N. N. Koshel), where all methods active learning are divided into non-imitation and

simulation (non-game and game). In his typology of active teaching methods, O. S. Anisimov distinguishes such groups of methods as traditional, new (imitation), and the latest (developing). The author points out that traditional methods provide a translation function, the latest methods perform a developing function, and new (simulation) teaching methods can implement both those and other functions. The traditional forms of education A. I. Zhuk and N. N. Koshel include: lectures, seminars, practical classes and trainings, which provide the accumulation of knowledge and skills, as well as increasing their level. New forms of training (simulation teaching methods) ensure the strengthening of the role of thinking and the development of trainees' motivation. These forms are used within the framework of both translational (classical) pedagogy and non-classical pedagogy. They are divided into non-game (case analysis), simulation exercises, action according to instructions, analysis of documentation) and game (business game, role-playing, game design, internship with the performance of roles). The latest forms of education (innovative games, organizational-activity games (OAG), organizational-thinking games (OTG)) provide the formation of an intellectual culture and a culture of self-development [2].

As the analysis of the typology of active learning methods has shown, game design refers to new forms of learning (simulation, game teaching methods), characterized by an increase in the importance of thinking and the development of students' motivation in the game process. The specific features of simulation (game) classes are the presence of a simulation model of the process under study, simulation of individual and (or) joint activities. In the process of these classes, intensive mental communication of the subjects of the educational-game process (teaching and trainees) is carried out in the performance of roles and (or) decision-making. Game design in education is an imitation game type of activity, where the participants of the educational process perform certain roles (sociocultural, production and game) in solving educational problems and environmental problems in the process of developing various educational projects. It is based on the essential characteristics of the project activity of students, the «project method» as a promising means of implementing a new activity-reflexive model of education aimed at exploring the world around us through self-knowledge and carried out in a playful way of learning.

In the special literature on active learning, this method is little studied and underdeveloped, which does not allow to effectively realize its potential as a pedagogical tool in educational practice. The reflection of the scientific and methodological literature shows that there are no special studies devoted to the disclosure of its essential characteristics and methodological foundations for its use in practical pedagogy. Therefore, we will dwell on the disclosure of its specific features as a method of active learning.

In intellectual and socio-cultural terms, design is designated as an absolutely universal and independent type of activity that must be mastered by students and can potentially be used in school practice to solve any educational problems, in particular, the formation of an ecological culture of high school students. The word «project» comes from the Latin projectus, which literally means – «thrown forward», «protruding», «stretched», «conspicuous», from the French projef, that is, «a realistic plan for the desired future».

Project activity as a socio-cultural mechanism that develops over time, an act of changing the world, focused on implementation in material, technological and organizational conditions, with a single approach, is characterized by a variety of areas of its application and is especially in demand in the education system at its various levels. The essence of project activity lies in the fact that it is a set of certain design activities initiated by sociocultural (including educational) needs, aimed at cognition, reproduction and creative solution of practice-oriented tasks implemented in the form of projects. In modern design and research technology, the «educational project», notes E. A. Rotmirova, is understood not as a rigidly formulated task for the student, aimed at obtaining a visually representable result, derived through their independent group creative activity, but actually given and discussed topics together, goals, results, conditions for organizing independent-group activities within the framework of the project and the material and technical equipment of this activity [3].

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Based on the study of the essential characteristics of this method based on the materials of pedagogical theoretical and methodological research and the results of its use in educational practice, the potentialities of the project method were identified, which are as follows:

– helps to educate a thinking, independent, ready for joint activity student, who understands that knowledge is not an end in itself, but a means of developing him as a person;

– helps the student himself to find information, contributes to his inclusion in the intellectual creative search. For a student, education becomes an organic, natural thing that has arisen as a way to realize their own needs;

– contributes to the creative work of students in solving specific vital situations, as students independently search for material, study and use additional sources of information;

– focuses the entire educational process on the student, his interests, life experience, individual abilities;

– affects the emotional sphere of the child, enhances the motivation for learning, develops individual responsibility of students for specific work, teaches partnership, cooperation, interaction of students with each other and with the teacher.

An analysis of the literature confirms that the project method is universal and can be applied at all levels of school education and in the process of teaching various school subjects. However, the historical experience of applying this method in the domestic and foreign schools convinces us that it is impossible to evaluate any of the methods as the only true one and replace all the others with it. Only by maintaining a balance in the arsenal of teaching methods, a modern teacher is able to competently solve the tasks. Summarizing the above, we can conclude that game design combines the features of ALM, in particular the game method, as well as the characteristic pedagogical features of the project method. In accordance with this, the distinctive features of game design include:

– goal-setting in game design is aimed at working with the future, at the development of the designed object and subjects of educational activity;

– the teacher takes different positions in joint activities with students depending on the learning situation, scenario (partner, assistant, consultant-coordinator, theorist, methodologist, regulator-organizer, manager, psychologist, independent expert, etc.);

– the student takes the position of the subject of educational activity;

– pedagogical interaction is based on subject-subject relations, which helps to increase motivation, activate thinking, emotionality, interest, activity and responsibility of students in the learning process; manifestation of creativity and independence in making decisions; formation of abilities to effectively solve educational tasks and problems; the formation of thought-communication culture of students; intensification of the educational process; reflexive self-organization of subjects of educational activity;

– the educational environment is characterized by creativity, productivity, information content, saturation with modern knowledge, collective mental activity, cooperativeness, dialogic and polylogic, interdisciplinary, integrative, multi-subject, imitation, modeling, conditionality of the educational and project situation, task-targeted form of educational activity;

– the effectiveness of game design is associated with the development of students and obtaining a product in joint learning activities.

Methodological analysis of the essential characteristics of game design shows that this method of active learning combines the features of the game method and the project method. This is a kind of implementation of project activities by students in a playful way. Therefore, it is obvious that at first, students must master the methodology and technology of game activity, and then master the project activity in the game process. Game modeling is implemented in educational practice through various gaming technologies and the design of educational and gaming complexes. Game problems in education are intensively developing and there are a large number of different types of games. In the education system, for the formation of a gaming culture among students, it is necessary to use the following types of gaming technologies: analysis of problem situations, interactive teaching methods, role-playing games, didactic games, business games, organizational and educational games, organizational and pedagogical games, organizational and mental games and organizational and activity games.

Game design in education is based on the modern pedagogical paradigm, values, theoretical patterns and methodological foundations of the designed educational process. It should be noted that it must be used in close connection with the information-task form of training. It is implemented through such various educational projects in gaming activities as subject, practice-activity, research, innovative and complex. Let us reveal the essence and characteristics of each type of projects in education.

The subject project can be used in the process of teaching various (science and humanities) disciplines in education. Tasks of the subject project:

– the formation of the need-motivational sphere of the personality of students;

– systematization of subject knowledge in various (science and humanitarian) disciplines in education;

– transformation of the acquired subject knowledge into practical methods of activity in one or another sphere of subject existence;

– development of mental activity of students.

The practical-activity project is aimed at mastering (formation and improvement) cultural norms and methods of a specific objective activity. Its tasks are:

– the formation of the need-motivational sphere of the personality of students to master the mechanism for the implementation and development of a specific objective activity;

– consolidation and systematization of students' knowledge on a multi-subject and multi-disciplinary basis in the system of cultural and historical forms of practical activity (industrial production and reproduction system);

– integration of subject knowledge in various disciplines in education;

– mastery of specific methods of practical activity;

– development of a culture of mental activity of students.

The research project is aimed at mastering the laws of research activity by students. Research project objectives are:

– the formation of the need-motivational sphere of students for the knowledge of the world, its transformation on the basis of universal values and knowledge;

– systematization and updating of subject knowledge and their updating;

– mastery of the methodology and methodology for conducting scientific research in various subject areas (on the basis of academic disciplines);

– obtaining new disciplinary knowledge in various academic subjects and areas of human activity;

– application of new disciplinary knowledge for solving practical problems in various activities;

– development of methodological culture of students.

The essence of an innovation project is to develop innovative and creative proposals, initiatives, innovations aimed at improving the activities and life of the region, country, world. Tasks of the innovation project are:

– to explore topical problems in the activities and life of the region, country, world;

– put forward an idea and a mechanism for designing innovation and innovation aimed at solving a fixed problem;

– mastering the methodology of innovative activity;

– to form knowledge, values, methods and norms of activity, the ability to design and develop an innovative project;

– development of a culture of innovative mental activity of students.

The complex project is aimed at solving practical problems (all the rest are about solving practical problems) based on an integrative approach. These problems are solved in a multi-subject, multi-disciplinary and integration way in the system genesis of the structural components of innovation activity: research activity (discovery of new subject, disciplinary knowledge), project activity (associated with the use of knowledge and the construction of a practical innovation – an object based on knowledge), practice-oriented activity (used this practical innovation and the assessment of the practical effectiveness of this object is carried out). Tasks of the complex project:

– mastering the methodology of an integrated approach to solving practical problems in various activities;

– systematization and integration of different disciplinary knowledge and values;

– mastering the innovative activity of students in various subject areas of the socio-economic development of the country;

– mastering the ways of solving urgent practical problems in different types of activities on an integrated basis.

– development of a culture of reflective mental activity of students.

Thus, the development and implementation of game design technology, which can be represented by separate projects or a complex, a system of educational projects for one or a cycle (for example, humanities) of academic disciplines, will allow students to carry out the activity and personal development of students in education.

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E. E. Koshman, A. M. Koshman

CURRENT VECTORS OF MODERNIZING SCHOOL EDUCATION

The article reveals the main theoretical and methodological vectors of the modernization of modern school education. The social, psychological and pedagogical aspects of ensuring the interests of participants in the educational process at school are considered. The characteristic of the main types of responsibility of the teacher. In conceptual terms, disciplinary procedures are disclosed in the school.

Dynamic changes in the socio-economic situation in the developed countries of the world, the aggravation of national and universal problems required a rethinking of the role of education. The inseparable connection of education with the processes taking place in the economy, society, in all spheres of practical and spiritual human activity has become apparent, the importance of the educational sphere as a mechanism for the development of society has increased. Education is a relatively independent sphere, which under the current conditions, with appropriate policies, can set an impetus, accelerate the development of the region, and move society forward. Education can and should become an integral mechanism for the consolidation of the nation and the development of national identity – a phenomenon through which each nation comes to realize its historical destiny, its place and role in the development of world civilization and culture. The identification and definition of one's own goal and one's own interest is becoming today an effective factor in the self-organization and revival of the nation, the principle of the social policy of the state of Belarus.

The school should become the most important factor in the humanization of socio-economic relations, the formation of new life attitudes of the individual. The result of the humanistic orientation of the pedagogical process is modern educated, moral, enterprising people who independently make

responsible decisions in a situation of choice, capable of cooperation, distinguished by dynamism, mobility and constructiveness. A modern school is a school that meets the goals of advanced development. Its most important task today is to provide students with the opportunity to choose their own educational trajectory, develop their thinking and emotional perception of reality, and help them become full-fledged citizens of the country. Students should be involved in research projects and creative activities in order to learn how to invent, understand and master new things, express their own thoughts, make decisions and help each other, articulate interests and recognize opportunities. It employs creative teachers who are open to everything new, ready to help their students find themselves in the future, become independent, creative and self-confident people.

Management of a modern school is carried out by managers (administration) on the basis of subject-subject relations. It is a wide information space with the use of information technology in the educational process. This is the creation, development and effective use of managed information educational resources, including personal user databases and data and knowledge banks of students and teachers with the possibility of widespread access to work with them. The methodological analysis of scientific and methodological literature and educational practice shows that the following are the strategic directions for improving modern school education: social, psychological and pedagogical aspects of ensuring the interests of participants in the educational process at school; social and pedagogical responsibility of teachers and administration in a modern school; pedagogical.

Let us reveal the essential characteristics and main content lines of these vectors of modernization of modern school education in our country. The first vector concerns students as subjects of educational and cognitive activity. The most important aspect of the interaction and relationship between the student and the school is the formation of the need-motivational sphere of the individual, where interest is one of its fundamental structural elements. Before proceeding to the description of the interests of the participants in the educational process, we, first of all, need to consider the essence of the concept of «interest». In psychology, interest is understood as an emotionally colored attitude aimed at some activity or some object, caused by a positive attitude towards the subject (L.S. Vygotsky). This is a specific form of manifestation of a cognitive need, which ensures the orientation of the individual to the realization of the goals of activity and thereby contributes to the orientation of the individual in the surrounding reality.

The concept of interest is defined as a need attitude or a motivational state that encourages cognitive activity, which unfolds mainly in the internal plane. Interest is one of the permanent and powerful motives of human activity. Interest is the real reason for action, felt by a person as a particularly important reason. Interests are classified by content, that is, by their subject relatedness; by the breadth of subject content; in depth, according to their rootedness in the system of needs relations of the individual; on sustainability; by strength; by duration [1].

Interest occupies an intermediate position in the increasingly complex series of need-based relations of a person to the world: it arises on the basis of a cognitive attraction (desire) to a particular area of reality and in the process of its development can develop into a stable personal need for an active, active attitude towards one's subject, into a tendency. Based on the foregoing, it can be said that interest qualitatively affects the inclusion and sustainable implementation of activities.

The need-motivational sphere of the personality acts as a «trigger» for the implementation of the criteria-based educational process at school. Participants in the educational process at school are students, teachers, legal representatives of students. Let us consider the social and psychological and pedagogical foundations for ensuring the interests of students in the educational process.

In accordance with the modern pedagogical paradigm, students act as the subject of educational and cognitive activity. The most important direction of improving the educational process in a modern school is the professionalism of teaching staff [2]. A teacher in a modern school is a person who conducts teaching or educational work (teacher, educator, lecturer, associate professor, professor, etc.). The teacher acts as the subject of pedagogical activity, in connection with which, a number of requirements are imposed on him. One of them is the responsibility of the teacher.

The concept of "responsibility of a teacher" is considered as a certain attitude to reality, as a property or quality of a person, manifested in pedagogical activity [2].

The responsibility of a teacher is a personal quality, which consists in the realization of the moral need to comply with social norms (in particular, personal ones), as well as the ability of an individual to adequately perceive a fair assessment of committed actions, to reflect and carry out an examination of their actions from the standpoint of humanity and a clear conscience. This professional and ethical quality is expressed in the willingness and ability to foresee the results of pedagogical activity and hold them accountable. To do this, the teacher should be characterized by: possession of the content of academic disciplines; possession of modern theories and technologies of training and education; knowledge and real consideration of the factors that ensure the success of pedagogical activity. The main types of responsibility of the teacher are: social, pedagogical, personal, legal, ethical and material. The presence of a responsible teacher in a modern school is the key to its success and prosperity in the future.

Educational law and its development are a promising direction in the modernization of the school space. The modern school is a socio-cultural institution that has a complex structure and functioning mechanism. The most important element of the activity of the school, as a pedagogical system, is the organizational and managerial activity of its administration [3]. At the same time, the inadmissibility of the command-administrative style of leadership, which suppresses the initiative, activity of team members, and individual freedom, is noted. At the same time, the importance of discipline is emphasized everywhere, the need to combine unity of command and collegiality in school leadership, the role of the pedagogical council, trade union, parent committee, and children's self-government.

Disciplinary procedures are an internal and administrative mechanism for applying the above rules and implementing effective disciplinary measures [4]. In practice, good disciplinary procedures usually contain expected rules of conduct. In its implementation, there should be a minimum of steps that usually need to be taken within the framework of a disciplinary procedure – they are also known as the «state minimum procedure». The employer must comply with this procedure, otherwise, the dismissal (deduction) is considered «automatically unfair». The disciplinary procedure should follow the following pattern. The first step in the state minimum procedure is a written application by the employer, outlining the circumstances (for example, behavior) that were the reason for taking disciplinary actions against the participant in the educational process. The reasons why they believe that there are grounds for a disciplinary procedure can also be explained. The employer will need to investigate the existing complaint against the education participant and invite the education participant to a meeting to discuss the problem. The meeting must take place before the start of disciplinary procedures. A participant in the educational process has the legal right to invite a colleague, parents or a trade union representative to the meeting. The employer must inform the participant of the educational process about his rights to appeal the decision. The appeal procedure is similar to the disciplinary procedure. The participant in the educational process must write a letter stating the reasons for the appeal. Usually a meeting is convened with the participation of a senior leader than the one who participated in the first meeting - a participant in the educational process has the right to come to the meeting accompanied by another person. Next comes the final decision [5].

Disciplinary procedures for teachers are carried out in accordance with the legal framework governing labor and related relations, as well as regulating the professional activities of a teacher in a school. These include primarily the Code of the Republic of Belarus on Education and the Labor Code of the Republic of Belarus, as well as various legal documents of a general and local nature. In the Code of the Republic of Belarus on Education, these issues are considered in Chapter 6 «Teaching staff and other employees of educational institutions», Article 51 «Requirements for teaching staff», Article 52 «Rights of teaching staff», Article 53 «Duties of teaching staff». The basis for the «launch» of disciplinary procedures against teachers is a disciplinary offense, which is understood as non-performance or improper performance by an employee due to his fault of the labor duties assigned to him [3]. The composition of a disciplinary offense includes two elements: objectively unlawful behavior of an employee, which is expressed in the very fact of non-performance or improper performance of labor duties by him and can consist of both action (for example, appearing

at work in a state of intoxication) and inaction (for example, failure to appear to work) (the objective side of a disciplinary offense); the fault of the employee in non-fulfillment or improper fulfillment of his labor duties (the subjective side of the disciplinary offense). These elements are necessary and, at the same time, sufficient to bring the employee to disciplinary responsibility. Material damage and a causal relationship between it and an unlawful violation of labor discipline are not included in the disciplinary offense and can only affect the choice of the type of disciplinary sanction or serve, in conjunction with other conditions, as the basis for the material liability of the employee. Disciplinary responsibility consists in the application by the employer to the employee of one of the following types of disciplinary action: remark; rebuke; dismissal.

Thus, the implementation of the vectors discussed above will contribute to raising the level of school education in our country. An indicator of the effectiveness of cooperation between the administration, teachers, students and parents is the level of development of their joint activities, and an indicator of the most complete provision of the interests of all participants in the educational process is the level of effectiveness of their joint activities, as well as the level of personal development and psychological health. Teacher responsibility is a key factor in quality school education. Compliance with disciplinary procedures in the school will improve its efficiency through the qualitative implementation of the educational process. The socio-psychological service in the education system will contribute to the solution of the above tasks related to the implementation of the national strategy for the development of education.

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**MATERIAL AND TECHNICAL COMPONENT
OF EDUCATIONAL SPORTS ENVIRONMENT**

The essence of the educational physical culture and sports environment is determined, the role of its material and technical component is shown, its structure, functions and principles of organization are revealed. Designing an optimal modern educational physical culture and sports environment for each educational institution, sports will allow more efficient implementation of the process of physical education development of children and young people.

The modern educational physical culture and sports environment of educational institutions is a socio-cultural product, which in turn is predetermined by the need to create and implement a set of conditions for the optimal launch of the processes of formation, functioning and development of a person's physical culture.

In the study of the material and technical component of the modern educational physical culture and sports environment, the theoretical basis is the ecological and personal model of the educational environment developed by V. A. Yasvin [1]. According to him, the term "educational environment" should denote a system of influences and conditions for the formation of a personality according to a given pattern, as well as opportunities for its development contained in the social and spatial-objective environment. In order for the educational environment to have a developing effect, it must be able to provide a set of opportunities for self-development of all subjects of the educational process (students and teachers). This complex, according to V. A. Yasvin, includes three structural components:

– spatial and subject – premises for classes and auxiliary services, the building as a whole, the surrounding area, etc.;

– social – the nature of the relationship of all subjects of educational activity (students, teachers, parents, administrators, etc.);

– psychodidactic – the content and methods of teaching, due to the psychological goals of building the educational process.

In addition, other models of the educational environment developed by domestic scientists are heuristic:

– communication-oriented model of the educational environment, developed by V. V. Rubtsov;

– anthropological and psychological model of the educational environment, which was proposed by V. I. Slobodchikov;

– psychodidactic model of the educational environment of the school, proposed by V. P. Lebedeva, V. A. Orlov, V. A. Yasvin and others;

– ecopsychological model of the educational environment proposed by the psychologist V.I. Panov [2; 3; 4; 5].

When revealing the essential characteristics of this phenomenon, we rely on the theoretical and methodological studies of this team of scientists. The educational environment of the school is a set (system) of various kinds of opportunities provided by the educational institution to the subjects of educational processes to ensure the conditions for their full and diversified development. The material and technical component of the developing educational environment is a system of technical and subject means that serves to provide subjects with opportunities for mastering knowledge, skills and methods of activity, stimulating active cognitive activity, allowing to satisfy the needs for cognition, communication and appropriation of the basic foundations of culture.

In accordance with the essential ideas fixed in these definitions, the material and technical component of the modern developing educational physical culture and sports environment is understood as a system of technical and subject means that serves to provide the subjects of physical culture and sports activities with opportunities for mastering physical culture thinking, knowledge, values, motor skills and ways of physical culture activity, development of physical qualities, stimulating to activating cognitive and educational-motor activity, which allows satisfying the needs for cognition, communication, motor activity and appropriation of the basic foundations of physical culture.

In this definition of the concept «Material and technical component of a modern developing educational physical culture and sports environment» there is one semantic core, which is a system of opportunities for the development of students (teachers), their assimilation of physical culture knowledge, values, ways of physical culture thinking and activity. In accordance with this, the external material and technical and technological environment of physical culture and sports should create a system of actual and potential opportunities for the development of participants (subjects) of the educational process.

In accordance with the importance and significance of the material and technical component in the modern developing physical culture and sports environment, we will reveal its structure and functional purpose, which will allow us to set its structural and functional model. The composition of the spatial and subject elements of the material and technical component includes such groups of objects as: structures, premises, equipment, inventory, books, clothing, etc. Based on the specifics of the sphere of physical culture and sports, the composition of the spatial and subject elements of the material and technical

component of the modern educational physical culture and sports environment includes such groups of objects as: buildings and premises, equipment, information carriers, equipment.

Structures and premises are divided into open and covered, and according to their involvement in educational and motor activities:

– training (gyms, sports grounds, stadiums, swimming pools, courts, gyms, shooting ranges);

– health-improving and recreational (recreation, hall of therapeutic physical culture, adaptive physical culture, physical rehabilitation, assembly halls, saunas, video and cinema halls);

– educational and household (halls, corridors, relaxons, rest rooms, dining room, showers, phytobars, etc.);

– educational, historical and cultural (museums of sports glory, offices of Olympic education).

Equipment and inventory – objects that are part of the material and technical component of the modern educational physical culture and sports environment, represent three main blocks of equipment:

– educational: educational equipment (simulators, technical devices and devices, amplifiers, thermometers, microphones, auxiliary materials and tools, musical instruments, etc.), sports equipment (balls, jump ropes, ropes, nets, weights, skis, skates, gates, bars, simulators, etc.); educational furniture (desks for students, tables and chairs for students and teachers, teaching boards, racks, cabinets, etc.);

– leisure (technical devices, guest, festive and special equipment, visual aids, sports and household equipment, furniture, etc.);

– educational and household technical devices and items to meet physiological needs (devices that ensure the operation of the catering unit, medical unit, sanitary unit), specialized furniture (sofas, armchairs, benches, chairs for halls, corridors, relaxons, rest rooms; tables, chairs, cabinets, shelving for the equipment of the teacher's room, sofas, couches, beds, cabinets used to furnish the medical unit, lockers for individual use for storing items of property, placed in a cloakroom or a room adapted for this, etc.) [4].

Information carriers – screen-sound and multimedia tools (TVs, video and audio recorders, screens, interactive whiteboards, projectors, tablets, computers, information and computer systems, etc.); visual and teaching aids (educational posters, dummies, puppets, educational stands, models, collection sets); textbooks; methodical literature; scientific and technical literature; reference books, encyclopedias, dictionaries; fiction; periodicals; virtual libraries, etc.

Equipment and paraphernalia are items of clothing (business, sports, work, special and festive); knapsacks, bags, replaceable seasonal sportswear and shoes; things; outerwear; emblems; medals; symbols; physical culture and sports signs, etc.

The composition of the material and technical component of the modern educational physical culture and sports environment, presented in the form of a blitz content, is not complete and closed for further expansion, additions and development, taking into account the emergence of new materials, furniture, equipment, teaching aids, etc., which are caused by development of science, technology and human thinking [5]. This information is the basis for further reflection, scientific research, research analytics, hermeneutic expertise and reflection, which provides ample opportunities for further progress along the experimental path in the framework of identifying, arguing, formulating and fixing the strategy (principles) for organizing the material and technical component of modern educational environment in educational institutions in the field of physical culture and sports.

The material and technical component of the modern educational physical culture and sports environment is actually the most material and financially intensive and costly. That is why the procedure of scientific substantiation of all aspects of its organization and creation is an effective tool here. The organizational matrix of this component is presented in the table. At the same time, it is expedient to compare (through definitions of concepts) the essential values of each component of the modern educational physical culture and sports environment, which shows both the significance and the specific and special differences of each [4].

The criterion for typology of the material and technical component of the physical culture and sports educational environment is: the focus on solving systemic problems of physical education and the adequacy of the composition of the material and technical component. Thus, all material and technical components can be typified according to the table. In particular, physical culture-sports-recreational facilities and premises can be used for the formation of physical culture thinking, need-motivational and value spheres of physical culture, physical culture knowledge, motor skills, physical fitness. Similarly, equipment, media, equipment and paraphernalia can be typified.

The functions of the material and technical component of the modern developing physical culture and sports environment are divided into two groups: general and special. The general functions include the following: aesthetic, spectacular, communicative, educational, educational, developing, leisure and recreational, rehabilitation and correctional, hedonistic, heuristic. The special functions of the material and technical component of the modern educational physical culture and sports environment include the following: motivating, activity-practical, applied, transformative, diagnostic-evaluative, organizational-management, information-communicative.

Principles of organizing the material and technical component of the modern physical culture and sports educational environment: expediency (the principle of reflecting the goal), transformability, modularity. The issues of designing, organizing and managing the creation of a material and technical component of a modern educational physical culture and sports environment should be dealt with by managers of various levels, ranging from members of the Government in charge of education, physical culture and sports, employees of the Ministry of Education, the Ministry of Sports and Tourism and ending with directors educational institutions, youth sports schools, physical education teachers, coaches, students and their parents and relatives. Designing an optimal modern educational physical culture and sports environment for each educational institution, sports will allow more efficient implementation of the process of physical education development of children and young people.

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A. N. Krutolevich

EMPATHY AND SOCIAL SUPPORT FOR STUDENTS-PSYCHOLOGISTS

The article examines the role of social support in the life of a modern person, its function, the main explanatory models of social support. In connection with social support, the phenomenon of empathy is analyzed. A study has been conducted that has shown a reliable direct relationship between the level of social support and empathy of psychology students. This can be explained both by professional quality and by the fact that most psychology students are girls.

The formation of stress resistance is a guarantee of a person's mental health and an indispensable condition for social stability, predictability of the processes taking place in society. Increasing loads, including mental ones, on the nervous system and psyche of a modern person lead to the formation of emotional stress, which is one of the main factors in the development of various diseases. At present, the concern for maintaining mental health and the formation of stress resistance of a modern person is coming to the fore.

Social support largely protects us from the negative effects of stress. Social support is a sense of belonging, a feeling that you are accepted and loved for who you are, and not because you can do anything for this person. This means that you have friends with whom you are spiritually close and with whom you share your joys, problems, fears and love. Good interpersonal relationships contribute to the development of empathy, which has a distress-reducing effect. Social support is inextricably linked to empathy. Each person has a need for communication, emotional contacts, the desire to be among people. The high need to be accepted in the society of other people is very important for the psychological and social adaptation of a person.

There is no single definition of the term "social support". Social support can be seen as various forms of support provided by social networks that help an individual overcome life's difficulties.

Family, friends, significant others act as social networks that provide social support. The most common approach to classifying types of social support is functional. It distinguishes five functions of interpersonal relationships: 1) emotional support, including love, care, empathy; 2) instrumental support; 3) information support – guidance or feedback from society, which can provide a solution to the problem; 4) assessment of support; 5) social communication, pastime on vacation.

Social support increases the individual's resilience (the ability to manage the environment) and facilitates his adaptation to new conditions (self-improvement in the interests of harmony with the environment). Social support can have a direct or main effect, being a barrier to the impact of stressors. Social support can provide the necessary information or provide support for advice and deeds to overcome a stressor. It can provide the individual in need with the resources needed to keep stress to a minimum. Individual self-perception of an individual can be influenced by belonging to a group that can help build self-confidence, a sense of ownership of the situation and having the necessary skills to control the development of events in the environment. This fits into the theory of personal control as the main regulator of the consequences of stress, which belongs to A. Bandura.

There is also an alternative explanation for the role of social support, which is that isolation or lack of social support leads to worse health rather than social support per se improves health. This is an unresolved issue. It also raises another question - what will happen if the result of a stressful situation is just the loss of the social support system, for example, in the event of a natural disaster, emergency or job loss.

The essence of the "buffer" hypothesis is that social support is wedged between the stressor and the response to stress, and thus weakens its consequences. This kind of "buffer" can change an individual's perception of stress and thereby weaken the potential of the former, or at least better prepare the latter for a crisis situation. External social support can provide assistance during times of crisis or lead to insights that can facilitate adaptation and response. Finally, social support can have a leveling effect on stress, calm the neuroendocrine system and make a person less susceptible to the effects of stressors.

E. Pines notes that an important aspect of social support is the sharing of social burdens. He suggests that social support helps the individual to give up self-flagellation, and the idea that he himself is to blame for everything. Interaction with the social support system as a whole can help to get rid of groundless fears and restore the social identity of the individual.

Studies of the relationship and interdependence of social support and work stress indicate that the successful overcoming of the latter is possible only if the support system is used effectively. Successful experience of coping with stress points to the need to use both formal and informal means of social support in dealing with stress. From the point of view of these authors, focusing research only on the positive outcomes of social support reduces the likelihood that researchers will uncover and describe its negative outcomes, much less consider the interaction between positive and negative outcomes.

People do not always want to receive social support. There are several reasons why social support may be undesirable for a person. One of them, described by many authors, is the consequences of social support - a person rejects it when it is negative for him or very "expensive". The second reason is that a person may perceive the process of obtaining social support as "difficult", "stigmatizing" and "unpleasant". Another reason is that social support itself is understood by a person as "useless".

In addition, the support situations themselves and/or interpersonal relationships play a key role in obtaining social support. A person may not want to accept support in a "state context", but experience positive emotional states from social support provided by loved ones. In addition, a person does not want to receive support when their needs for self-efficacy are high, but will seek it when they need self-support. It is very difficult for a person to receive social support from a partner who arouses antipathy or distrust in him.

Social support and a system of social ties in the context of normal social functioning of a person allow him to feel closeness and unity with other people, provides him with a sense of social belonging, makes it possible to live and adaptively experience stressful life situations, satisfies his basic needs, including the need for security. The negative effect of social support is expressed primarily in its "unit cost" – when the "payment" for social support exceeds the socio-psychological benefit received by a person. According to Festinger, each person has a need for communication, emotional contacts, a desire to be among people, which is activated by interpersonal skills and relationships. The high need to be accepted in the society of other people is very important for the psychological and social adaptation of a person. The relevance of this topic is due to the fact that graduate students have an increasing need for social support from relatives, families and significant others during the period of stress and negative factors associated with final exams, the defense of course and diploma projects, the need for personal self- determination in the future professional environment. The relationship of social support with the manifestation of empathy among psychology students is also important, since empathy is a professionally significant quality of future specialists. This paper explores the relationship of perceived social support with the manifestation of empathy in students of psychology and students of physics. Since the nature of the professional activity of psychology students and students of physics is different, which may affect the degree of perceived social support with the manifestation of empathy between these groups.

In order to study the relationship between the level of social support and the level of empathy of psychology students, a study was conducted with the participation of 52 students of the Faculty of Psychology and Pedagogy. The following methods were used: Social Support Scale (Multidimensional Social Support Perception Scale – MSPSS) D. Ziemet; adaptation by V. M. Yaltonsky, N. A. Sirota) and the technique "Diagnostics of the level of empathy" by I. M. Yusupov.

The scale of social support is designed to assess the subjective perception of social support by the respondent. It assesses the effectiveness and adequacy of social support in three dimensions – "family", "friends" and "significant others". The principle of constructing the methodology "Diagnosis of the level of empathy" is based on the fact that empathy and sympathy can arise and manifest with great force not only in relations between people and animals that really exist, but also in images and works of literature, cinema, theater, painting, sculpture.

Most psychology students have an average level of empathy. The average level is expressed in the fact that a person is ready at the right time to show sympathy for the person who needs it, but at the same time does not seek to fully imbue his state.

3.37% of students have a high level of empathy. 80% of psychology students have an average level of empathy. 16.67% of psychology students have a low level of empathy. This suggests that psychology students are empathic. Calculating the average values on the subscales and the overall MSPSS scale, we can conclude that psychology students receive the greatest social support from a "close person", the average value for the sample is 24 points, then from "friends" 22 points, the least social psychology students receive support from their families. The perception of social support by psychology students from friends and family is perceived almost equally, however, psychology students perceive support from friends to a greater extent than support from family.

Psychology students showed a statistically significant relationship between social support and empathy, r = 0.45, with significance p = 0.01. This relationship suggests that young people who receive more support from loved ones, friends and family are more empathic. However, one can also assume that psychology students, who are mostly female and empathic because of their professional skills, receive more social support.

A statistically significant relationship was found between the level of perceived social support and empathy for children with a correlation coefficient of r = 0.26, with a significance level of p = 0.04. A statistically significant relationship was determined between the general level of perceived social support and the manifestation of empathy for the heroes of fiction. The correlation coefficient is r = 0.25, with a confidence level of p = 0.03. This suggests that students experience empathy for characters in fiction, depending on perceived social support from significant others. A significant correlation between perceived social support and the manifestation of empathy for parents, animals, the elderly and unfamiliar people was not found in the group of psychology students.

Based on the analysis of scientific research, it can be concluded that social support and the system of social ties in the context of a person's normal social functioning allow him to feel closeness and unity with other people, provide him with a sense of social belonging, give him the opportunity to live and adaptively experience stressful life situations, satisfy his basic needs, including the need for security. The researchers argue that social support is a multi-level volumetric construct and, therefore, various approaches are possible to it, in terms of the quantitative composition of the support received (how often he or she receives or expects to receive the necessary support from others) and its qualitative composition (satisfaction with the support received, its sources, appearance and form). Isolation or lack of social support leads to poorer health than social support per se improves health. The perception of received and provided social support is associated with subjective well-being: the general level of well-being and satisfaction with life. A key factor in subjective well-being is satisfaction with perceived social support. To improve the quality of social support, the following components are necessary, such as listening carefully to the individual, encouraging him, giving the necessary advice, providing opportunities for communication and all possible assistance. To improve the quality of social support, the following components are necessary, such as listening carefully to a person in need of help, encouraging him, giving the necessary advice, providing opportunities for communication and all possible assistance. For the development of empathy in another person, it is necessary to develop the cognitive-cognitive sphere of his personality, i.e. develop such mental processes as speech, thinking, memory, perception, attention, imagination, representation, sensation.

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A. N. Krutolevich

RELATIONSHIP BETWEEN PSYCHOSOMATIC SYMPTOMS AND ANXIETY OF PSYCHOLOGY STUDENTS

The article deals with the problem of psychosomatics of adolescents. The theoretical relationship between psychosomatic symptoms and anxiety is analyzed. A study was conducted that showed a significant relationship between the level of situational anxiety and the manifestations of psychosomatic symptoms in psychology students.

At present, interest continues to grow in the problem of anxiety, which affects the emotional and behavioral status, somatic health and performance. The relevance of the anxiety syndrome remains very high for many branches of modern clinical medicine and medical psychology. The importance of this neuropsychological symptom complex for occupational medicine, other medical and psychological areas associated with extreme conditions of professional activity and everyday life is especially significant. The phenomenon of anxiety (mainly situational) is of great importance for professional medicine, since there is a tendency to increase the complexity and potential danger of many types of industries.

In the life of a modern person, psychosomatic disorders occur more and more often. And this is not surprising, since now there are plenty of factors leading the body to a stressful state. These include sudden illness, divorce, the death of a loved one, being fired from a job, failing an exam, and more.

Subjectively, the state of anxiety can be described by feelings of tension, anxiety, gloomy forebodings, and physiologically by activation of the autonomic nervous system. In students with increased anxiety, the performance of activities in stressful conditions causes significant neuropsychic stress, due to their excessive demands on themselves. Such people experience a state of anxiety more often and more intensely. This is especially evident in situations that threaten their self-esteem, for example, in interpersonal relationships in which their personal adequacy is assessed. For this reason, there is a shift in the motive of activity, in which a person, instead of actively searching for a solution to a way out of the situation, focuses on the quality of the success of his activity, overestimating the significance of the mistakes made and the responsibility for them.

But when a situation of insoluble conflict arises, which cannot be avoided, fear turns into anxiety, and then psychosomatic symptoms appear.

Anxiety is considered as one of the main parameters of individual differences. As a rule, it is increased in neuropsychiatric and chronic somatic diseases, as well as in healthy people experiencing the consequences of mental trauma, in people with deviant behavior. Anxiety in the structure of integral individuality refers to the level of personality traits and is understood as the expectation of an unfavorable outcome in relatively neutral situations that do not contain a real threat. Psychologists consider it an indisputable fact that any emotional states, especially long-term, protracted negative emotions, are accompanied by changes in the functional systems of the body and are inseparable from them. Numerous studies show that reactions of anxiety, aggression, fear, etc., being chronic, cause a persistent ensemble of affective changes that are directly related to the pathogenesis of psychosomatic diseases, developing according to the mechanism of strong and long-acting emotional overstrain. To date, it has been revealed that chronic anxiety can pathogenically affect the functioning of the hormonal, central and autonomic nervous system. According to the WHO recommendation on the diagnosis, nomenclature and classification of mental illness, held in 1970 in Basel, psychophysiological disorders with emotions are considered as the main element of psychosomatic diseases. In general terms, the mechanism of occurrence of psychosomatic diseases, or, as they are also called, psychosomatosis, can be represented as follows: a mental stress factor causes affective tension that activates the neuroendocrine and autonomic nervous system with subsequent changes in the vascular system and internal organs. Initially, these changes are functional in nature, but with prolonged and frequent repetition, they can become organic, irreversible. An increased level of anxiety is also one of the leading factors in the emergence and development of cardiovascular diseases.

Psychosomatic disorders are understood as symptoms and syndromes of disorders of the somatic sphere (various organs and systems), due to the individual psychological characteristics of a person and associated with the stereotypes of his behavior, reactions to stress, and methods of processing intrapersonal conflict [8]. For psychosomatic disorders, it is characteristic to recognize the importance of psychological factors, both in the occurrence and in their conditioning of the strengthening or weakening of somatic (physical) suffering. According to the authors, the criterion for classifying an existing specific physical disease or suffering as psychosomatic is the presence of psychologically significant stimuli from the environment, which are associated with the occurrence or exacerbation of this physical disorder in time [9]. A psychosomatic illness is understood as such a

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somatic suffering, in the etiopathogenesis of which the central role belongs to psychological factors, such as, in particular, unreacted emotions. "Somatopsychic-psychosomatic" G. Engel and A. Schmale call diseases "in which predisposing biological factors not only take place from the moment of birth or from infancy, but directly or indirectly participate in the development of the mental apparatus. This does not mean that biological factors necessarily predominate; they may have a common undifferentiated matrix. But at some stage, the "controversial" somatic system begins to influence mental development in a specific way" [3].

In general terms, the term "psychosomatic disorders" is understood by most authors to mean dysfunctions of internal organs and systems, the emergence and development of which is most associated with neuropsychic factors, the experience of acute or chronic mental trauma, and specific features of the individual's emotional response. Thus, the criterion for classifying an existing specific physical illness or suffering as psychosomatic is the presence of psychologically significant stimuli from the environment, which in time are associated with the occurrence or exacerbation of this physical disorder. This understanding of psychosomatic disorders is considered to be broad, because these include all violations of the functions of internal organs and systems, the emergence and development of which is closely related to neuropsychic factors, the experience of acute or chronic psychological trauma, or with specific features of a person's personal-emotional response to the environment.

The analysis of numerous scientific works allows us to highlight the main negative aspects of a high level of personal anxiety. Researchers often note that a high level of anxiety negatively affects the development of a personality and can lead to its maladjustment and neuroticism. It is believed that anxiety underlies a number of developmental disorders that cause the formation of various negative changes in the functional state. A person with a high level of anxiety tends to perceive the world around him as containing threat and danger to a much greater extent than a person with a low level of anxiety. A high level of anxiety poses a threat to the mental health of the individual, contributes to the development of neurotic conditions. A constantly high level of anxiety is also considered as a condition leading to the development of psychosomatic pathology. As one of the components of emotionally negative mental states, anxiety is included in the structure of asthenic, depressive, hypochondriacal and other disorders. On the other hand, on the basis of anxiety as a personality trait, its socio-psychological properties such as shyness, understood as sensitivity to social influences, or victimization, that is, readiness to be the object of criticism or physical attack, can be formed. Anxiety is one of the fundamental properties that modify the structural and functional organization of the personality of both healthy and sick people.

In order to identify the psychological symptomatic status, the psychodiagnostic method "Symptomatic Questionnaire SCL-90-R" was used. To diagnose the psychosomatic state, the scale "Somatization" was used. The disturbances, called somatization, reflect the distress that comes from feeling bodily dysfunction. This includes complaints fixed on the cardiovascular, gastrointestinal, respiratory and other systems. The components of the disorder are also headaches, other pains and discomfort of the general muscles and, in addition, somatic equivalents of anxiety. All of these symptoms and signs may indicate the presence of a disorder, although they may also be manifestations of real medical conditions. To determine the level of anxiety, the questionnaire "Spielberg-Khanin Scale for Determining Personal and Situational Anxiety" was used. This psychodiagnostic technique is an informative way of self-assessment of the level of anxiety at the moment (reactive anxiety as a state) and personal anxiety (as a stable characteristic of a person). Reactive anxiety occurs as a person's reaction to various socio-psychological stressors and is characterized by tension, anxiety, and nervousness. Very high reactive anxiety causes disturbances in attention, sometimes a violation of fine coordination. Personal anxiety characterizes a stable tendency to perceive a wide range of situations as threatening, to respond to such situations with a state of anxiety (increased reactive anxiety). Very high personal anxiety directly correlates with the presence of a neurotic conflict, with emotional and neurotic breakdowns, and with psychosomatic diseases.

The aim of the study is to study the relationship between the level of manifestation of psychosomatic symptoms and the level of anxiety, in particular, personal and situational. The study

was conducted on the basis of Gomel State University named after Francysk Skoryna. Students of the Faculty of Psychology took part in the study. The total sample size was 52 people. The age of the subjects was 19-21 years. The study showed that the average value of the manifestation of psychosomatic symptoms (M) for this sample was 0.77 with a standard deviation (SD) of 0.55. The minimum value (Min) is 0.00 and the maximum value (Max) is 2.5. The minimum value for situational anxiety is 11, the maximum value (Max) is 57, and the mean value (M) is 37 with a standard deviation (SD) of 12.6. The minimum value (Min) for the indicator of personal anxiety was 22, the maximum value (Max) - 61, the average value - 44.7 with a standard deviation (SD) of 7.3. The data obtained allow us to conclude that this sample of students corresponds to a high level of personal anxiety, in contrast to situational anxiety, as well as a high level of manifestations of psychosomatic symptoms. So, for comparison, in Tarabrina's study, the average value of the level of manifestation of psychosomatic symptoms in students was 0.55, which is significantly lower than the level of 0.77 found in our study, which indicates the presence of psychosomatic symptoms in this sample. When comparing the data obtained in our study and the data obtained by Z.A. Bakirova, S.M. Mochalov, P.A. indicator of situational anxiety in patients with psychosomatic pathology is $M=43.76\pm1.67$, and personal anxiety $M=49.22\pm1.40$ [32]. Thus, the indicator of situational anxiety in our study, when compared, is much lower than in patients with psychosomatic pathology, but the indicator of personal anxiety is really close to the indicator of these patients. Thus, students of the Faculty of Psychology more often noted weakness or dizziness, headaches, back pain and a feeling of weakness in various parts of the body. To identify the relationship between the two studied parameters, a correlation analysis was carried out using the Spearman method. Correlation analysis according to Spearman established a statistically significant relationship between the level of manifestation of psychosomatic symptoms and the level of situational anxiety, correlation coefficient $r=0.32$, with a significance level $p=0.02$. Such a coefficient indicates a direct relationship between the two parameters, and in this study, that a higher level of situational anxiety leads to a more pronounced manifestation of psychosomatic symptoms. Correlation analysis did not reveal a statistically significant relationship between the level of manifestation of psychosomatic symptoms and the level of personal anxiety, since $r=0.219$ at $p=0.11$.

A relationship has been found between the manifestation of psychosomatic symptoms and situational anxiety, and an increased level may indicate insufficient emotional adaptation to those other social situations. Students with this level show an attitude towards themselves as weak, inept. Anxiety colors the attitude towards oneself, other people and reality in gloomy tones. From this we can conclude that in students with increased anxiety, the performance of activities in stressful conditions causes significant neuropsychic stress, due to their excessive demands on themselves. Such people experience a state of anxiety more often and more intensely. Based on the foregoing, we can conclude that students with a high level of anxiety in tense situations exacerbate psychosomatic diseases. These diseases are often a reaction of the body to conflict experiences, manifested as a nervous strain, and pathology on the part of one or another organ. In this case, most often a person does not talk about his traumatic experiences, but reports bodily symptoms and ailments.

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A. N. Krutolevich, A. N. Redyuk

COMPLEX POST-TRAUMATIC STRESS DISORDER
OF DOMESTIC VIOLENCE VICTIMS

The article is devoted to one of the most pressing socio-psychological problems of modern society – domestic violence. An analogy is drawn between the devastating consequences of hostilities for society, and the consequences for victims of domestic violence, which manifests itself at the mental level in the form of structural dissociation. The main signs of complex post-traumatic stress disorder, as well as methods and stages of psychotherapeutic assistance to victims of domestic violence are given.

Violence, as one of the most pressing socio-psychological problems of modern society, is a destructive interaction between groups of people or individuals, during which some individuals, using overt or covert coercion, subdue and use the lives and resources of other individuals to satisfy their own needs.

Domestic violence is an implicit mechanism of redistribution of resources within the family, where a physically or emotionally dependent person is forced to give up his needs and act in the interests of the aggressor in order to save his own life, avoid suffering, or in the hope of satisfying his needs in the future, being in a relationship of belonging to the aggressor [1].

Obvious manifestations of domestic violence are bodily harm of varying severity, rape, damage to property, insults, threats, blackmail, deprivation of food and financial support. More veiled forms can be presented in the form of devaluation, control, coercion to undesirable actions, ignoring or lack of actions necessary for the maintenance of life, health and personal development.

Such phenomena as phobias, addictions, depressions, suicides, obsessive-compulsive disorders, abortions, psychosomatic diseases, eating behavior problems in our society are usually considered as traditional negative phenomena. However, these phenomena are direct signs of the existence of violence in the family and society.

In most cases, at the initial stage, violence is not only not manifested outwardly, but is not recognized either by the persons who are subjected to violent acts, or by the persons who produce various types of violence against members of their family, and is perceived as a norm of behavior. However, escalating violence over time becomes more and more obvious and destructive.

Open high-intensity violence at the global and regional levels manifests itself in the form of various armed clashes and wars, the result of which are the destroyed lives of people, numerous physical injuries, injuries and illnesses among survivors, destroyed infrastructure, huge economic losses, bitterness and division of relations between peoples and members one family.

Military psychiatrists usually diagnose post-traumatic stress disorder (PTSD) in combat participants and witnesses. PTSD is a severe mental condition that can result from exposure to a short-term, sudden traumatic event (or a time-limited series of shock events) resulting in a loss of physical integrity or the threat of death, where the person felt helpless and unable to act to protect themselves, or one who has been exposed to danger.

PTSD in the ICD-11 is characterized by symptoms such as:
– repeated experiences of traumatic events in the form of flashbacks, intrusions, nightmares presented in different sensory modalities and their combinations;
– avoidance of places, people, things, actions, thoughts, sensations, reminiscent of a traumatic experience;
– hypervigilance and heightened startle response due to constant subjective sense of threat.

The ICD-11 presents another type of mental trauma (literally: mental and behavioral disorders associated with stress) called complicated or complex post-traumatic stress disorder (CPTSD), which is caused not by a situational, but by a prolonged (continuing for a long time) trauma from which it

was impossible to get out. Such exposures include participation in hostilities, slavery, long-term physical, sexual and emotional abuse.

In addition to the main three root symptoms common with PTSD, and described in the ICD-11, CPTSD has 3 additional symptoms that belong to the category of «I-organization disorders»:

– difficulties in regulating emotions (especially fear and anger), manifested in dysphoria, suicidal thoughts, using one's own body (self-harm, compulsive overeating) and external resources (sexual activity, psychoactive substances) for emotional calm;

– violation of self-perception - self-esteem becomes consistently low, a person feels humiliated, worthless, ineffective and helpless. There is toxic shame, which explains the negative attitude of other people towards themselves («I am treated badly because something is wrong with me»), and toxic guilt as an attempt to take responsibility into one's own hands in order to be able to change the situation.

– violations in relationships, which are manifested in distrust, difficulties in self-disclosure, seeking help and support from other people. People with CPTSD are not able to notice danger in time and get out of traumatic relationships. The fear of intimacy is associated with the fear of attachment, because the person on whom the victim depended for a long time used him and harmed him [2].

While the association between military and catastrophic shock trauma and PTSD in the psychotherapeutic and psychiatric community is natural and obvious, the association between domestic violence and CPTSD is counterintuitive and latent. The introduction of this diagnosis makes visible the suffering of victims and survivors of domestic violence, explains the reasons for the ineffectiveness and frequent failures of therapy for this category of people, and also gives specialists a chance to identify this diagnosis and use more direct and effective ways to cope with this disorder.

The main signs of people suffering from CPTSD are:

– dissociation – perception of the events of one's life not in the first person; inconsistency of intonation, posture and gestures with the meaning of the story.

– the gap between development and achievements in various spheres of life;

– numerous failures in psychotherapy with different therapists, accompanied by the attitude «the therapist can not stand me»;

– complaints about sudden, difficult to bear emotional states that have no basis in real life context;

– increased control and anxiety, inability to relax;

– consistently low self-esteem: a feeling of being unnecessary, worthless, insignificant, rejected and unworthy of attention;

– difficulties with creating long-term and resourceful personal relationships.

Most often, CPTSD is confused with various forms of disorders of the hyperactive, anxiety, depressive, borderline, autistic, narcissistic, bipolar, co-dependent, obsessive-compulsive spectra.

People suffering from CPTSD most often perceive their condition as a norm, as a feature of character, and not as the consequences of unsatisfactory external conditions of their life and development, therefore, if they seek help, they cannot explain what exactly causes discomfort in their life.

CPTSD is based on psychic trauma – a neoplasm that has arisen in the psyche as a result of a traumatic event as an adaptive structure. O. Van der Hart in his theory of trauma calls this neoplasm structural dissociation. This disorder is formed as a result of repeated and repeated episodes of dissociation that occur in a state of extreme stress associated with violence [3].

The traumatic impact that led to CPTSD was so normal, gradual and constant in the physical world of the victim, and at the same time so unbearable for his psyche, that the only way to survive was to dissociate (split or repress) this experience.

Dissociation is a mechanism of reaction and adaptation to stressful situations, which suggests that the information received in the process of traumatic impact becomes inaccessible for associative access, or, in other words, it becomes mismatched (incongruent). Dissociation in this case will be expressed in the separation of mental processes. Normally, mental processes function in parallel and represent a continuum of behavior, affects, sensory sensations and cognitions.

Domestic violence is abuse, neglect, deprivation of the basic psycho-physiological and social needs of a person who, due to age or other circumstances (pregnancy, disability, etc.), is dependent on another person. Therefore, in practice, most professionals in the helping professions use the term CPTSD as a synonym for attachment trauma, developmental trauma, early childhood trauma associated not only with violent actions of high intensity by persons in power over victims, but also with ignoring and lack of actions necessary to meet the needs of a healthy developing person. Situations of interpersonal violence, accompanied by chronic betrayal by the person who is the object of affection, although not directly related to the threat to life, increase the risk of complex traumatization. Personality development takes place in an environment where the main energy of a person is aimed at survival, and not at solving the usual problems of age development, that is, a person is not focused on getting pleasure, but focuses on avoiding pain.

Thus, the diagnosis of CPTSD is not a personality disorder, but arises as an adaptive structure in the psyche, in response to a traumatic external environment. Consequently, with a change in the external environment and adequate psychotherapeutic work, CPTSD can be overcome, restoring the natural processes of emotional and social development [4].

The most effective therapeutic directions for working with CPTSD in victims of domestic violence are approaches that pay special attention to attachment theory and relationships that arise in the «client-therapist» pair, as well as the integration of fragmented personality structures that have formed in the psyche as an adaptive survival function: gestalt-therapy, schema therapy, emotionally-imaginative therapy, emotionally focused therapy, somatic therapy by P. Levin, DPDH, prolonged exposure CBT, some body-oriented therapy techniques, psychodramas, constellation techniques and their combinations [1, 5].

The following main stages of treatment of victims of domestic violence with CPRSD can be distinguished.

1. Stabilization and development of a sense of security. Emphasis is placed on working with factors in the environment of the victim, which pose a threat to his physical and mental safety. Work is being done with internal structures that, in the absence of a real threat, reacting to triggers, launch a series of associations leading to inadequate reactions and/or retraumatization.

2. Reconstruction and reassessment of traumatic memories. This includes recovering the traumatic experience and reliving it in a safe environment, with the goal of integrating traumatic memories into autobiographical memory, with a change in cognitive representations of oneself and relationships with other people.

3. Work with the emotional and social competencies of the victim with their subsequent testing in real life conditions, with constant or booster support from the therapist [1].

The diagnosis of CPTSD is formed in victims of domestic violence as a result of being in long-term dependent relationships, the destructiveness of which is hidden and perceived as the norm. The constant frustration of healthy needs in relationships dependent on the aggressor leads to the gradual deprivation of the victim of vitality and resources, and over time reduces the chances of getting out of such relationships. If the attachment figure and the aggressor are the same person, then the attachment becomes an addiction. Therefore, the main psychotherapeutic direction in working with victims of domestic violence is to build reliable attachments with people who are resourceful for the victim [6].

The ability of mental health professionals to identify a diagnosis of CPTSD reflects both changes in the perception of the topic of domestic violence and recognition of the traumatic experience of their patients in order to more effectively help survivors of domestic violence.

Reducing the level of domestic violence is the most important factor in the prevention of a large number of mental disorders and the main tool for the improvement of society.

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A. N. Krutolevich, A. N. Redyuk

DOMESTIC VIOLENCE: CHARACTERISTICS AND TYPES

The article reveals the concept of domestic violence and the mechanism of its action through the theory of attachment. The main features of domestic violence are considered: inequality, consistency, latency and escalation. The main forms of manifestation of domestic violence are given: physical, sexual, psychological and economic. The importance of prevention of domestic violence is argued as a way of interaction between family members, which has a deep psycho-traumatic effect both on the direct objects of influence – the victims of violence, and on the entire family system, including witnesses and the aggressors themselves.

«Domestic violence is an involuntary mechanism for the redistribution of resources within a family (or other system). The individual gives up his needs and desires and acts in the interests of the aggressor or the system as a whole in order to maintain belonging to the system and attachment relations» [1, p. 62].

The younger the child, the more his life and well-being depends on an adult. Attachment is the oldest biologically built-in mechanism for caring for offspring. The main task of such a mechanism is by any means to maintain attachment with a strong figure, in whose hands the necessary resources for survival and development are concentrated. Rejection (or, in other words, loss of attachment) is perceived by the child as the strongest threat to his existence. Therefore, the child is ready to endure anything, just to maintain this connection [2].

Man is a social being, and he can fulfill his needs only in interaction with other people. The child grows up, and the attachment mechanism retains its function and manifestation. An adult also strives to be accepted by important people on whom we are emotionally, physically, sexually or economically dependent.

The main features of domestic violence are: inequality, consistency, latency and escalation.

All violence is based on inequality. The basis for inequality arises where one person is really stronger than another, or has a belief about his superiority and about the normality of the use of violence.

The aggressor restructures the intra-family system of resource distribution in such a way that most of them are under his subordination. This is achieved by gradually changing the system of needs of the victim, where the needs of the aggressor are built into her needs. This whole system is reminiscent of parasitism that exists in living nature – a type of long-term relationship where one organism lives at the expense of another, gradually oppressing it, which often leads subsequently to

the death of the suppressed organism. Violence is an unequal and one-way process, where the needs of one member of the system are met while another is chronically ignored.

Violence is the systematic use of power and control to control the thoughts, feelings, sensations, and actions of others against their will. If physical violence is obvious, then psychological violence is not immediately recognized, it is often confused with conflict. O. L. Danilova defines this discrepancy in terms as follows: «It is important to note the difference between a family conflict and a case of violence: if the conflict has a local isolated character, then violence has a systemic basis and consists of incidents following one after another» [3, p. 185]. The conflict is based on a specific and resolvable problem, while violence is based on the desire to gain complete power and control over the feelings and behavior of the injured party, in order to appropriate its resources to satisfy its own needs to the detriment of its interests. Thus, a fixed pattern of behavior is an indicator that distinguishes a domestic conflict from a violent act. The prevalence of violence is associated both with the inability of victims to sufficiently differentiate open manifestations of violence from family conflict, and with their position dependent on the perpetrator.

Thus, domestic violence is not an accident, like, for example, a street attack by a bully with whom the victim does not have a personal attachment relationship, but a pattern of behavior where a loved one systematically violates the boundaries of a weaker and more dependent family member.

The systemic nature of domestic violence is also manifested in its cyclicity, and in the gradual increase in its intensity (escalation of violence). The cycle of violence can be divided into the following key phases.

1. «Honeymoon» is the beginning of a relationship characterized by trust, interest, and enjoyment of the relationship. Partners see in each other exactly who they need. They do not check whether the partner is really suitable for them, but attribute to him all the necessary qualities.

2. Voltage rise. Over time, partners become convinced that the ideal image of a loved one does not coincide with reality. The aggressor, based on past experience of vulnerability, reacting to a certain trigger, suspects the other partner of wanting to reject or hurt him. Individual bouts of irritability and verbal aggression are observed. The aggressor accuses the victim of provocations. The victim seeks excuses for the aggressor and tries to appease him.

3. Act of violence. The aggressor, experiencing anger, loneliness and pain, regresses into his traumatic experiences, and defending himself, turns the accumulated heat onto the victim. Aggression takes on more intense and open forms, in the form of severe psychological and physical violence. Reacting to aggression, the victim plunges into fear, pain, loneliness and helplessness. She does not defend herself and freezes because her anger is blocked by fear. When the violent act exhausts itself, the partners disperse for a while.

4. Reconciliation and the beginning of a new cycle. Through the dissociative process, the pain of the violence is blunted, the incident is forgotten. The aggressor either explains the reason for the cruelty, apologizes, promises never to repeat this again, or denies his guilt, blames the victim for what happened, convinces her of exaggerating events. Partners are afraid of losing affection, go to reconciliation, and violence comes to the second round. The relationship between the rapist and the victim returns to the original. The behavior of the aggressor becomes caring and gentle, the victim, in turn, forgets about the violence and hopes that the cycle will not repeat itself.

The repetition of all four stages becomes a pattern in the relationship between the victim and the rapist. Over time, the applied aggressive actions become more intense and repeated at ever shorter intervals. The honeymoon period is gradually disappearing from the cycle [1].

The topic of domestic violence is taboo in society. The family, being a closed system, has been preserving the traditions and accumulated experience of interaction between family members for centuries. And even if there are significant changes in society, it remains resistant to the adoption of the new. Violent patterns of behavior, perceived within a closed family system as a norm and a necessity, are passed down from generation to generation and are carefully hidden from exposure to public space. All this leads to the fact that the boundaries of the norm in society are shifting very gradually and unevenly. In parallel, at the same time in the same geographical location, there may be

different ways of «normal» intra-family communication. In some families, they negotiate by discussing and accepting alternatives, in others, pressure and control are applied over weaker and more vulnerable family members. Next to someone who has power and sets the norm through violence, bringing information outside and, therefore, an alternative view becomes impossible. Dependent family members have a sense of shame for their inferiority, a sense of guilt for what is happening, as well as feelings of helplessness, hopelessness and the attitude that «violence is normal», and that «everyone lives like that».

Although early family experiences become habitual patterns of behavior, family boundaries are not completely hermetic. New information constantly comes in from the outside through the media and direct communication at school and at work. More economically independent, informationally advanced and having access to psychotherapeutic and legal assistance, sections of the population more accurately recognize violence in their own and other people's behavior. They more easily renounce violence and contribute to a more complete satisfaction of the interests of all participants in social interaction [1].

Researchers studying the problem of violence distinguish four types of violence, which can also occur in various combinations, move from one type to another and alternate in time [4].

Physical violence is the most obvious form of violence, which is expressed in the form of direct and indirect physical impact on the victim in the form of screams, arm waving, pushes, kicks, slaps, beatings, holding by force, coercion to certain actions. This can also include damage, hiding and theft of property.

Women who become victims of this type of violence have excessive patience and the ability to repeatedly forgive the offender, which is usually associated with the fear of losing respect in society, leaving children without a father, pity for a spouse, economic complications. The first call to the police for the aggressor, as a rule, goes unpunished due to the indifference of law enforcement agencies and pressure from relatives with advice and demands to withdraw the application. Substance dependence of a spouse is a frequent companion of the existence of physical violence in the family.

Sexual violence is a type of harassment, in the form of sexual humiliation and insults, obsessive touches, coercion to sex, threats, intimidation, sexual intercourse after beating. This also includes ignoring the woman's right to sexual pleasure.

Many authors see the reason for the existence of sexual violence against women in gender stereotypes, manifested in giving men an unconditional right to possess a woman's body, and the use of force if she does not want to have an intimate relationship [5].

Sexual violence is less common in families where there is equality between spouses. Most often, sexual assaults are reported by women who have been married for a short time and are relatively economically independent, recognize their right to their own body, and have one or two children [6].

Economic violence is the deliberate deprivation of a person of housing, property, food, clothing, the opportunity to earn money independently, to dispose of the funds received at his own discretion. This may also include refusing to purchase necessary things or medicines for the dependent party, refusing to financially participate in raising children, hiding and spending family money.

At the initial stages, it manifests itself in the form of care. Subsequently, it ends with accusations of the insolvency and weakness of the victim, and her complete financial dependence. All this creates an increased likelihood for the manifestation of other types of violence.

Psychological violence is the most complex type of violence that harms the mental health of a person, which manifests itself in control, insults, intimidation, blackmail, rejection, isolation, exploitation, ignoring and devaluing the important needs and interests of a person (emotional and physical intimacy, in preventing the development of abilities, etc.). All these actions lead to a decrease in self-esteem, loss of self-confidence, inappropriate behavior, the formation of pathological character traits in the victim, which prevents the establishment of normal social relationships.

The consequences of psychological abuse are extremely destructive, remote and longer lasting compared to physical, sexual and economic abuse [7].

Violent acts directed against a specific family member cannot be isolated, they have a detrimental effect on all family members who, being direct witnesses of what is happening,

experience helplessness and anger, and experience the same psychological and mental consequences as the victim. Children who have witnessed domestic violence almost inevitably fall into the exclusion zone in society. They develop memory problems, aggravate reactions to aggression, anxiety, fears, somatic diseases and eating disorders.

Violence and its consequences pose a serious threat to human health and safety and impede the normal development of the individual and society as a whole. Work on the prevention and elimination of the consequences of violence should include work in three areas (levels):

– legislative (state) – improvement of the legal framework in the field of victim protection and taking responsibility for the authorship of violence by aggressors;

– educational (society) – education and dialogue aimed at changing public perceptions of violence. Work with stereotypes, prejudices and discrimination.

– psychotherapeutic (family) – work with victims of domestic violence.

The importance of prevention of violence within and outside the family is an important direction in the development of psychological theory and practice. Violence prevention work must necessarily include administrative and social rehabilitation programs for the aggressors, which will contribute to the prevention of stereotypes of behavior associated with the use of violence and demonstrate that power does not lie in the suppression and infringement of the weak, and that the punishment for unworthy and dangerous behavior will be.

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A. N. Krutolevich, E. V. Zhakun

**STUDY OF THE RELATIONSHIP OF PARAMETERS
EMERGENCY MEDICAL WORKERS**

The article presents data on the study of the psychological components of health, namely: vitality and role functioning, due to the emotional state of medical workers of the ambulance station in the city of Gomel. The obtained data are compared with the data of Russian population control and other Russian studies on this issue. The relationship of the above components of psychological health with the components of job satisfaction was studied.

The relevance of the study of psychological health is primarily due to the decisive importance of the phenomenon of health for human life. The most important component of human health is psychological health, which serves as the basis for the effectiveness of both professional activity and general well-being.

An increasing number of domestic and foreign authors point to the need for a thorough study of the mental health of medical workers (P. D. Tishchenko, Yu. A. Rossinsky, V. Ya. Semke, N. V. Aslanbekova, O. N. Sharova, O. V. Bashmakova, R. Tillet) [1]. Since the negative consequences of professional chronic stress can be assessed in terms of the psychological health of the medical workers themselves, in addition, this will help to identify the targets for providing psychological assistance.

Such attention to the state of their health is quite justified, since medical activity is of great social importance, since medical professionals are responsible for the physical and mental health of the patient.

The most important component of human health is psychological health, which serves as the basis for the effectiveness of both professional activity and general well-being. One of the main characteristics of a psychologically healthy person is stress resistance and the ability to self-regulate.

Increased requirements for the state of psychological health of ambulance medical personnel are constantly presented in their current activities, since the object of labor is other people,

The presence of a balance between the desire for risk and the desire for safety is a sign of a person's stress resistance and a necessary quality for emergency medical workers, since psychological health implies, first of all, resistance to stressful situations.

Despite the indisputable relevance, the health status of ambulance workers has not been studied enough.

The available foreign sources present studies that affect many aspects of the problem of the health of medical workers, including an aspect that is relevant and interesting to us: the relationship between health and job satisfaction.

For example, employees of the University of Warsaw and the Open University of Catalonia in the journal Polish Sociological Review (Polish Sociological Review, 2017) mention that low job satisfaction can negatively affect mental and physical health [2].

The International Journal of Health Services (2014) features an article that focuses on factors associated with job satisfaction among Brazilian public sector physicians. The article mentions a proven link between job satisfaction and illness among physicians.

Thus, in the course of a theoretical review of sources on the problem of the impact of job satisfaction on the health of medical workers, it was found that low job satisfaction can adversely affect the mental and physical health of medical workers.

The data obtained tell us that it makes sense to study the problem of job satisfaction among medical workers in a more comprehensive and detailed way, since this issue has a direct relationship with their state of health.

The relevance of the problem of job satisfaction is related to the fact that most of a meaningful life a person is engaged in labor activity. Satisfaction with work is determined not only by the nature of the work, but also to a large extent by its intensity and socio-psychological aspects. The pandemic situation has led to even greater work intensity and psycho-emotional overload of medical workers. An empirical study of the factors of satisfaction with work and the health of medical workers will make it possible to identify those aspects that are most significant, to more clearly and in detail determine the areas of possible influence.

In this regard, a hypothesis was put forward that job satisfaction is interconnected with the state of health of medical workers and an empirical study was carried out for a more detailed and comprehensive examination of the problem of the relationship between psychological health and job satisfaction.

To test the hypothesis, an empirical study of the parameters of psychological health and the components of job satisfaction among medical workers was conducted on the basis of the ambulance station in the city of Gomel. The study involved 30 people.

It is important to note that many studies describe that the health of medical workers, due to the influence of a combination of production factors, is characterized by a number of unfavorable trends, including a high level of infectious morbidity, a high degree of neuro-emotional stress. All of the above affects the quality of life of medical workers. However, studies characterizing the features of the quality of life in general and medical workers in particular are so far isolated.

Further, in order to study the characteristics of the psychological health of medical workers, an empirical study was conducted in which the questionnaire SF-36 "Assessment of the quality of life" was used. The Russian version of the SF-36 questionnaire has reliable psychometric properties and is acceptable for population studies of quality of life [3].

Based on the results of the study, the main indicators of descriptive statistics were determined (mean, standard deviation, minimum and maximum), presented in Table 1.

Table 1 – Descriptive statistics on indicators of psychological health of medical workers

Scale	Minimum	Maximum	Average	Standard deviation
Vital activity	5	90	57,33	20,75
Role functioning due to emotional state	0	100	74,42	33,55

According to the data processing instructions, the psychological health component "role functioning due to emotional state" corresponded to the statements "Your emotional state caused difficulties in your work or other normal daily activities, as a result of which you had to reduce the amount of time spent on work or other activities. You did less than you wanted to, did your job or other things not as neatly as usual. In turn, the vital activity component was answered by questions about well-being and mood over the past four weeks: "Did you feel cheerful (oops)?; Did you feel full of strength and energy?; Did you feel exhausted?; Did you feel tired?

According to the obtained data, the average value of the subscale role functioning due to the emotional state was 74.42 points, which is higher in comparison with the average values of the data of the Russian population control, where RE is 57.23 points.

It can be assumed that the emotional state of the respondents does not interfere with the performance of work or other daily activities.

According to the data obtained, the vital activity of medical workers in the EMS was 57.33 points, which is slightly higher in comparison with the average data of the Russian population control, where VT is 55.15 points. But it should be noted that 36.6 percent of respondents have indicators below the average data of the Russian population control, which indicates that almost every third respondent is characterized by fatigue and a decrease in vital activity.

To study the components of job satisfaction, we used the method of studying integral job satisfaction (N.P. Fetiskin, V.V. Kozlov, G.M. Manuilov).

According to the data obtained, the average level of job satisfaction was 15.83 points, which corresponds to a high level of job satisfaction, including 53.3% of respondents had a high level of job satisfaction, 20% an average level, 26.6% a low level.

Interest in the work was 3.5 points, which corresponds to a high level, including 6.66% had a low level, 50% average, 43.33% high.

That is, we can conclude that, on average, respondents are interested in their field of activity, at work they learn new information and enjoy the work process.

The average value of satisfaction with achievements in work was 2.8 points, which corresponds to a high level. Including 10% had a low level, 26.66% an average level, 63.33% a high level.

The obtained data allow us to draw a conclusion about the growth of professional knowledge and success in the profession among the respondents in recent years.

The average value of the subscale satisfaction with employee relations was 4.23 points, which corresponds to a high level. Including 16.66% had a low level, 16.66% average, 66.66% high.

Thus, most of the respondents have good relations with members of their team, feel respect from colleagues and have a small number of disagreements.

The average value of satisfaction with management relationships was 2.6 points, which corresponds to a low level.

Including 43.33% had a low level, 23.33% average, 33.33% high.

The average value of the level of claims in professional activity

was 1.73 points, which corresponds to the average level. Of these, 33.33% had a low level, 46.66% had an average level, and 20% had a high level.

The average value of the subscale preference for work performed over high earnings was 1.37 points, which corresponds to a low level, including 50% have a low level, 36.66% have an average level, and 13.33% have a high level.

This suggests that respondents prefer high earnings in a different area instead of the work they do.

The average value of satisfaction with working conditions was 1.97 points, which corresponds to the average level, including 16.66% had a low level, 66.66% average, 16.66% high.

The average value of the professional responsibility subscale was 0.93 points, which corresponds to the average level. Including 33.3% had a low level, 40% average, 26.6% high.

Thus, the results obtained give us the opportunity to identify components with a high level (interest in work, satisfaction with work achievements, satisfaction with relationships with employees, overall job satisfaction); medium (claims in professional activities, satisfaction with working conditions, professional responsibility) and low level of job satisfaction (satisfaction with relationships with management, preference for work performed over high earnings).

Analyzing the obtained results, we can draw the following conclusions:

1) on average, respondents are interested in their field of activity, at work they learn new information and enjoy the work process.

2) there has been an increase in professional knowledge and success in the profession in recent years.

3) most of the respondents have good relations with members of their team, feel respect from colleagues and have a small number of disagreements

4) respondents believe that management underestimates their abilities and opportunities in the workplace, rarely encourages them to work and often does not understand what influenced the result of satisfaction with the relationship with management;

5) respondents prefer high earnings in another area instead of the work they do.

For a statistical study of the relationship between indicators of the psychological health of medical workers and the components of job satisfaction, the Spearman rank correlation coefficient was calculated.

The results of the correlation analysis of psychological health parameters and job satisfaction characteristics are presented in Table 2.

Table 2 – Correlation analysis of job satisfaction characteristics and physical health parameters

Content characteristics of job satisfaction	Significance values	Vitality (r)	Role-Emotional (r)
1	2	3	4
Overall satisfaction	P	0,371*	0,359
	P	0,044	0,052
Interest in work	R	0,178	0,208
	P	0,348	0,270

End of table 2

1	2	3	4
Satisfaction with work achievements	R	0,312	0,307
	P	0,093	0,098
Satisfaction relationships with employees	R	0,290	0,169
	P	0,121	0,372
Satisfaction with relationship with management	R	0,395*	0,448*
	P	0,031	0,013
Level of claims in professional activity	R	-0,142	-0,154
	P	0,455	0,415
Job preference over high pay	R	0,474	0,460
	P	0,008	0,011
Satisfaction with working conditions	R	-0,049	-0,041
	P	0,795	0,831
Professional responsibility	R	0,360	0,383*
	p	0,051	0,037
Note: *p <0,05; **p <0,01; n = 30			

Having examined the relationship between the components of job satisfaction and the emotional functioning subscale, a positive relationship was established between the relationship with management and emotional functioning (p = 0.013); preference for work performed over high earnings and emotional functioning (p = 0.011), professional responsibility and emotional functioning (p = 0.037); overall job satisfaction and emotional functioning (p = 0.052).

Thus, understanding on the part of management, the presence of incentives for work, the preference for job satisfaction over high earnings, and understanding of the limitations of one's capabilities are associated with the level of emotional state.

The revealed correlations are confirmed in theoretical works.

For example, M. Argyle even identifies relationships with management as one of the factors of job satisfaction, because social support coming from the manager, including praise and encouragement, creating a pleasant creative atmosphere can reduce anxiety, depression, which will increase the energy level of employees [4].

It is interesting to note the revealed trend towards the relationship between working conditions and emotional functioning (p = 0.831). This trend requires additional research into the relationship between favorable working conditions and emotional state.

Having considered the relationship between the components of job satisfaction and the components of the psychological health of medical workers, a positive relationship was established between the relationship with management and life activity (p = 0.031); preference for work performed over high earnings and vitality (p = 0.008); professional responsibility and vitality (p = 0.051); overall job satisfaction and vitality (p = 0.044).

Based on the data obtained, it can be assumed that the understanding on the part of the management, the presence of encouragement for work, the expression of satisfaction with the work performed by the employee, the preference for satisfaction received from work over high earnings, the understanding of the limitations of one's capabilities, are associated with the employee's ability to feel full of strength and energy.

Thus, the study showed that a policy aimed at providing social support, attention to psychological health in the workplace, can positively affect job satisfaction in this profession.

Therefore, the novelty of this study lies in the addition, enrichment and expansion of theoretical provisions on the problem of the relationship between the parameters of the psychological health of medical workers and job satisfaction.

The materials of this study can be used in the practice of psychologists in a healthcare institution to work with staff, as well as to develop practical recommendations on the problem of job satisfaction and the health of medical workers.

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S. A. Lukashevich

PSYCHOLOGICAL AND PEDAGOGICAL FOUNDATIONS FOR THE USE OF INNOVATIVE TECHNOLOGIES IN HIGHER EDUCATION

The main problem of modern education is to update the content and educational and methodological parameters of the education system. Recently, the introduction of computer information technologies into the learning process has become a real innovative achievement. Now multimedia technologies of education increase the possibilities of obtaining, storing and transmitting educational, scientific and reference information, diversify cognitive activity, and eliminate the complexity of computational work.

The current stage of development of education is an intensive search for something new in the theory and practice of education and upbringing. At this stage, it is not enough to own the baggage, consisting of the sum of knowledge, skills and abilities. Many educators from all over the world are looking for ways to improve the effectiveness of teaching.

In the Republic of Belarus, the problem of learning effectiveness is being actively developed on the basis of the latest achievements in psychology, pedagogy, methods of teaching private disciplines, informatization and the theory of cognitive activity management. Over the past decades, domestic science has made significant progress in scientific and methodological support and the introduction of new psychological and pedagogical technologies. As the analysis of pedagogical practice in modern education shows, the transition to humanistic methods of teaching and educating students associated with personality-oriented education technologies has been clearly marked.

Based on the tasks facing higher education, it should be noted that the main goal of education is aimed at developing a high level of professionalism and competence among graduates, able to adapt to the changing conditions of professional activity. It is necessary to prepare graduates who are intellectually and creatively developed, with adequate self-esteem, capable of making decisions independently, taking initiative, responsibility and able to effectively interact with others.

Considering innovation from a pedagogical point of view, we note that it is a complex of interrelated processes and is the result of the constructiveness of a new idea, which is aimed at solving a problematic task and further – to the practical application of a new phenomenon. As pedagogical innovations in the educational process, there can be a whole range of activities: the content of educational material, methodological support for training, technical means, information technology,

modeling, methodological methods for presenting information, pedagogical technologies, etc. The famous teacher V.D. Simonenko refers to innovative technologies at this stage of education:

– interactive learning technologies;

– project-based learning technology and computer technology.

Having considered the experience of using innovative methods in pedagogical activity, we can note their advantages:

– new innovations provide an opportunity to master a higher level of personal social activity;

– they help teach students how to actively acquire new knowledge;

– stimulate the creative abilities of students;

– help bring learning closer to the practice of everyday life;

– form not only knowledge, skills in the subject, but also an active life position.

It should be noted that pedagogical innovations contribute to the implementation of these requirements. Thus, innovation in the educational process is the use of new knowledge, techniques, approaches, technologies to obtain results in the form of educational services that are socially and market-demanded. When studying innovative experience, we note that most innovations belong to the development of technologies. In recent decades, various educational technologies have been widely introduced into pedagogical practice, but the idea of the learning process was expressed by Ya. A. Comensky almost 400 years ago, who proposed to make learning "technical", that is, such that everything that is taught is a success. The result of using educational technologies to a lesser extent depends on the skill of the teacher, it is determined by the totality of its components.

Innovative learning technologies help to activate the cognitive activity of pupils and students who have achieved high results in the acquired knowledge, which inspires and inspires them, motivates, instills self-esteem, develops independence, initiative, including cognitive, intellectual, mental processes, motivational and emotional-sensory resources personality. At the same time, the famous scientist and teacher F. V. Kadol, noting that all innovations should be directed through the teaching of a subject to moral and patriotic education, the formation of the honor and dignity of a citizen of the Republic of Belarus. Thus, the main, active, successful cognitive activity holistically decides all, without exception, qualities and personal resources. Interactive learning technologies should be considered as ways of mastering knowledge, developing skills and abilities in the process of the relationship between the teacher and the student, as subjects of educational activity.

The main functions of the innovative learning process should be considered:

– intensive development of the student's and teacher's personality;

– democratization of their joint activity and communication;

– humanization of the educational process;

– orientation towards creative teaching and active learning, and the student's initiative in shaping himself as a future professional;

– modernization of means, methods, technologies, training that contribute to the formation of innovative thinking of the future professional;

– education of moral and patriotic feelings, honor and dignity of a citizen.

In interactive learning technologies, the roles of the teacher and trainees are significantly changing, as well as the role of information in the interactive technology of educational testing. Maximum activation is achieved due to the motivation to study new constantly changing questions of test tasks, which are aimed at determining the correct answers, as well as by educational, formative evaluation of test results, which are growing uncontrollably in quantitative and 100% qualitative terms [1].

The success of cognitive activity is the motivation for the activation of an independent cognitive process in the selfless solution of training test tasks, continuously striving to achieve the highest results – the quality of academic performance until the predominance of "excellent" and "good" marks according to high assessment criteria, which are embedded in the passport of correct answers.

It should be noted that the qualitative and quantitative assessment of training often depends, first of all, on the perfection of the educational material, methods and forms of its presentation in the organization of the educational process. Consequently, even in the ordinary scheme of learning, there

is a huge number of problems associated with the ever-increasing flurry of new information, the complication of knowledge, the lack of an illustrative display. The creation of multimedia tools and technologies allows solving many of these issues. The introduction of computer information technologies in the educational process not only frees the teacher from routine work in the organization of the educational process, it allows you to accumulate rich reference and illustrative material, presented in a wide variety of forms: text, graphics, animation, sound and video elements. Interactive computer programs activate all types of human activity: mental, speech, physical, perceptual, which speeds up the process of assimilation of new material.

Computer simulators allow you to acquire practical skills. Interactive testing systems analyze the quality of knowledge. In other words, the use of multimedia tools and technologies makes it possible to build such a scheme of education in which a reasonable combination of conventional and computer forms of organizing the educational process gives a different new quality in the transfer and assimilation of the knowledge system.

Multimedia technologies used in education are a technology for transferring educational information. Innovative activity involves the introduction of fundamentally new approaches and models of trainees and educators. The model of innovative education is a guideline that guides in determining the content of the academic discipline, choosing the means and methods for organizing the cognitive activity of students and, most importantly, in organizing the strategy and tactics of interaction with them. The specific results of the educational process, such as the degree of mastery of knowledge, depth and strength, must be predictable, controllable and, if necessary, corrected.

Recently, taking into account the unfavorable circumstances associated with taking into account the COVID infection, distance learning is being introduced into the educational process, which is associated with Internet education. At this time, the organizational and pedagogical possibilities of distance learning are realized with the help of almost all available telecommunication services, such as e-mail, electronic journals, web conferences, chats, etc.

Taking into account telecommunication and information means, it is possible to use various pedagogical forms of activity. For example, laboratory work and workshops, virtual visits to inaccessible objects, virtual tours, computer correspondence, the issuance of electronic newsletters, and much more.

One of the most important in the teaching methodology is the principle of visibility of learning, which implies the presence of means of visual presentation of educational information.

To this end, demonstration programs have been developed at the Faculty of Physics and Information Technology, the possibilities that arise when using a computer as a means of systematizing and displaying educational information are considered, work is underway to create a modern and reference and illustration complex with the aim of using it in the educational process. In particular, the structuring of physics courses was carried out in order to highlight sections that require information updating, a search and systematization of modern reference and illustrative material was carried out in various sources of information (textbooks, monographs, articles, Internet resources, etc.), adaptation of the necessary physical and mathematical information for the educational process.

Along with the organization of the educational process at the university, attention is paid to the automation of the management of the educational institution, which is considered by the leadership of the university as an important and promising task. It consists of at least two parts related to managerial activities and the educational process, respectively.

One of the constituent parts of managerial activity is the electronic document management of the curator of the student group. This task automates the maintenance of the electronic journal of the group curator, the preparation of reports, and the preparation of long-term work plans.

The use of an electronic journal allows for quick access to any information about students, its copying, editing and output to paper.

A database containing the topics of information and curatorial hours, as well as a diverse list of events held in the group, allows the curator to save considerable time on compiling reporting documentation.

The software is intended for informatization and technologization of the ideological and educational process at the faculties of the university, in the department of educational work with youth in the form of an automated information system "Curator's Electronic Journal". The developed system is based on Internet technologies for organizing the collection, storage and provision of information and allows for the maintenance of an electronic journal by the curator of the study group in an automated mode.

The functions of the journal include: importing basic data about students from the university databases, generating a work plan for the curator, reports on the work of the curator with students and their parents, information about progress and attendance at classes, a student's health card, accounting for ideological and educational work, socio-pedagogical and psychological and pedagogical characteristics of the group, the dynamics of the main indicators of the group, the traditions of the group.

Based on the foregoing and the creation of educational demonstration electronic aids, the following conclusions can be drawn:

– means of modern information technologies improve the quality and novelty of visual information;

– demonstration programs make it possible to create a visual abstraction through the complex use of textual, formulaic, visual and numerical forms of information presentation;

– it seems reasonable to use demonstration programs for a detailed display of the most complex elements of educational material, as well as for summarizing and systematizing knowledge in individual sections and disciplines as a whole.

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E. A. Lupekina

A STUDY OF ENVY OF ADOLESCENTS, LEFT WITHOUT PARENTAL CARE

The article presents the results of a study of types of envy: envy-dislike and envy-despondency – in adolescents, from among orphans and adolescents brought up in biological families. Differences in the manifestation of types of envy in girls and boys were revealed. Teenage orphans are more likely to experience envy-dislike than "home" children. The experience of envy-hostility is accompanied primarily by emotions associated with the emotional stress of the subject (anger, irritation, indignation, nervous tension) and directed at the superior Other. The manifestation of the phenomenon of envy in adolescents from among orphans puts them at risk in the field of socio-psychological relations of the individual.

Formulation of the problem. The problem of the emergence, formation and manifestation of a feeling of envy is relevant in social psychology, personality psychology and pedagogical psychology. It is of particular interest to specialists in the field of developmental psychology, since it can be assessed as an important socio-psychological phenomenon that significantly affects the behavior and socialization of an individual in a group.

Envy is a socio-psychological construct that encompasses a number of different forms of social behavior and feelings that arise in relation to those who possess something (material or intangible) that the envious person wants to possess, but does not possess. According to Dahl's Dictionary, envy is "annoyance at someone else's good or good", envy is "to regret that oneself does not have what another has [1].

Modern society provides a person with many opportunities to realize himself and his abilities. A person can realize himself in various spheres of life: from personal, family to professional and leisure. The possibility of this realization depends on many factors, which leads to varying degrees of success of people in different spheres of life and to a sharp increase in inequality among people (not only material, but also spiritual). This situation directly or indirectly causes the manifestation of envy. The study of the problem of envy began in the works of such philosophers as Aristotle, F. Bacon, R. Descartes, I. Kant, S. Kierkegaard, F. Nietzsche, A. Schopenhauer, and others. The problem of envy in psychological research has been actively developing over last 10 years (T.V. Beskova, K. Muzdybaev, V.A. Gusova, S.M. Zubarev, A.V. Prokofiev, E.E. Sokolova, M. Klein, N. Rosenfeld, O. Kernberg and etc.).

The purpose of the article is to analyze the content of the phenomenon of envy, as well as to identify the features of the manifestation of envy in adolescents left without parental care, in contrast to adolescents brought up in a biological family.

Presentation of the main material. With a scientific position, E.P. Ilyin's envy can be regarded as a moral feeling in its situational manifestation and as an emotional attitude, i.e. the feeling itself, with its stable manifestation in relation to certain objects [2]. The attribution of envy to moral feelings also corresponds to the scientific position of S.L. Rubinstein, who noted not only that this type of feeling reflects the diversity of human relations, but also the fact that in them the objectively socially significant is experienced as personally significant.

Envy can mask incompetence, laziness, destruction, deforming the integral development of the personality, forming secrecy, anxiety, loneliness. K. Izard notes that it is not characteristic of people who are self-sufficient, independent, passionate about their own business. Ambitious, vain, lazy and selfish people are prone to envy [3].

It is useful to distinguish between envy and envy. The latter is indeed a quality of personality. L. A. Dyachenko and M. I. Kandybovich consider envy as a socio-psychological personality trait, manifested in discontent, hostility towards other people who are more successful and successful in life. They evaluate envy as a vice, as a sign of a limited mind and pettiness [4]. This contradicts the opinion of E. P. Ilyin [2], who refers this interpretation to the characteristic of envy.

The main characteristics of the experience of envy by a person are: 1) a feeling of envy can provoke a feeling of anger, shock or frustration; 2) the formation of a feeling of dissatisfaction with oneself and the products of vital activity, which, ultimately, can lead to a critical decrease in self-esteem; 3) the manifestation of a feeling of powerlessness (mental and physical), "psychological weakness", the impossibility of realizing volitional effort; 4) experiencing adaptive and non-adaptive aggression [5].

A. V. Vasilchenko summarizes the psychological portrait of the phenomenon of envy, namely it is as follows.

1. Envy is formed at the level of emotional-volitional, motivational, value-semantic and personal spheres.

2. Envy is a feeling (or mental state) that is formed as a consequence of the defense of self-esteem during social comparison.

3. Envy – the externalization of the internal dissatisfaction of the individual in relationships with people.

4. In subjects who experience a feeling of envy, defects in volitional regulation and possible manifestations of psychological stress of varying intensity are formed [5].

In socio-psychological literature, analyzing the mechanism of social comparison in the formation of envy, first of all, there is a comparison in the dyad "I – Another", carried out by the subject both involuntarily and arbitrarily. In the first case, the emergence of social comparison is

automatic, unconscious, representing "an almost inevitable element of social interaction. In the second case, it is implied that the subject makes certain purposeful efforts [6].

Comparison in the "I – Other" system plays a leading role in the formation of envy, but at the same time, this role is not exclusive. Comparison can be carried out not only by the subject himself, but also by other people (parents, teachers, colleagues, etc.). In this case, the subject is the object of comparison. As a result of the comparison made in the "I – Other" system and external comparison, the Other in relation to the subject is assessed as more or less successful, superior or not superior to him in any parameters [6].

In our opinion, the mechanism of the appearance of envy in the system "I – Another" is the key to the analysis of this phenomenon in children left without parental care (social orphans).

Of particular difficulty are the so-called "social orphans", that is, children whose parents (parent) are alive, but deprived of parental rights, which makes long-term contact with the child impossible. Unlike a child who was left without maternal care from birth, the development of the personality of a child who had a mother, but at some point lost her, follows the so-called neurotic type, when various kinds of defense mechanisms come to the fore. Aggression is one of the main characteristics of the personality of such an orphan teenager. A negative, aggressive attitude towards other people is the result of a lack of warmth and acceptance in communication.

The study of the characteristics of motivation in orphans in a boarding school according to A.M. Parishioners and N.N. Tolstykh showed that, unlike younger pupils, adolescents from the boarding school had statements that reflected experiences associated with their family ill-being, their desire to live in a normal family and attend a regular school: "I I would like to have parents", "I dream that my mother will start a new life", "I want to help my mother understand life". Such statements were not found at all among adolescents from the family.

Of course, this does not mean that the need for an 8-9-year-old pupil of an orphanage in a family, maternal affection is less than that of a teenager. It is very likely that he suffers even more from maternal and family deprivation, but these needs are in a different relation to his consciousness. In psychology, it is known that up to about 9 years old a child perceives reality realistically, he does not think about the fact that this reality could be different, and therefore does not evaluate it. The only exceptions are the most gifted, critical and sensitive children.

Teens see reality differently. You could say it's not realistic at all. He likes to present this reality in different ways, transform it, how to play it in his dreams, often imagining both real and very unlikely situations (for example, the quick re-education of his mother, who is currently hundreds of kilometers, somewhere in the colony). On the other hand, adolescents are especially sensitive to comparing themselves, their lives, and everyday life with how others live. Apparently, all this leads to the fact that adolescents from the boarding school begin to acutely and sometimes even painfully perceive their difference from "family" children.

In conditions of deprivation of parent-child relationships, as shown in the works of A.M. Parishioners, N.N. Tolstykh and V.S. Mukhina, in adolescent children, as a result of a kind of identification with each other, an orphanage or boarding school "we" spontaneously develops, which is expressed in joint isolation from other, "alien" people and gives rise to a negative attitude towards them. This shared isolation from other people leads to the emergence of a pseudo-kinship relationship between children: they remain alienated from each other and often act cruelly to their comrades. Psychological alienation from people creates internal conditions that subsequently become fertile ground for offenses.

Based on the foregoing, the purpose of our study is to identify the features of the manifestation of envy in adolescents left without parental care, in contrast to adolescents brought up in a biological family.

The study involved adolescents left without parental care: 30 girls and 30 boys from the Gomel children's social shelter based on the SPC, the Zhlobin boarding school, the Gomel Professional Lyceum of the River Fleet (students, orphans). Also, teenagers brought up in biological families of the city of Gomel - 30 girls and 30 boys. Age of participants is from 12 to 16 years.

To determine the envious personality, T.V. Beskova, which diagnoses the severity of the integrative indicator of envy, as well as its two varieties - envy-dislike and envy-despondency, which differ in the spectrum of experienced emotions and behavioral manifestations.

Analysis of the content of the affective component of envy according to the research data of T.V. Beskova discovers that envy-dislike is accompanied by anger, irritation, indignation, nervous tension and guilt, while envy-despondency is characterized by a completely different spectrum of emotions (depression, despair, disappointment, despondency, pessimism, feeling like an unhappy person who has no hope and strength to change the situation). It can be said that the subject of envy-dislike to a greater extent experiences negative emotions in relation to a person superior to him, while the emotions of the subject of envy-despondency are directed at himself and are associated with a decrease in the general vitality [7].

According to our study, adolescent boys left without parental care have a low (in 50%) and medium (in 50%) level of manifestation of envy-dislike and a low (87%) level of envy-despondency. The average values in the sample for these types of envy are presented in Table 1. Statistical differences according to the Mann-Whitney U test allow us to reliably state ($\rho \leq 0.05$) that orphan boys show more envy-dislike than envy-despondency.

According to our study, adolescent girls left without parental care have an average (in 57%) and low (in 37%) level of manifestation of envy-dislike, as well as a low (in 57%) and average (in 37%) level manifestations of jealousy. At the same time, there were no statistically significant differences in the manifestation of a certain type of envy among orphans.

There were no differences in the manifestation of envy-dislike between boys and girls orphans (U emp=372, U cr=338).

With regard to envy-despondency, it was found that orphan girls show this type of envy more than orphan boys (by φ^* - Fisher's angular transformation $\rho \leq 0.05$).

According to our study, the majority of adolescent boys brought up in biological families are dominated by a low (in 86.7%) level of manifestation of envy-dislike and a low (in 76.7%) level of envy-despondency. There were no statistically significant differences in the manifestation of a certain type of envy in adolescent boys brought up in a biological family.

Analysis of differences in the manifestation of envy-dislike in adolescent boys from among orphans and adolescent boys brought up in biological families, according to the Mann-Whitney U criterion, allows us to reliably (U emp = 269 at $\rho \leq 0.05$) state that boys Orphans show more envy-dislike than boys brought up in biological families.

Table 1 – Statistical analysis of differences in terms of envy

Sample	Average value		Standard deviation		Reliability differences
	envy-dislike	envy-despondency	envy-dislike	envy-despondency	
teenage boys in biological families	11,53	13,5	6,49	9,1	No
teenage girls in biological families	19,4	16,1	7,6	8,9	No
teenage boys in from among the orphans	18,2	12,03	9,14	12,62	Mann-Whithey U criterion $\rho \leq 0,05$
teenage orphan girls	21,00	18,06	11,01	15,93	No
adolescents in biological families	15,5	14,82	8,06	9,01	No
teenagers from among orphans	19,6	15,05	14,77	19,44	No

There were no differences in the manifestation of envy-despondency between teenage boys in different family situations.

According to our study, adolescent girls brought up in a biological family show low (in 50%) and medium (in 50%) levels of manifestation of envy-dislike, as well as low (63.3%) and medium (in 36.7 %) the level of envy-despondency. There were no statistically significant differences in the manifestation of a certain type of envy among adolescent girls brought up in a biological family.

In the course of the analysis of envy-dislike and envy-despondency in adolescent girls in different family situations, no differences were found.

An analysis of differences in the manifestation of envy-dislike in adolescent girls and adolescent boys brought up in biological families, according to the Mann-Whitney U criterion, allows us to reliably state that girls show envy-dislike more than boys (U emp = 210 at $\rho \leq 0$ .05).

In general, it was found that adolescents from among orphans show more envy-dislike than adolescents in biological families (U emp = 1412 at $\rho \leq 0.05$).

Findings.

1. Teenagers-orphans are more likely to experience envy-dislike than "home" children. This applies mostly to boys. The experience of envy-hostility is accompanied primarily by emotions associated with the emotional stress of the subject (anger, irritation, indignation, nervous tension) and directed at the superior Other. (according to T.V. Beskova).

2. Among adolescents, among orphans, girls are more likely to experience envy-despondency. According to T. V. Beskova, envy-despondency gives rise to a fundamentally different emotional background – depression, despair, disappointment, despondency, pessimism, feeling like an unhappy person who has no hope and strength to change the situation. That is, it is more directed not at the Other, but at the subject himself, not only intensifying his negative emotions, but also reducing his general vitality.

3. Adolescents brought up at home are less likely to experience manifestations of envy of both types (envy-dislike and envy-despondency). However, adolescent girls are more likely to experience envy-dislike than boys.

4. Adolescents from among orphans are at risk in the field of socio-psychological relations of the individual.

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E. A. Lupekina

FOSTER PARENT PROFESSION AND PRO-SOCIAL BEHAVIOR

The article analyzes the approach to the foster family as an example of pro-social (helping) behavior. Three aspects of prosocial behavior of adoptive parents are investigated: prosocial identity, social norms of prosocial behavior, manifestations of care (compassion, altruism, empathy). A comparative analysis of the selected aspects in the groups of foster mothers and mothers raising blood children is presented.

Helping other people in any civilized society is considered one of the most important human values. Helping behavior is the provision of direct help to someone who needs it. From the point of view of psychological definitions, helping behavior is classified as prosocial activity.

In psychological science, the problem of prosocial behavior (activity) is not given as much attention as the problem of antisocial behavior. The hallmark of help-motivated activity is that it leads not so much to one's own well-being as to the well-being of another person, that is, it brings more benefit to the other than to the subject himself.

In the work of H. Heckhausen, based on the results of the analysis of experimental studies on the problem of motivation for providing assistance, it is concluded that experimental paradigms for studying the activity of assistance underestimate the influence of personal factors compared to situational ones [1]. Most of all, the reactions of the subjects were studied when help is required in unexpected, sudden situations and requires a quick decision. When help is needed by completely strangers in an unfamiliar environment, a person is guided rather than by stable personality traits, but by momentary emotional states.

However, in life there are many examples of premeditated, targeted assistance. For example, charity, voluntary work for the well-being of others, volunteering.

The profession of a foster parent is considered by us as a variant of prosocial behavior. The profession of a foster parent is help that is deliberate, planned in advance, and not situational. Therefore, such a manifestation of prosocial behavior is not situational, but long-term and purposeful, should be considered from the standpoint of the orientation of the individual (i.e., a set of stable motives that are characterized by interests, inclinations, beliefs, ideals, attitudes of a person).

One of the principles of the social policy of the Republic of Belarus in relation to orphans is the priority attitude to family forms of placement. Various forms of foster families have been created in Belarus. One of them is a foster family.

At present, in the psychological and pedagogical literature, it is possible to single out the concept of "foster family", understood in a broad context. This is the so-called traditional approach. According to this approach, I. N. Kurbatsky points out that "adopted children are children left without parental care, and accepted into new family groups, or brought up with the participation of a new family member – a stepfather or stepmother, as well as other persons replacing parents, in conditions of relations of adoption, guardianship (guardianship) [2, p. 36]. According to this definition, any form of family arrangement of an orphan child, as well as a family in which the child is adopted in relation to one of the parents, can be called a foster family.

The problem of correlating the legislative and traditional interpretation of this term is resolved as a result of harmonizing both positions by introducing a broad and narrow concept of a foster family.

A narrow understanding of the concept of "foster family" is based on modern family law and is interpreted as a form of placement for orphans and children left without parental care.

In the Republic of Belarus, a foster family is a model of family placement for orphans, where the work of parents is paid by the state. The regulation on the foster family was approved by the Decree of the Council of Ministers of the Republic of Belarus dated October 28, 1999 No. 1678.

In Western countries (Great Britain, Sweden, Germany, etc.), this practice has been going on for many decades.

In the Republic of Belarus, the number of orphans and children left without parental care who are being raised in families (in family-type orphanages, foster and foster families) at the end of 2018 amounted to 14869 [3]. In general, more than 18 thousand orphans and children left without parental care live in the Republic.

Raising children with a special destiny on the basis of creating a foster family is a professional activity, responsible and serious work that requires significant personal resources from the parent [4]. The key moment of motivation of a person working as a foster parent is the desire to help orphans, i.e. prosocial behavior.

In our opinion, external reinforcement in the form of a foster parent's salary and child allowance is not sufficient for a person to decide to become a foster parent. The current state of affairs is such that everyone who wanted to work as a foster parent has already done so, and new candidates are hardly found. So, on the example of the city of Gomel, adoptive parents are women, more than 60% of them over the age of 50, raising children from 11 to 18 years old (72%). Less than 10 new candidates for the role of a foster parent are trained in Gomel per year.

We are interested in the question why some people are ready to take on the upbringing of someone else's child and do it, while others are not. In the context of considering the profession of a foster parent as a purposeful prosocial behavior, in 2019 a psychological study was conducted on the basis of the Educational Institution "Gomel City Social and Pedagogical Center", one of the main areas of activity of which is the selection and training of candidates for foster parents (parents-educators), creation of a foster family (and other forms of substitution), psychological and pedagogical support of a foster family.

The study involved foster parents and parents-educators of family-type orphanages in the city of Gomel in the amount of 51 people, women, average age – 46 years, work experience as a foster parent for more than 5 years, education – secondary special.

As a control group, the study involved 60 women, average age – 38 years, the presence of biological children – 2, education – higher and secondary special.

The first hypothesis of our study was that there are differences in the prosocial identity of women who work as foster parents for a long time, in contrast to women who do not show long-term purposeful helping behavior.

The prosocial orientation of a person is a set of content and dynamic characteristics of a person that determine the propensity to help others and the willingness to benefit other people and society as a whole. The person who provides help wins, as helping behavior is considered prestigious and noble. Although the helper has to pay a certain price for this (for example, time, money, effort), the positive consequences of providing assistance can be more significant than the negative ones [5].

For the study, the methodology "Content of Prosocial Identity" (GSA, Barriga and et al.), adapted by N.V. Kukhtova [6]. The purpose of the methodology: to assess moral self-awareness and the degree that determines the importance of moral values for self-understanding, that is, to determine the totality of personal characteristics that reflect moral judgments and determine the reflexivity of actions to help people around.

Description of the technique. A list of 16 statements in the form of two words is proposed, the importance of which should be noted individually according to the degree of preference (from 1 to 4 points, where the first is the most significant). Personal characteristics are grouped into three blocks: eight non-moral qualities (imaginative, hardworking, sociable, intellectual, funny, logical, independent, energetic); four moral qualities (honest, loyal, fair, reliable); four prosocial moral qualities (attentive, kind, sympathetic, generous). To assess the content of prosocial identity, the meanings of non-moral concepts are subtracted from the meanings of prosocial virtues. For statistical data processing, Student's t-test was used.

The second hypothesis of our study is related to the social norms of prosocial behavior. It is possible that the social norms of adoptive parents differ in their degree of expression from the social norms that guide the behavior of ordinary parents raising blood children.

Prosocial behavior is any action aimed at the well-being of other people. According to H. Heckhausen, prosocial behavior should be analyzed from the point of view of several important points, one of which is personal norms that set the standards for assessing the subject of his altruistic act (which generally do not coincide with the normative standards prescribed by society) [1].

The social norms of prosocial behavior include: the norm of social responsibility, the norm of reciprocity, the norm of justice, the norm of "cost-reward" [5]. These norms are found in all human societies. They provide a cultural basis for prosocial behavior. In the process of socialization, individuals learn these norms and gradually begin to behave in accordance with the principles of prosocial behavior. The formation of prosocial behavior largely depends on the level of assimilation of social (social) norms, which is associated with normative regulation (behavior management).

The norm of social responsibility is a social rule based on the fact that people should help those who need it, includes causal attribution and a sense of responsibility for various social situations in order to avoid feelings of guilt and preserve self-esteem. This norm requires prosocial behavior in all cases where the person in need of help is dependent on a person who can provide help.

The norm of reciprocity is associated with various reactions to the provision of assistance, the so-called exchange relations of various motivations (altruistic and egoistic). Generally, aid is given in exchange for previous aid, the expectation that people give to help others will increase the likelihood that they will be helped in the future.

The norm of justice is designed to help people "according to merit." Based on the fact that the members of the group will be satisfied with the distribution of the reward, which is proportional to the participation of each member of the group. People define it as "fairness" when each person receives remuneration in the amount in which personal participation in joint activities was established (undertaken).

The cost-reward norm is associated with personal distress and emergency assistance.

Research methodology: "Social norms of prosocial behavior", developed by I.A. Furmanov, N.V. Kukhtova [5]. Purpose: to study the positions of appropriation of social norms and building interpersonal relations on the basis of four types of norms that influence the prosocial orientation of behavior: the norm of social responsibility, the norm of reciprocity, the norm of justice, the norm of "costs-reward".

For statistical data processing, Student's t-test was used.

The third hypothesis of our study was expressed in the fact that there may be differences in the manifestations of care, i.e. expressiveness of compassion, empathy and altruism between foster parents and parents raising blood children.

Empathy, responsiveness, altruism, responsibility, and a desire to help are important personality traits of any parent, and especially an adoptive parent. These characteristics constitute the content of prosocial identity.

Research methodology "Methodology for measuring care" (H. Kohut, B. J. Boome, F. N. Kerlinger), adapted by I. A. Furmanov, N. V. Kukhtova [5]. Purpose: to measure caring through the manifestation of compassion, empathy and altruism.

Description of the technique. It is a questionnaire consisting of 3 scales: compassion, sympathy (empathy), altruism.

According to the results of our study, the indicators of prosocial identity in the group of adoptive parents were: mean = 2.86. For the control group: mean = 1.75. The differences are significant: temp = 2 at p≤0.05. Thus, the hypothesis of our study was confirmed.

Conclusions: the moral self-awareness of women who have been working as foster parents for many years is qualitatively different from the hierarchy of moral qualities of women who do not show long-term purposeful helping behavior. For adoptive parents, prosocial moral qualities (attentive, kind, sympathetic, generous) are of greater importance in the hierarchy of the moral self-awareness of the individual.

According to the results of our study, the indicators of the norms of social responsibility, the norms of reciprocity, the norms of fairness, the norms of "cost-reward" between the groups of women working as foster parents, and Women raising only blood children do not differ significantly (Table 1). Thus, our hypothesis was not confirmed.

Table 1 – Appropriation of social norms, averages for two samples

Social norms	Women who work as foster parents (average value)	Women raising only blood children (average value)	Differences
Norm of social responsibility	12,49	11,45	temp = 1,4 tcr = 1,97; p≤0,05
Reciprocity norm	4,35	4,85	temp = 1 tcr = 1,97; p≤0,05
Norm of Justice	11,04	10,55	temp = 0,6 tcr = 1,97; p≤0,05
Cost-reward norm	8,53	8,33	temp = 0,3 tcr = 1,97; p≤0,05

Conclusions: in our opinion, the results of the study can be explained by the belonging of both samples of respondents to the same socio-cultural stratum. The same culture, the same social norms accepted in our society and socialized by these representatives of society. It is likely that the reasons for adoptive parenthood as prosocial behavior are less related to learned social norms.

According to the results of our study, the indicators on the "Compassion" and "Empathy" scales between the groups of women working as foster parents and women raising blood children do not differ significantly (Table 2). However, significant differences between these groups were found on the "Altruism" scale.

Table 2 – Measures of care, two-sample averages

Measures of care	Women who work as foster parents (average value)	Women raising only blood children (average value)	Differences
Scale "Compassion"	17,29	17,27	temp = 0,1 tcr = 1,97; p≤0,05
Scale "Empathy"	15,92	15,3	temp = 0,7 tcr = 1,97; p≤0,05
Scale "Altruism"	18,9	16,95	temp = 2,0 tcr= 1,97; p≤0,05

Conclusions: women who have been working as foster parents for many years declare a greater inclination to altruism than women raising blood children. Those. adoptive mothers are more inclined to selfless concern for the well-being of others, to selflessness, kindness and mercy.

According to J. Reikovsky, altruistic behavior is defined as "love and care for others", "the desire for the well-being of others in the absence of benefits for oneself", "the tendency to sacrifice oneself for the sake of the group without compensation", "the desire to help another, even if it entails some costs for the helper" [7]. In our opinion, such an understanding of altruism is closest to the position of the majority of foster parents, for whom the profession of a foster parent inalienably involves the investment of a huge amount of strength, kindness, patience, and complicity in the life of a foster child.

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E. A. Lupekina

PECULIARITIES OF THE SUBJECTIVE FEELING OF LONELINESS
OF BELARUSIAN SCHOOLCHILDREN WITH DIFFERENT SOCIAL ORIENTATION

The article is devoted to the actual psychological problem of experiencing loneliness in adolescents. The article describes the results of an empirical study of the subjective feeling of loneliness among Belarusian schoolchildren. A comparative analysis of data on the manifestation of various types of loneliness in schoolchildren with a prosocial and socially inert personality orientation is presented. It is concluded that the pro-social orientation of the personality of schoolchildren, the desire to help others, to actively participate in socially useful activities, makes it possible to reduce the intensity of the subjective experience of loneliness and, in general, experience loneliness as a positive state.

At first glance, it may seem to a simple layman that the problem of loneliness least of all concerns schoolchildren, youth and the younger generation as a whole. But it's not. Modern teenagers are growing up in the era of information technology. On the one hand, constant access to the Internet and the ability to communicate at any time have led to the fact that modern teenagers have ceased to appreciate live communication and, in some way, have lost touch with the real world. On the other hand, the experience of loneliness for a teenager remains an acute problem. The concept of "digital loneliness" has appeared – the phenomenon of the subjective experience of loneliness by the digital generation [1].

Most psychologists are of the opinion that adolescence is the time of the formation of self-awareness, the formation of personality, when a teenager necessarily faces the experience of a feeling of loneliness. "The feeling of loneliness .... is a normal phenomenon, a consequence of the birth of inner life," notes the domestic psychologist I. S. Kon [2, p. 59].

In adolescence, the experience of loneliness can be more acute and have a negative impact on personal development. Teenage loneliness is dangerous because it can be accompanied by such consequences as depression, alcoholism, drug addiction and suicide attempts. This is associated with a sense of defenselessness and self-doubt, in their abilities. It seems to teenagers that no one hears or

understands them, they have no one to trust. They are afraid to ask for help and withdraw into themselves. This leaves an imprint on their further socialization in society.

Thus, the problem of loneliness in modern schoolchildren and adolescents is relevant. How to deal with the negative manifestations of loneliness? Since loneliness is a subjective experience, there is no single way to overcome it that will suit everyone. However, the analysis of psychological recommendations for this problem convinces us that the manifestation of activity in a broad sense (find your hobby, start helping other people, etc.) is one of the most effective methods of overcoming loneliness.

The assumption of our study is that there are differences in the severity of loneliness and the nature of its manifestation in adolescents with different social orientations: prosocial and socially inert.

Under the prosocial orientation of the individual, we understand the propensity to help others and the willingness to benefit other people and society as a whole. The desire to help others for such people is a value, a range of interests, a motive and gives human life a certain meaning. In life, we meet many examples of premeditated, targeted assistance. For example, charity, voluntary work for the well-being of others, volunteering. The socially inert orientation of the individual is understood by us as the absence of a propensity for prosocial activity.

Our study was conducted in 2022 on the basis of I. Melezh Gymnasium No. 36 of Gomel. The study involved 120 students, including 43 adolescents with a pro-social personality orientation and 77 with a socially inert personality orientation, aged 15 to 17 years. The division of adolescents into groups with a prosocial and socially inert orientation was carried out using the method of expert assessments and observation. The group with a pro-social orientation of the personality included schoolchildren whose range of interests and voluntary activity includes such activities as volunteering (for the elderly, children, animals), socially useful activities (labor and environmental landings), participation in creative projects, competitions. Schoolchildren who did not show interest and activity in the above activities were classified as socially inert.

For the purpose of our study, the following psychodiagnostic methods were used. "The scale of the subjective feeling of loneliness" by D. Russell, M. Ferguson, which allows you to determine the degree of severity of the subjective feeling of loneliness (high, medium and low level). A high degree of loneliness corresponds to an indicator from 40 to 60 points [3]. "Questionnaire for determining the type of loneliness" S.G. Korchagina [4]. The questionnaire is designed to determine the depth of the experience of loneliness, and its type. The following scales are presented in the methodology: diffuse, alienating, dissociated loneliness. For statistical data processing, Student's t-test and Fisher's φ*-test were used.

Research results. Among schoolchildren with a socially inert orientation, the presence of a state of loneliness (medium and high levels) was revealed in 41% of the respondents. At the same time, the data of our study are consistent with the data of other modern similar Russian studies [5]. Our results confirm the hypothesis that the problem of loneliness is relevant for many modern schoolchildren.

The average level of subjective feeling is characterized by the author of the technique as adequate, as it reveals the features of experiencing the subjective feeling of loneliness as a natural normal state. Such teenagers can only occasionally experience a feeling of loneliness due to a lack of attention from the near social environment.

According to our study, among schoolchildren with a prosocial orientation of personality, the presence of a state of loneliness (average level) was revealed in 16% of respondents. The majority of adolescents with a prosocial orientation (84%) have a low level of subjective feeling of loneliness.

The low level of subjective feeling of loneliness in the context of this technique suggests that it is not common for adolescents to experience loneliness as a state, it is not an obstacle for them in interpersonal relationships. These teenagers have harmonious social relationships.

The results of a comparative analysis of indicators of the level of subjective feeling of loneliness in adolescents with a prosocial and socially inert orientation are presented in Table 1.

Table 1 – Comparative indicators of the subjective feeling of loneliness in adolescents with different social orientations according to Student's t-test

Group of schoolchildren	Mean subjective feeling of loneliness	t-test Student	Significance level
Schoolchildren with a pro-social orientation	11,953±6,09	4,558	0,001**
Schoolchildren with a socially inert orientation	18,74±10,213		

According to our study, it was statistically reliably established that adolescents with a socially inert personality orientation are significantly more likely to experience a subjective feeling of loneliness than adolescents with a prosocial personality orientation. Based on these data, we assume that the prosocial activity of the personality of schoolchildren in a broad sense allows them to fight loneliness and overcome its negative manifestations.

Analysis of the results obtained according to the questionnaire by S. G. Korchagina to determine the type of loneliness showed which type of loneliness prevails in adolescents with a prosocial and socially inert orientation.

According to our data, we can note that adolescents with a prosocial and socially inert personality orientation show different types of loneliness.

Schoolchildren experiencing diffuse loneliness are distinguished by suspicion in interpersonal relationships and a combination of conflicting personal and behavioral characteristics: resistance and adaptation in conflicts; the presence of all levels of empathy; excitability, anxiety and emotivity of character, communicative orientation [4]. In a state of acute experience of diffuse loneliness, a teenager strives for other people, hoping to find confirmation of his own existence, his significance in communication with them. Acutely reacting to stress, adolescents choose the strategy of seeking sympathy and support.

According to our study, schoolchildren with a prosocial personality orientation tend to experience diffuse loneliness more often than schoolchildren with a socially inert personality orientation (φ^*=1.43 with α=0.08). The nature of the experience of this state of loneliness in schoolchildren is probably associated with their desire to show prosocial activity. In other words, volunteering, socially useful activities help such schoolchildren to cope with loneliness.

Schoolchildren who discover a state of alienating loneliness are prone to manifestation of excitability, anxiety, cyclothymic character, low empathy, confrontation in conflicts, pronounced inability to cooperate, suspicion and dependence in interpersonal relationships. Such adolescents are characterized by a tendency to isolate themselves from other people, norms and values accepted in society, the world as a whole. At the same time, there is a loss of significant connections and contacts, intimacy, privacy in communication, and the ability to unite. A person feels abandoned, lost, abandoned. He can no longer find the necessary response and understanding. Awareness of the impossibility of being listened to, understood, accepted often leads to the conviction of one's own uselessness [4].

According to our study, the state of alienating loneliness is experienced by the same number of schoolchildren with a prosocial and socially inert orientation (35% and 36%).

The dissociated type of loneliness, according to the author of the methodology, is the most difficult state, both in terms of experiences and in terms of origin. It is expressed in anxiety, excitability and demonstrative nature, confrontation in conflicts, personal orientation, a combination of high and low empathy, selfishness and subordination in interpersonal relationships, which are opposite trends [4].

According to our study, it was found that adolescents with a socially inert personality orientation tend to experience a dissociated type of loneliness more often than adolescents with a prosocial personality orientation (φ^*=1.42 with α=0.08). This means that adolescents with a socially

inert personality orientation are subject to the most acute and complex type of loneliness, in which some aspects of their personality are accepted by a person, while others are categorically rejected. In this state, the feeling of loneliness is experienced as acute, clear, conscious, painful.

Thus, schoolchildren with a socially inert personality orientation are more likely to experience a subjective feeling of loneliness in general than schoolchildren with a prosocial personality orientation. They are more characterized by experiences of the most acute, painful, clearly perceived loneliness (dissociated loneliness).

Compared with the group of socially inert students, students with a prosocial personality orientation are less prone to acute experiences of subjective loneliness. This group of schoolchildren is characterized by an experience of diffuse loneliness, manifested in the desire for sympathy and support, the desire to find confirmation of their significance in communication. In our opinion, such a nature of the experience of loneliness in these schoolchildren pushes them to the manifestation of prosocial activity. Being engaged in socially useful, volunteer activities, schoolchildren cope with loneliness, confirm their own significance and value.

The experience of loneliness is a normal phenomenon of adolescence. However, loneliness can occur in a more acute form and have a negative impact on personal development. The prosocial orientation of the personality of schoolchildren, the desire to help others, to actively participate in socially useful activities, makes it possible to reduce the intensity of the subjective experience of loneliness and, in general, experience loneliness as a positive state, the dynamic balance of the processes of identification and isolation, the psychological stability of the individual in relation to the influences of society.

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E. A. Lupekina

PERSONAL RESOURCES OF BULLYING PARTICIPANTS IN THE BELARUSIAN EDUCATIONAL ENVIRONMENT

The article reflects the results of an empirical study of the psychological characteristics of adolescents, participants in bullying in the Belarusian educational environment, reflecting their personal resourcefulness: social and psychological adaptation, resilience, models of coping behavior. The results of the study are of interest in the context of a resource approach to providing psychological assistance to victims of bullying.

The first systematic studies of the problem of bullying belong to Scandinavian scientists – D. Olveus, P. Heinemann, A. Pikas, E. Roland. Then interest arose in Great Britain (V. Ortoa, D. Laya, D. Tattua, E. Munte). In the United States, special attention to the problem of bullying began to be shown in the early 90s of the XX century.

Today, the attitude to the problem of bullying is changing, its seriousness is emphasized. So Belarusian authors, in particular N. F. Greben, analyze the problem of the prevalence of bullying among Belarusian teenagers, the most common forms of bullying and the possibility of its detection using psychodiagnostic tools. N. F. Greben' established differences in the severity of bullying between different class groups, between boys and girls, and some interethnic differences were also identified [1].

In addition, the seriousness of the attitude to the topic of bullying is evidenced by the large-scale national study conducted in 2018 to assess the situation with violence against children in the Republic of Belarus (including school violence), with the support of the United Nations Children's Fund (UNICEF). Reputable Belarusian scientists, in particular Professor, Doctor of Psychology I. A. Furmanov, took part in it. The results of the study showed that "every second child studying in institutions of general secondary education, and two out of five students in institutions of vocational education were subjected to violence in the school environment" [2, p. 14].

D. Lane and E. Miller define bullying as a long process of conscious cruel attitude, physical and (or) mental, from one or a group of children to another child (other children) who is weaker [3].

Bullying as a form of violence can be expressed in a variety of ways. In the classification of bullying, the following types are most often distinguished:
– direct (both physical and verbal);
– indirect (social deprivation, gossip, conspiracies, etc.).

In the classification of social roles in a situation of bullying, there are "bullers", or "persecutors", "victims" and "witnesses" [4]. "Victims" of bullying are characterized as sensitive, withdrawn and shy people. They are anxious, insecure, have low self-esteem. At the same time, any feature of the "victim" can serve as a reason for bullying – physical disabilities, the ambiguous attitude of teachers, psychological characteristics. The reason may also be a low level of family income or social status, gender or national identity, and simply the definition of a person as "alien".

"Pursuers" or "bullyers" have an average or below the average level of anxiety in the group, have a strong need to dominate and subdue, behave aggressively and defiantly, often considering their behavior as justified. The "witness" position is the most difficult to recreate typological features, since in a situation of bullying, the majority turns out to be "witnesses" [5].

The "invisible" factors of bullying, for example, such as the resourcefulness of a person, are the most difficult to study. The data accumulated in psychological science on the problem of bullying and its relationship with personal resources are not sufficient. This determined our choice of research topic.

The concept of "resources" is used in various studies related to the study of psychic reality. In recent years, the resource approach, which originated in humanistic psychology, has become widespread in psychology, in which the study of the constructive beginning of the personality, which makes it possible to overcome difficult life situations, has taken an important place.

The problem of resourcefulness of the personality was dealt with by such foreign authors as E. Fromm, S. Hobfall, S. Muddy and others, in domestic psychology – K. Muzdybaev, N. E. Vodopyanova, A. G. Maklakov, L. V. Kulikov and others scientists.

Analysis of the psychological literature allows us to make the following generalizations: there are two classes of resources - personal and environmental (in other words, psychological and social). Personal resources (psychological, professional, physical) are the skills and abilities of a person. Environmental resources reflect the availability of assistance (instrumental, moral, emotional) to the individual in the social environment (from family members, friends, colleagues) and material support for the life of people who have experienced stress or are in stressful conditions.

Personal resources are an integrative characteristic. So, N. E. Vodopyanova defines resources as "internal and external variables that contribute to psychological stability in stressful situations; ...

emotional, motivational-volitional, cognitive and behavioral constructs that a person actualizes to adapt to stressful / stressful work and life situations, ... means (tools) used by him to transform interaction with a stressful situation" [6, p. 290].

In the resource concept of stress by S. Hobfoll, resources are determined as something that is significant for a person and helps him adapt in difficult life situations. S. Hobfall refers to resources: material objects (income, house, transport, clothing, object fetishes) and intangible objects (desires, goals); external (social support, family, friends, work, social status) and internal intrapersonal variables (self-esteem, professional skills, optimism, self-control, life values, belief system, etc.); mental and physical conditions; volitional, emotional and energy characteristics that are necessary (directly or indirectly) for survival or maintaining health in difficult life situations or serve as a means of achieving personally significant goals [7].

Personal resourcefulness in the concept of S. Maddy corresponds to the concept of "hardiness" introduced by him, which is defined by the author as an integrative characteristic of a person responsible for the success of overcoming life's difficulties. Hardiness implies psychological vitality and extended effectiveness of a person, being an indicator of his mental health [8].

Based on the concepts listed above, we will focus on such resource characteristics of the personality of bullying participants as social and psychological adaptation, resilience, models of coping behavior.

The purpose of our empirical study was to study the psychological characteristics of adolescents, participants in bullying in the educational environment, reflecting their personal resourcefulness.

The choice of psychodiagnostic tools also corresponded to the theoretical and methodological basis of the study (S. Maddy, S. Hobfoll, N. E. Vodopyanova). We used the "Scale of socio-psychological adaptation" (SPA) by K. Rogers and R. Diamond in the adaptation of A. K. Osnitsky, a five-factor personality questionnaire (R. McCrae, P. Costa), a questionnaire "Strategies for overcoming stressful situations" ("SACS") S. Hobfoll in the adaptation of N. E. Vodopyanova, S. Muddy's hardiness test in the adaptation of D. A. Leontiev. The statistical method of data processing is Student's t-test for independent samples.

The study was conducted in the 2021–2022 academic year on the basis of the educational institutions "Secondary School No. 60" in Gomel and "Rechitsa District Gymnasium". The sample of participants was 100 students (13–14 years old). Of these: 52 girls and 48 boys.

Using the method of expert assessments, two categories of students were distinguished from this sample: "bullers" ("persecutors"), the number of which was 16 people, and "victims" – 21 people. The remaining students made up the control group – 63 people.

For the method of expert assessments, a questionnaire for teachers "Bulling" was used, developed by the teacher-psychologist "Gymnasium № 91" E. V. Novikova and the medical psychologist "Clinical Psychotherapeutic Center" of the Ministry of Health of the Republic of Bashkortostan I. R. Khokh. Further, a conversation was held with teachers, real cases, the frequency of episodes and the specifics of the roles occupied by students in the process of bullying were discussed. On the issues of bullying among students, they also talked with a school psychologist and a social teacher.

In the course of studying the coping strategies of adolescents, participants in bullying in the educational environment, it was found (Table 1) that "bullyers" are to a greater extent than "victims" ($t = 10.1$ at $p \leq 0.01$) and representatives of the control group ($t = 5.8$ with $p \leq 0.01$) use the "aggressive actions" strategy.

Aggressive actions of "bullers" are directed at other people. They manifest themselves in a tendency to experience negative feelings in case of failures and conflicts with other students, to blame others for something, to experience a feeling of anger, irritation, internal tension.

Table 1 – Average indicators of coping strategies of "bullyers", "victims" and the control group

Coping strategies	"Bullers"	"Victims"	Control group
assertive actions	19,8	18,4	20,4
entering into social contact	20,1	22,7	26,1
search for social support	21,3	21,7	22,3
careful action	23,5	20,3	21,5
impulsive actions	19,3	17,7	17,9
Avoidance	20,3	18	14,7
manipulative actions	24	17,8	18,2
antisocial actions	21,6	16,8	16,4
aggressive actions	23,5	13	17,6

"Bullers" to a greater extent than "victims" (t = 4.06 at p ≤ 0.01) and representatives of the control group (t = 5.3 at p ≤ 0.01) use the "antisocial actions" strategy.

Asocial actions of "bullers" are characterized by a tendency to go beyond socially acceptable limits and restrictions, egocentrism, the desire to satisfy their own desires, regardless of the circumstances and interests of other students.

"Bullers" to a greater extent than "victims" (t = 5.53 at p ≤ 0.01) and representatives of the control group (t = 6.8 at p ≤ 0.01) use the "manipulative actions" strategy. They are good manipulators, they know how to force others to do something in their own interests, how to influence the behavior of other students so that they do not suspect it.

"Bullers" to a greater extent than "victims" (t = 3.26 at p ≤ 0.01) and representatives of the control group (t = 2.66 at p ≤ 0.05) use the "cautious actions" strategy.

"Bullers" are characterized by long reflection and careful weighing of all possible solutions, the desire to avoid risk. They think through all the possible consequences of their actions and exercise caution in their execution.

Adolescents who are "victims" in the process of bullying are more likely to use such coping strategies as "entering into social contact", "search for social support" and "cautious actions".

Adolescents in the control group more often use such coping strategies as "entering into social contact (t = 3.31 at p ≤ 0.01), "search for social support" and "assertive actions" (t = 3.31 at p ≤ 0,01).

Thus, for adolescents, participants in bullying in the educational environment, mainly "persecutors" (or "bullyers"), the use of non-constructive coping strategies of behavior is typical: manipulative, aggressive and asocial actions. Such personal resources as the ability to effectively and constructively overcome stressful situations are not developed among the direct participants in the bullying process.

The study of the level of resilience of the participants in the educational process (Table 2) showed that there are no differences between "bullyers" and "victims" in terms of the level of resilience. However, it becomes obvious that both "victims" and "bullies" have a significantly lower level of hardiness than adolescents in the control group (t = 4.33 at p ≤ 0.01 and t = 3.69 at p ≤ 0, 01).

Table 2 – Average indicators of the level of hardiness of "bullers", "victims" and the control group

	"Bullers"	"Victims"	Control group
Vitality index	62,5	66,5	80,9

Thus, the main participants in bullying have a low ability of the individual to withstand stressful situations, and are not able to maintain internal balance, which leads to a decrease in the success of their activities.

Table 3 – Comparative characteristics of "bullyers", "victims" and the control group according to a five-factor personality questionnaire (average scores)

Factors	"Bullers"	"Victims"	Control group
introversion-extroversion	47,12	46,33	48,24
Isolation-attachment	47,25	54,42	49,16
impulsivity-self-control	47,62	50,95	46,67
Emotional stability-instability	50,68	48,23	46,94
Practicality-expressiveness	56,12	42,94	47,45

A study of the psychological characteristics of adolescents participating in bullying (Table 3) showed that "victims" have a higher level of attachment than bullies (t = 2.19 at p ≤ 0.05) and representatives of the control group (t = 2, 07 at p ≤ 0.05), i.e. they are more trusting and cooperative. At the same time, they are more expressive than the representatives of the control group (t = 2.24 at p ≤ 0.05).

Bullers are more expressive (t = 2.81 at p ≤ 0.01) and emotionally unstable (t = 2.24 at p ≤ 0.05) than the representatives of the control group.

Thus, the typical psychological characteristics of adolescents involved in bullying are emotional instability and expressiveness, which also testifies in favor of their low personal resourcefulness.

The study of socio-psychological adaptation (Figure 4) showed that the "victims" are the least adapted to the conditions of the social environment. "Bullers" characterized by a higher level of adaptation than "victims" (t = 2.83 at p ≤ 0.01), that is, they are more adapted to the conditions of interaction with other people in the system of interpersonal relations, they quickly adapt to changing environmental conditions. In addition, the desire for dominance is more pronounced in bullies, which is manifested in the desire to influence others, to convince them of their opinion, to defend their positions.

However, in general, both "victims" and "bullies" have a lower level of adaptation than adolescents in the control group.

The maladjustment of the "victims" of the bullying process is specific, so with low levels of self-acceptance, they show a high level of acceptance of others (I am "-", you are "+").

"Bullers" show significantly lower rates of acceptance of others than "victims" (t = 2.66 at p ≤ 0.05) and teenagers in the control group (t = 2.74 at p ≤ 0.01).

Table 4 – Average indicators of socio-psychological adaptation of "bullers", "victims" and the control group

Scales of socio-psychological adaptation	"Bullers"	"Victims"	Control group
general adaptation	51,9	42,04	54,1
self-acceptance	54,3	46,2	56,3
Acceptance of others	53,7	65,7	66,1
Emotional Comfort	51,6	54,6	58,4
Internality	51	55,5	56,2
Striving for dominance	48,2	42,2	44,7

The concept of "socio-psychological adaptation" implies a person's adaptability to harmonious life in society, which combines the need to meet the requirements of society and their own needs, motives, interests. Socio-psychological adaptation is characterized by the individual's awareness of the need for gradual changes in relations with the social environment through the mastery of new ways of behavior, as well as the formation of new adaptive mechanisms focused on harmonizing the relationship of the individual with the environment. The level of socio-psychological adaptation is closely related to the psychological characteristics of the individual and the characteristics of her behavior.

The results of the study showed that adolescents, participants in the bullying process, especially the "victims" of bullying, have a low level of social and psychological adaptation.

Thus, the data of the empirical study indicate that the resource characteristics of the personality of bullying participants in the educational environment are characterized by deficiency, or low resource potential of the individual. This is expressed in:

– a low level of socio-psychological adaptation;
– the use of non-constructive strategies of behavior;
– low level of vitality;
– emotional instability, inability to control one's emotional state in a bullying situation.

In the context of the resource concept of S. Hobfoll, a person seeks to restore lost and acquire new resources [7]. The development of constructive interaction skills in stressful situations, constructive coping strategies, such as "assertive actions", "entering into social contact", "search for social support" can become opportunities for expanding the resource potential of the individual for adolescents who are participants in bullying. Psychological and pedagogical assistance to adolescents, participants in bullying, should be based on a personality-oriented approach to overcoming difficult life situations. Also, one of the possibilities for expanding a person's personal resources (according to research [9]) is the acquisition of personal achievements, success in any sphere of activity significant for the subject, and optimism, that is, self-confidence, a positive emotional atmosphere of interaction with others.

Prevention of bullying in educational institutions will be timely already in elementary school. Before the age of 12, the problem of bullying is easier to solve, because at this age, students have not yet formed moral principles, and they rely on the opinion of the teacher. Sufficiently effective methods here will be a conversation with children of primary school age, censure. After 12 years, moral convictions are already, in the main, formed. It is necessary to approach the issue of aggression more carefully. Since adults are no longer considered authority, peers or slightly older children come to the fore in the role of authority. Effective methods will be influence on the aggressor from the outside, an authoritative person or a reference group; attracting a reputable ally. In this situation, it is worth trying to convince students that bullying is unacceptable behavior.

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E. A. Lupekina

SOCIO-PSYCHOLOGICAL ADAPTATION OF SCHOOLCHILDREN
WITH DIFFERENT ATTACHMENT TO MOTHER

The article reflects the results of an empirical study of the socio-psychological adaptation of 5th grade students with different attachment to their mother. It has been established that schoolgirls with secure attachment have a higher level of adaptation compared to girls with anxious-ambivalent and avoidant attachment types. It has been established that schoolboys with secure attachment have a higher level of adaptation compared to boys with avoidant attachment. Boys with anxious-ambivalent attachment have a slightly higher level of adaptation compared to boys with avoidant attachment. The results of the study are of interest in the context of the work of a school psychologist in providing psychological assistance to middle-level students in the process of school adaptation, based on the approach of psychotherapy for attachment disorders.

In modern psychology, it has been established that the features of the formation and nature of attachment directly affect the formation of a child, and later on an adult as a person, the peculiarity of his interaction with society, his attitude to the world around him, the establishment of social contacts [1, p. 37–49].

Attachment is an innate form of behavior in a child, and any form of behavior that results in the acquisition or maintenance of intimacy with the "object of attachment", which is usually the person who provides assistance. The experience of relations with parents, which gives rise to attachment to a loved one, determines the further course of the child's mental development. If parents and other family members show tenderness, care, sensitivity to the needs and interests of the child in relation to the child, a reliable attachment is formed in him, which gives a sense of security and security. Securely attached children are characterized by active exploratory activity in a new environment, lack of fear of a stranger, and joy at the appearance of a mother or other close relative. The attitude of the child towards himself and his idea of himself determine his attitude towards close adults [2, p. 155–188].

The process of school adaptation is the most important moment in the formation of the child as a subject of educational activity. Firstly, because in the course of adaptation to schooling, the child receives an orientation in the system of behavior, which for a long time determines the future fate of his development. Secondly, in the course of this process, a student team is formed with a certain level of socio-psychological cohesion. Relationships in the classroom are a powerful means of attracting the child's personality to new social functions, culture, and norms of behavior that are characteristic of the school. Some children go through this process easily without mental trauma, while others are quite difficult, as a result of which the problem of "school maladjustment" follows. Close attention to school adaptation is due to the fact that, representing a dynamic process of progressive restructuring of the body's functional systems, it ensures age-related development; the mechanisms of adaptation that arose during adaptation are updated again and again, and are used in similar situations, are fixed in the structure of the personality and become substructures of its character. The school educational situation is aimed at building educational interaction in the classroom, at the acceptance and development by schoolchildren of the way of school life, norms and methods of educational cooperation, forms of assessment of educational work, and methods of communication. The main strategic task of any school is to prepare its students for the future independent adult life [3, p. 12–27].

When entering secondary school, many children have difficulty getting used to the new environment. The relevance of this study is due to the fact that at present more and more children entering secondary school are adapting to society with great difficulties.

The purpose of our study was to determine the characteristics of the socio-psychological adaptation of students with different attachment to the mother.

The study was conducted in 2022 on the basis of the State Educational Institution "Uvarovichi Secondary School of the Buda-Koshelevsky District", the State Educational Institution "Secondary School № 19 in Gomel". Sample of the study: the study involved 120 students of the 5th grade aged 10–11 years, including 60 boys and 60 girls.

To conduct an empirical study, the following diagnostic methods were selected: Questionnaire for attachment to parents for older adolescents M.V. Yaremchuk; Questionnaire of socio-psychological adaptation, SPA (Rogers-Diamond). Student's t-test was used to establish differences between the samples.

The results of the study of the type of attachment to the mother in schoolchildren of the 5th grade according to the method of M.V. Yaremchuk are presented in Table 1.

Table 1 – The results of the study of attachment to the mother of students in grade 5

Attachment type	Reliable attachment	Anxious-ambivalent attachment	Avoidant attachment
Boys	38%	35%	27%
Girls	35%	43%	22%

According to the results of our psychodiagnostic study, as well as the data presented in Table 1, we can state the following:

Reliable attachment to the mother is typical for 38% of the surveyed boys and for 35% of the surveyed girls.

Secure attachment is characterized by the fact that in the presence of the mother the child feels safe, uses the mother as a reliable base for exploring the world in episodes before separation; experiences her absence, refuses to play, reduces research activity when the mother is not around; tends to the mother, looking for physical contact with her at reunion. Secure attachment to parents must be accompanied by a perception of high positive interest on their part and low hostility, a balance between directiveness and support for autonomy, and consistency in parenting. People with a secure type of attachment perceive themselves, other people, and relationships positively. Such people are able to build strong close relationships, primarily due to the positive experience of interaction with a significant adult. This means that the childhood experience of a person's relationship with a significant adult was richly colored emotionally, had a reliable consistent character, was saturated with positive reactions and high-quality feedback.

Anxious-ambivalent attachment to the mother was found in 35% of the studied boys and 43% of the girls surveyed.

With anxious-ambivalent attachment, children show signs of anxiety even before separation from a parent, they experience the absence of a parent hard, and during reunion they show ambivalent reactions (search for contact - and at the same time an obstacle to contact). This type of attachment will be associated with perceived low positive interest, increased directiveness and educational inconsistency on the part of parents. Children with an anxious attachment type may perceive themselves negatively. They often show insecurity, as a result of which, in relationships with people, they are able to show dependence and jealousy.

Avoidant attachment to the mother was found in 27% of the surveyed boys and 22% of the surveyed schoolgirl girls.

Avoidant attachment is characterized by low expressiveness of children's experiences during separation from the parent, as well as avoidance of contact when reunited with him. Children with this type rarely cry and show fewer signs of anxiety compared to infants in the two previous groups; during the reunion, they avoid the mother, either by mixing intimacy-seeking and contact-avoidance behaviors, or by completely ignoring the mother. Such attachment will be combined with the impoverished emotional side of the interaction and the prevalence of support for autonomy over directiveness.

According to research by psychologists, under normal conditions of upbringing, in 70% of cases, children develop a secure attachment to their mother. However, current research shows significantly lower results. So, M.V. Yaremchuk, when studying the role of attachment to parents in the formation of romantic relationships in older adolescence, revealed a reliable type of attachment in only 35% of adolescents. It is noteworthy that such a low rate occurs in various families, including socially prosperous families that do not have pronounced signs of impaired functioning. We can assume that there is a crisis in the parent-child relationship.

Let us present the results of a study of a group of boys and girls according to the method of diagnosing socio-psychological adaptation by K. Rogers and R. Diamond (Table 2).

Table 2 - The results of the study of socio-psychological adaptation of students in grade 5 according to the method of K. Rogers and R. Diamond in the parameter "Adaptation"

Level adaptation	Low level	Middle level	High level
Boys	28%	30%	42%
Girls	23%	28%	48%

It can be noted that less than half of the students have a high level of adaptation to new learning conditions in the middle school for the second quarter of the school year (among them 42% of girls and 48% of boys). The data obtained should be interpreted as not high enough for such a period of time as the second term. Every fourth student is not sufficiently adapted to the new learning conditions. Such students have additional difficulties in learning, therefore, they need the help of a school psychologist.

Let's present the results of our study on the ratio of the type of attachment to the mother in grade 5 students and their level of socio-psychological adaptation in Table 3.

Table 3 – The results of the study of socio-psychological adaptation of 5th grade students with different types of attachment to the mother

Level adaptation	Low level	Middle level	High level
Boys with secure attachment to mother	21%	26%	52%
Boys with anxious-ambivalent attachment to mother	14%	28%	58%
Boys with avoidant attachment to mother	57%	31%	12%
Girls with secure attachment to mother	22%	27%	51%
Girls with anxious-ambivalent attachment to mother	30%	35%	25%
Girls with motherly avoidance	30%	30%	40%

According to the results of our study, 52% of boys with secure attachment to their mother have a high level of social and psychological adaptation. This means that boys with this type of attachment are more drawn to explore new environments and show more independence. Because they have a developed sense of security with a reliable adult family member in their lives. The mother learns to cope with difficult and new conditions without avoiding them, which makes it possible to gain useful experience for future situations.

According to the results of our study, 58% of boys with anxious-ambivalent attachment to their mother also have a high level of social and psychological adaptation. Despite the fact that this type of attachment is not the most adaptive, students have a set of personal characteristics that allow them to adapt to the conditions, but in a slightly different way than children with a secure type of attachment. This indicates that such children, as a rule, believe that fate is in their hands, and they control it. Even after a series of failures, they do not lower their expectations and maintain a sense of

control over the environment, even if their behavior goes unrewarded several times. This allows them to quickly adapt to new conditions at school.

According to the results of our study, only 12% of boys with avoidant attachment to their mother have a high level of social and psychological adaptation. Compared to boys who show a reliable and anxiously ambivalent type of attachment to their mother, these are statistically significantly lower indicators.

Using Student's t-test, it was found that the significance of differences between groups of boys with secure and avoidant attachment was temp=2.085 at p=0.05.

Using Student's t-test, it was found that the significance of differences between the groups of boys with anxious-ambivalent and avoidant attachment was temp=3.154 at p=0.05.

Thus, it can be concluded that boys with avoidant attachment to their mother are less adaptable to the conditions of secondary education at school than boys with secure and anxiously ambivalent attachment to their mother.

According to the results of our study, 51% of girls with secure attachment to their mother have a high level of adaptation, which indicates that girls with this type of attachment are more drawn to exploring new conditions and show greater independence. Because they have a developed sense of security with a reliable adult family member in their lives.

According to the results of our study, 25% of girls with an anxious-ambivalent type of attachment to their mother have a high level of adaptation. Despite the fact that this type of attachment is not the most adaptive, students have a set of personal characteristics that allow them to adapt to the conditions, but in a slightly different way than children with a secure type of attachment.

According to the results of our study, 40% of girls with an avoidant type of attachment to their mother have a high level of adaptation. Despite the fact that this type of attachment is not adaptive, students have a set of personal characteristics that allow them to adapt to conditions, but in a slightly different way than children with a secure type of attachment.

Using Student's t-test, it was found that the significance of differences between groups of girls with secure and avoidant attachment was temp=2.35 at p=0.05. There were no significant differences between the groups of girls with anxious-ambivalent and avoidant attachment.

Thus, it can be concluded that girls with avoidant attachment to mothers adapt worse to the conditions of secondary school education than girls with secure attachment to mother.

A secure type of attachment is the best at adapting a child to a new environment. Anxious-ambivalent and avoidant attachment types are insecure attachment types and prevent a successful adjustment process.

In our study, it was noted that the number of children with a secure type of attachment has significantly decreased. This is a very serious problem in today's world.

It can be noted that a high percentage of students who do not allow trusting relationships with adults and peers, believe that "no one can be trusted", various forms of opposition-protest behavior, resistance to traditions that are different from their personal ideas are manifested.

Thus, given the significant impact of the quality of a child's attachment to family members on his further adaptation in society, as well as the urgent problem of reducing the level of attachment, we consider it important to draw the attention of parents to the seriousness of the problem of adaptation. We also consider it necessary to organize work to overcome the difficulties of school adaptation not only with students, but also with their parents.

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A. A. Lytko

INTERRELATION OF THE LEVEL OF MORAL COMPETENCE OF ADOLESCENTS AND THEIR ATTITUDE TO THEMSELVES AS A SUBJECT OF MORALITY

The article is devoted to the consideration of the results of the correlation analysis between the level of moral competence of adolescents and their attitude towards themselves as a subject of morality (acceptance, position in moral reflection, differentiation of assessment, subjectivity).

In adolescence, a qualitatively new "social situation of development" (L. S. Vygotsky) is observed; elements of adulthood appear because of the restructuring of the body and the emergence of a different level of self-consciousness. On this basis, a teenager builds relationships with adults and peers; his self-determination takes place in the field of universal human values and communication between people. On the one hand, a child, on the other hand, not yet an adult acquires the skills of interpersonal communication with peers of his own and the opposite sex, strives for relationships that are more independent with his parents. During this period, the system of values is ordered; attitude towards oneself, other people, and society as a whole is formed [1].

In modern Belarusian society, there is transformation of social relations – the transition from traditional collectivism to individualism: relations of equal exchange and benefit are increasingly replacing relations of cooperation and cooperation. The value break that occurred a little more than a quarter of a century ago has not yet received an unambiguous development towards a new system of morality [2, p. 630]. The study of the problem of the relationship between the moral competence of a modern teenager and the development of his moral subjectivity is an attractive relevance.

The empirical study involved 120 students divided into two diagnostic groups: middle school age (grades 8-9) and senior school age (grades 10-11), studying in secondary schools in the Gomel region. The test of moral competence by G. Lind and the test "Unfinished sentences" by L. Sachs and V. Levy, modified by G. R. Shafikova, used as psychodiagnostic tools. The search for the relationship was carried out using the Spearman criterion. Table 1 presents the results of the correlation analysis in the group of adolescents of middle school age.

Table data1 allow us to state that there are two statistically significant positive relationships between the groups of variables represented by the scales of methods: correlations between a high level of moral competence and acceptance ($R_s = 0.319$ at $p \leq 0.05$) and a low level of moral competence and subjectivity ($R_s = 0.322$ at $p \leq 0.05$).

Consequently, the higher the moral competence in the group of adolescents of middle school age, the higher the acceptance of oneself as a moral person. With a decrease in the level of moral competence, the subjectivity of the perception of moral guidelines increases.

Table 1 – The results of calculating the relationship between the levels of moral competence and attitude towards oneself as a subject of morality among adolescents of middle school age

Moral competence	Criteria for treating oneself as a subject of morality			
	Acceptance	Position in moral reflection	Assessment differentiation	Subjectivity
Short level	R = 0.065 p = 0.624	R = - 0.019 p = 0.884	R = 0.203 p = 0.119	*R = 0.322* p = 0.016*
Average level	R = 0.139 p = 0.308	R = - 0.043 p = 0.752	R = 0.245 p = 0.069	R = 0.222 p = 0.099
High level	*R = 0.319* p = 0.013*	R = 0.065 p = 0.624	R = - 0.019 p = 0.884	R = 0.203 p = 0.119

Note: * – significance level 0.05; R is the correlation coefficient; p is the correlation significance level.

Thus, adolescents of middle school age, with an understanding and developed ability make value judgments on moral issues in terms of right/wrong behavior feel satisfied yourself how moral personality, they are characterized confidence in his rightness, justice, kindness and others Consequently, in middle school age, it becomes relevant to distinguish between what is morally acceptable in a particular situation and what is unacceptable, and this knowledge helps to build self-confidence. But at the same time, adolescents in this group there is no awareness and differentiation in moral actions, they prefer group rules, and the position in assessing the need to comply with moral standards is uncertain or absolutist.

Table Figure 2 presents the results of the relationship between moral competence and attitude towards oneself as a subject of morality in a group of adolescents of senior school age.

The data in Table 2 allow us to state that between the groups of variables represented by the scales of methods, there is one statistically significant positive relationship: correlations between a high level of moral competence and the position of moral reflection ($R_s = 0.268$ at $p \le 0.05$), that is, the higher the moral competence in the group of adolescents of senior school age, the higher the position in moral reflection. The revealed correlation can be substantively characterized as follows: adolescents of senior school age, who accept social rules, and also strive to comply with the rules of public order, and not only adapt to the standards of the people around them, tend to analyze current events from the position of morality, look for answers to questions about whether all the rules are followed.

Table 2 – The results of the correlation analysis of the level of relationship between moral competence and attitude towards oneself as a subject of morality among adolescents of senior school age

Moral competence	Criteria for treating oneself as a subject of morality			
	Acceptance	Position in moral reflection	Assessment differentiation	Subjectivity
Short level	R = 0.242 p = 0.073	R = 0.217 p = 0.107	R = - 0.078 p = 0.566	R = - 0.112 p = 0.410
Average level	R = - 0.192 p = 0.157	R = 0.135 p = 0.321	R = - 0.128 p = 0.348	R = - 0.046 p = 0.737
High level	R = 0.100 p = 0.446	**R = 0.268* p = 0.039**	R = - 0.243 p = 0.061	R = - 0.064 p = 0.629

Note: * – significance level 0.05; R is the correlation coefficient; p is the correlation significance level.

After analyzing the results of the relationship between the moral competence of high school students and their attitude towards themselves as a subject of morality, with we come to the following conclusions: 1) middle adolescents in a situation of searching for an answer to a situation of moral choice seek to find a solution, guided by the experience accumulated within their group, and at the same time, their self-confidence, an accurate understanding of what is good and what is bad in a given situation remains important for teenagers. Hence, under the circumstances, reflection may be difficult; 2) adolescents of senior school age in a situation of searching for an answer to a situation of moral choice resort to moral analysis and reflection, looking for patterns in a particular moral problem. Therefore, for adolescents in this group, the formation of their own opinion is relevant.

Thus, the relationship between the moral competence of high school students and their attitude towards themselves as a subject of morality lies in the fact that among adolescents in middle school age, the acceptance of moral values is associated with the desire to systematize moral manifestations, relative Axis a specific situation to the category of "good" or the category of "bad". Nevertheless, already in senior school age, the adoption of moral values is associated with the reflection of moral ties, the search for patterns of moral categories and their analysis.

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I. A. Mazurok

FEATURES OF MORAL EDUCATION OF FUTURE TEACHERS

The current topical problem of higher education is the development of the moral qualities of future teachers in the process of mastering pedagogical disciplines is reviewed. The article reveals the essence of the moral education of future teachers, the content component, which causes excitement and, probably, mental feelings, motives, the formation of moral will, motivation for moral behavior.

In pedagogy, the idea arose that active development is a struggle with contradictions, including the coverage of food and external factors. The internal driving force of the moral development of public opinion is the contradiction between the cultivated by the individual need to follow moral preferences and those of his aspirations that counteract this consecution. Therefore, the source of the moral development of the individual is contradictions. The main ones are the contradictions that occur between experienced cases of behavior and newly encountered spiritual cases. Satisfaction of some necessarily gives rise to new ones, which stimulates the activity of a person and contributes to his natural moral improvement; therefore, it is necessary not to resolve contradictions, but to find out the conditions for their occurrence, their originality at each stage of development and ways to solve them in accordance with educational tasks [1].

Needs are at the core of human culture and essence. Behavior, actions of individuals are dictated by the requirements of his character, aimed at their stability. Needs cover each other hierarchically and evolutionarily, ranking according to their strength and importance. Attempts to change and describe them, to explain on their basis this essence and nature of individuals involved in numerous scientists. The American scientist A. Maslow most meaningfully revealed their system. According to the scientist, after the birth, seven classes of achievements accompany personal maturation: physiological, for safety, for belonging and love, respect (reverence), cognitive, aesthetic, for self-actualization. All these needs can be seen as just steps on the ladder leading to self-actualization, which may include the satisfaction of basic needs [2]. Needs act as a trigger for emotional appeals, interests, value orientations, moral habits.

The emotional state, being one of the components of a moral quality, consists in experiencing by a person a feeling of joy from behavior that corresponds to moral standards.

Moral knowledge is a combination of knowledge about the object of judgment with a subjective attitude towards it. Only under this condition will moral knowledge be complete. The absence of a value attitude to moral norms, a lack of understanding of their significance for oneself and society in general indicates that a person has vague ideas about moral phenomena. Students must master the system of moral concepts, norms, principles. Principles that have acquired the character of subjective value become beliefs. A positive attitude towards moral principles is ensured by knowledge of the arguments for the expediency of a moral position, as well as by the example of authoritative people who follow these principles.

I. F. Kharlamov notes that interest is a need that is peculiarly colored by emotions and has passed the stage of motivation [3, p. 225]. A stimulating influence on the development of the moral

qualities of a student's personality is exerted by the moral motives of the actions and deeds performed. It is the quality of motives that determines the essence of the personality and its direction, which determines the importance of their formation. "The role of the motive is that it transforms this or that physical behavior into a certain mental behavior. He succeeds in this due to the fact that he includes this behavior in the system of basic needs of the personality and generates in the subject the installation of its implementation" [4, p. 406]. The attitude is understood as the "integral state of the subject", its "holistic orientation in a certain direction, towards a certain activity". Speaking about the difference between impulsive and volitional behavior (and moral behavior is volitional), it is noted that in the case of impulsive behavior, the setting is created by the actual situation, and the setting of volitional behavior is created by a situation that is not given to a person directly, not actual, but is presented and comprehended by him, that is, an imaginary or conceivable situation [4, p. 407].

In the theory of motivation, there is a wide variety of understanding of the essence and relationship of the triad (motives, interests, needs), identification or separation of its components. We abstract from the theoretical provisions in which this complex acts as a regulatory mechanism for the formation of relations and positions of the individual, his attitude. Motivation plays a leading role in it. Motivation is the impulse to the activity of the individual. The motivational sphere of the personality acts in two meanings: as a complex hierarchized set of motives (inciting, guiding and regulating), and also as a system of personality's relations to reality based on a certain motivation. In connection with the last, V. N. Myasishchev noted: "The motive as the basis of action, decision is nothing more than an expression of attitude towards the object of action, acting subjectively as desire, aspiration, need, consciousness of duty, necessity" [5, p. 219]. The motive as a conscious impulse is preceded by an attitude; the attitude arises as a consequence of motivation. He also singled out the following algorithm for the formation of a motive: the emergence of a need – its awareness – awareness of incentives – transformation of the needs into a motive with the participation of incentives – the formation of relationships and attitudes – the organization of behavior and activities.

A person with formed needs for moral development, who is interested in fulfilling the laws of morality, has moral motives that determine a positive personal orientation, is distinguished by a personal position, an attitude towards acquiring moral qualities, towards moral development. The internal factors listed above constitute the need-motivational sphere of the personality, through which all external influences are refracted.

Thus, the transformation of a need into a motive as an internal stimulus and regulator of development is in principle impossible without the creation of external and internal incentives adequate to the goals and objectives of moral education, which must be taken into account when creating external conditions for the moral education of a person.

General psychology singles out what pertains to the personality itself. Not to the personality of a doctor, engineer, student, but to the personality as a completely special psychological formation, which will be refracted in different ways in people of different professions. L. S. Vygotsky, A. N. Leontiev originated a holistic approach to the individual as a functional organ. B.S. Bratus further developed this approach. In its main features, it boils down to the following: a person is an instrument for forming an attitude towards a generic human essence. "The essence of personality does not coincide with either temperament or ... with character. The main plane of movement is moral and value, a person in a narrow sense (the core of personality) is a person's position in the world, which is set by a system of general semantic formations" [6, p. 93]. "The position of the individual as a subject of social behavior and diverse social activities is a complex system of relations of the individual (to society as a whole and to the communities to which he belongs, to work, to people, to himself), attitudes and motives that guide him in his activities, goals and the values to which this activity is directed. This whole complex system of subjective properties is realized in a certain set of social functions – roles performed by a person in given social situations of development [7, p. 289].

In line with humanitarian psychology, B. S. Bratus [6] developed a scale of personal meanings, which has a tiered structure and contains five levels, given in ascending order: almost impersonal, group-centric, humanistic, eschatological, or spiritual.

This or that number of levels is present in each person, depending on the situation at one time or another one of them wins. But we can talk about a typical level for a given person. The above levels of personal meanings, characterizing the level of moral development of a person, are manifested in any kind of activity, since there is no specific, purely moral activity, there are only moral aspects, aspects of various types of activity, including educational and professional.

A person experiences attitudes to various aspects of reality; however, speaking of the moral education of young people preparing for professional pedagogical activity, we consider the level of moral development in accordance with the relations that a student has in the learning process. Relations in the learning process include the relationship between the subjects of this process and the relationship to the process of assimilation of new knowledge and ways to apply it.

The reason for this was the judgment that "moral relations take on the character of "spilled" precisely because they are present in any type of activity, in any sphere of public and personal life, and in interaction even with the material-objective world, which for a morally educated of a person is "disobjectified" and acts as a "human" world" [8, p. 17]. This allows us to conclude about the breadth of the sphere of moral relations: it is not limited to a certain type of activity. The process of moral education is the process of purposefully introducing pupils to the interests of the "other person" and society, the constant expansion of the sphere of personal interests to the interests of the public, that is, it is necessary to include the "other person" as a social and personal value in the internal plan of the individual [8, p. 7]. According to N. E. Shchurkov, "another person" should not be understood as a specific subject of interaction, he is present in every social phenomenon, which confirms the possibility of educating humanistic relations in the learning process.

The criterion for the formation of a moral quality, or attitude, of a person should be correlated with its essential features, or the main content-structural components, which were mentioned earlier. In accordance with these indicators of attitude towards people are: needs, emotional state, knowledge of moral concepts and value attitude towards them, interests. The types of needs, interests, knowledge, emotional states associated with their future professional activities act as signs of humanity among students of pedagogical specialties.

The needs that determine the humanistic orientation of the individual include selfless service to people; participation in the fate of another person; emotional contact with others; moral freedom of the individual and others. In addition, future teachers should feel the need to follow such norms of morality as respect for the dignity of another person, readiness to help, tolerance and understanding, adherence to principles in the face of immoral, inhumane behavior.

It is important for a teacher to experience an emotional state, which consists in experiencing a feeling of joy from communicating with people, a feeling of being needed by people; feelings of gratitude; psychological balance, harmony with the world in connection with the recognition by others of your personal merits, their understanding and support [9, p. 39]. Experiences of this type should be characterized by constancy and stability.

Students must master the system of humanistic concepts, norms, principles. A morally educated person is distinguished by a high level of comprehension of the essence of humanity as a moral quality of a person and its manifestation in consciousness and activity.

The process of educating students should be carried out on the basis of a set of approaches.

The use of the activity approach as the basis for organizing the learning process aimed at the moral education of the student's personality determines the selection of ways to include students in activities. Moral education, therefore, occurs as a result of the implementation of activities and their reflection. At the same time, students are included in moral activity in accordance with their active position of the subject.

The culturological approach necessitates the formation of the moral experience of the student's personality in the process of learning by involving it in the process of learning moral values, their perception, preservation and implementation in real relationships. The use of the culturological approach provides normative-value regulation of the activity of the future teacher. This approach involves the introduction of samples of following the norms of moral behavior, their application in

educational and future professional activities as the content of moral education. At the same time, the application of the culturological approach requires the creation of certain conditions in the learning process in which the student finds himself in a situation of choosing the mode of action that is most acceptable for moral reasons.

The use of a personality-oriented approach as a methodological basis for organizing the learning process aimed at the moral education of the student's personality involves taking into account individual characteristics, personal experience, as well as the orientation of the process of moral education towards self-development, self-improvement of the student's personality, and the cultivation of the ability to moral reflection.

Thus, the moral education of future teachers in the process of professional training should be aimed at changing the attitude towards a person and oneself as a social value, which, in turn, will affect the attitude towards knowledge and activities for its acquisition, since in any activity there are social motives and goals.

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I. A. Mazurok

MORAL CULTURE OF TEACHERS AS A COMPONENT OF THEIR PROFESSIONALISM

The problem of the moral culture of the teacher in modern conditions is of particular relevance. The article reveals the essence of the concept of "moral culture" from the position of the activity-relational concept, the features of the implementation of the teacher's moral culture in professional activities. The interrelation of professionalism and moral culture of the personality of the teacher is substantiated.

Today, much attention is paid to the scale, dynamism, depth of the ongoing changes in the economic, political, spiritual spheres of the Republic of Belarus, the importance of the social function

of education, which consists in the formation of the intelligentsia, the cultivation of high-level professionals. In this regard, there is no doubt about the need for reforms in education. However, it should be understood that only the theoretical justification of innovations would not ensure their implementation. The teacher must be ready to assign new norms of activity.

In situations of this type, the teacher should transfer attention from such objects as the educational process and its result to his own thinking and activity, transform them, and then they will change the objective world and reality. There is no doubt that this requires a high level of development from the social subject, which is the result of the moral development of reality and which is determined by A. S. Laptenok as a moral culture of the individual [1, p. 39].

Moral culture always expresses the degree of embodiment of values in real actions, when the universally common is refracted in individual being and behavior, since morality is only possible when it is based on unshakable, absolute values. It is they that constitute the actual humanistic content of any culture.

It must be taken into consideration that the teacher, as a subject of the educational process, also has personal values, which, in principle, should be consistent with the foreground socio-cultural and target settings of their time.

We consider the teacher's moral culture as a complex integral system of personal and professional qualities that characterize the degree of development and self-development of his moral qualities (motives, values, beliefs, knowledge, skills, feelings and abilities). These qualities manifest themselves in various situations of moral choice and moral activity in comparison with those humane values, principles, and rules that are considered normative in the modern socio-cultural environment and professional activity. An analysis of the functions it performs such as axiological, humanistic, normative, regulatory, reflective, creative, evaluative-diagnostic, corrective, prognostic allows determining its place and role in professional pedagogical activity.

Considering the problem of the formation of the moral culture of the teacher's personality, one should pay attention to understanding the essence of the concept of "personality".

Considering a personality as a set of relationships, the following types of relationships, the content of which allows characterizing a teacher as a professional, can be distinguished: attitude towards the subjects of the educational process, attitude towards oneself as a professional, attitude towards activity and its results.

We will reveal the content of each of the components, based on the understanding of moral culture.

The attitude towards other people in the activities of a teacher is primarily associated with the attitude towards students. In line with humanistic psychology, B.S. Bratus developed a scale of personal meanings, containing five levels:

– impersonal – the teacher does not have a personal attitude to the actions performed;

– egocentric – semantic aspirations are personal gain, prestige, convenience; all other people, depending on this, are "good" or "convenient";

– group-centric – identifies himself with the group, the main thing is the success of the group, a person is valuable not by himself, but by his belonging to the group;

– humanistic – semantic aspirations of a universal orientation; each person implies equality of rights, freedoms and duties, striving to create results that will bring equal benefit to others, perhaps personally unknown to him;

– eschatological, or spiritual – a person decides his subjective relationship with God, another person acquires sacred value as the image and likeness of God [2].

For a teacher, who is at an almost impersonal level, authoritarianism and disbelief in the child's ability to self-affirmation are characteristic. The teacher, whose personal development is characterized by an egocentric level, treats the student as a means to achieve his goals, he is inherent in manipulation: declaring success for the student and striving for success for the sake of his vanity. With the dominant group-centric level, the interests of the team for the teacher are of greater importance than the interests of each child. For a teacher of the humanistic level of personal

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development, each child is unique and has its own unique meaning of life. Such a teacher does not form, but cooperates and facilitates, leads a dialogue. At the spiritual level, the teacher sees the student as a beloved spiritual brother, and the main goal is not to damage the image of God in him and to help timely remove obstacles on his unique path to God [3, p. 49–50].

The teacher's attitude towards himself as a professional is associated with the "I-concept", in which the following components can be distinguished: cognitive (the picture "I am a teacher"), evaluative (self-assessment of the level of development of the most significant personal qualities for professional activity), emotional-attitudinal (attitude to oneself), behavioral (activity of the teacher in accordance with self-image).

What will allow the teacher to get a holistic view of the content, means and methods of his activity, to be critical of himself and his activity in the past, present and future, to become the subject of his activity? Reflection has all these properties.

The reflective culture of a teacher as a cultural, axiological, acmeological and psychological-pedagogical phenomenon is a systemic personality neoplasm in the composition of its structural components such as reflexivity, professional-personal and value-semantic potential, responsibility, adequate to the nature of pedagogical activity and formed as a result of internal activity of the subject of pedagogical activity [4, p. 37].

There are the following levels of development of reflection: fixative, comparative, problematic, conceptual, value. The personality masters various levels of development of reflection: from fixing an event to rethinking the system of values. Consequently, the axiological component of reflective culture determines its highest level, which, according to V. I. Slobodchikov, with "comprehension of the epistemological situation, with going beyond the limits of subject-subject interactions, with the restructuring of this rigidly obvious and massive structure of consciousness, with transcending into the field of life meanings" [5].

Thus, the level of the teacher's moral culture is determined not only by the value bases of professional activity, but also by the level of his reflective culture.

Since morality characterizes not some separate aspects of the personality, but represents an integral characteristic of its spiritual world, in which both elements of moral consciousness and real behavioral acts are taken into account, it manifests itself in any kind of activity, including professional. And since moral culture always expresses the degree of embodiment of values in real actions, therefore, in this case, we will be interested in the content of the teacher's value system and the degree of their implementation in professional activities, as well as the relationship between the level of professionalism and the level of moral culture of the individual.

Let us note those positions in which professionalism and moral culture of the individual, in our opinion, most closely adjoin.

From the standpoint of the cultural-historical theory V. V. Davydov notes that a person is a subject of activity producing a new material or spiritual product. The formation of an activity can be judged by the following signs: 1) whether a value attitude to this type of activity has been formed, that is, whether the motive of actions corresponds to the social significance of the activity; 2) whether the way of action is culturally appropriate [6].

In the modern sociocultural situation, competence is necessary to achieve professionalism. There is a concept of professional and socio-psychological competence. Professional competence ensures the effectiveness of leading activities. There are the following types of professional competence: special, public, personal, individual [7].

Special competence lies in the possession of the professional activity itself at a sufficiently high level, the ability to design one's further professional development. However, this ability implies not only the mastery of design skills by a specialist, but, first of all, his need for development, which arises as a result of a huge spiritual work to determine the content, awareness of his own goals, values, ways to achieve them.

The content of social competence is the possession of joint (group, cooperative) professional activities, cooperation, as well as the methods of professional communication accepted in this profession. Cooperation, in turn, is a component of such an integrative moral quality as humanity.

Personal competence is defined as the possession of methods of personal self-expression and self-development. It presupposes that the teacher has personal value attitudes, which, in principle, should be consistent with the priority socio-cultural and target attitudes of their time.

Individual competence consists in readiness for professional growth, mastering the techniques of self-realization and development of individuality within the profession. It is known that any new norm introduced from the outside cannot automatically and painlessly enter the consciousness of a person and determine his activity. Only administrative measures or material incentives cannot ensure a person's desire to transform himself and, consequently, his professional activity. This allows us to assert that the leading role in this case belongs to the moral responsibility of the teacher, since participation in innovative processes (humanization, humanitarization, personal knowledge and cognition), if we are not talking about formalism, requires awareness of the need to participate in reform as the subject of this process. The result of the absence of this need is, for example, the gap observed in educational practice between the personality-oriented approach declared by teachers and the pedagogical activity carried out by them.

Achieving excellence in professions is due to socio-psychological competence.

Social competence, considered as an understanding of the essence and basic mechanisms of the functioning of the existing social system, possession of the laws of social development and methods of social progress, implies significant moral reserves of the individual, moral behavior and activity. Communicative competence, defined as an empathic property, is also an indicator of the teacher's development of humanity.

In his research, N. V. Kuzmina characterizes professionalism as follows: "Professionalism of activity is a qualitative characteristic of a representative of this profession, which is determined by the measure of his possession of modern content and modern means of solving professional problems, productive ways of its implementation" [8]. We share the opinion of L. P. Saxonova, who defines professionalism as a qualitative and moral characteristic of activity [7]. This allows us to conclude that the professionalism of activity is also a moral characteristic of the individual.

Assuming the expediency of including the moral culture of a teacher in an indicator of the level of his qualifications, we consider it unlawful to present a list of personal qualities that characterize the level of moral upbringing of a teacher, since there is not and cannot be an unambiguous attribution of many personal qualities to the nature of activity. We consider qualification as a system of activity characteristics, and we connect the level of a teacher's moral culture with the value bases of professional activity and the level of his reflective culture.

And since the change in the level of social development of the individual is accompanied by a deep crisis, one of the tasks of the teacher training system should be the generation of this crisis, which produces an increase in the level of the moral culture of the individual through the construction of a system of values that determine the activities of the teacher, and the formation of his reflective culture.

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I. A. Mazurok

STUDENT PERSONALITY STRUCTURE AS A SUBJECT OF MORAL EDUCATION

The personality of a student of pedagogical specialties as a subject of moral education is considered in the article on the basis of a psychological model of personality. Its main characteristic is the system of relations to reality. Considerable attention is paid to the morality of the individual as its central component and the structure of moral quality.

Considering the process of educating a future teacher as a system of external influences on the internal sources of personality development, it is necessary to determine the structure of the personality and the place that morality occupies in it.

In defining the concept of "personality of a student" we will proceed from general theoretical positions. In humanistic philosophical and psychological concepts, a person is considered as a value for the sake of which the development of society is carried out.

Philosophy defines the concept of "personality" as a dynamic, relatively stable, holistic system of intellectual, socio-cultural and moral-volitional qualities of a person, expressed in the individual characteristics of his consciousness and activity, as a holistic formation in the unity of his individual abilities and social functions performed by him, as a person with his socially conditioned, individually expressed qualities: intellectual, strong-willed, emotional [1, p. 222–223].

B.G. Ananiev names the following personality characteristics that determine its worldview, life orientation, development trend: roles, motivation of behavior and value orientations, structure and dynamics of relationships. The author notes that the totality of such properties represents the character as a system of personality properties, its subjective relations to society, other people, activities, itself, constantly realized in social behavior, fixed in the way of life. Everything to which a person shows his attitude is an object of relations. Personality in this sense is the subject of relations [2, p. 312].

In considering the personality of a student of pedagogical specialties as a subject of moral education, we took as a basis the psychological model of personality developed by V.N. Myasishchev.

The scientist emphasized that the system of social relations in which a person is included forms his subjective attitudes to all aspects of reality. And this system of a person's relationship to the world around him and to himself is the most essential characteristic of a person. "Personality is the highest integral concept. Personality is characterized primarily as a system of human relations to reality. The most important and defining personality is its relationship to people, which are at the same time relationships" [3, p. 48].

According to V.N. Myasishchev, "human relations represent a conscious, selective, experience-based, psychological connection with various aspects of objective reality, expressed in his actions, reactions, experiences. They are formed in the process of activity" [3, p. 48]. Relationships determine the degree of interest, the degree of expression of emotion, the degree of tension of desire or need;

therefore, they are the driving force behind the development of the individual. The problem of morality, the scientist points out, is primarily a problem of moral relations that determine the motives and choice of an act. Personal morality is a set of mastered moral principles and is the main component of personality. The substructure of morality is one of the socially conditioned substructures of the personality, because it gives social value to all other substructures.

V.A. Tokareva is of the same opinion and gives the following grounds for considering the morality of the individual as its central component:

− morality and personality have a common genesis. Both of them are a later product of both socio-historical and ontogenetic development, both have a historical and class character; both historically and ontogenetically, personality and morality are inseparable from each other;

− neither morality nor personality are genotypic formations;

− like a person, morality also arises only in relations between people;

− the personality is formed and manifested in activity, which is the basis, the foundation for it. Morality permeates all kinds of activity;

− both of them develop in the course of a person's life. Both of them are characterized by common development conditions: the practice of communication, the practice of relations, work, the practice of introducing moral values into various activities [4, p. 38–39].

As a result of the analysis of the theoretical concepts of personality, it became possible to define a generic concept, to isolate the most significant features and functions of personality. The personality of a student is not a simple set of qualities, properties, but a single, holistic education, characterized by a unity of attitude to the surrounding being.

Having determined the place of morality in the structure of personality, it seems necessary to reveal the structure of human morality as the goal of education.

Human morality consists of three components: the emotional sphere, which is its backbone; moral consciousness, and moral behavior. The emotional sphere of morality, including moral feeling, experience, conscience, is associated with the moral ideal, in which the moral requirements imposed on people are expressed in the form of a morally perfect personality, an idea of a person who embodies all the highest moral qualities. The more developed the moral feelings are, the higher is the level of moral consciousness of the individual, the higher the moral culture he has, the more accurately he realizes his own place in the system of moral relations and more reasonably makes the moral choice of his actions, more adequately assesses his actions, personal responsibility for them.

A developed moral consciousness presupposes knowledge of moral principles and norms. It is as a result of the work of consciousness that a person realizes, comprehends and evaluates his position in society. According to B. T. Likhachev, the subjective driving force behind the development of moral consciousness is moral thinking – the process of constant accumulation and comprehension of moral facts, relationships, situations, their analysis, the implementation of moral choice [5, p. 325].

The activity of consciousness differs from the activity of thinking in that the main values – personal meaning and experience – exist and control human behavior only in his mind. Personal meaning arises in human life, but, "being included in consciousness, semantic formations build a personal value system, which, on the one hand, expresses the moral position of the individual, but on the other, is the result (at a certain stage) of its moral development" [6, c. 12–13].

Moral behavior is characterized by voluntary adherence to moral standards in any situation, that is, we are talking about a free and correct moral choice. One of the components of moral consciousness and behavior is the skills and habits that arise and are fixed in the human nervous system as a result of the totality of moral relations and behavior [5, p. 321].

V.M. Myasishchev connects the growth of the personality with the transformation of a personal relationship into a principled one, with the transition from dependent (for the sake of the leader) to independent action (for the sake of principle). According to the level of development of relations, one can trace the stages of the moral development of the personality and its qualities. Relations are the basis for developing objective criteria for assessing the moral education of students at all levels of education. In relations, the nature of the actions of students, their position is manifested.

By relationships, one can judge the level of development of responsibility, the ability to manage one's behavior, exercise self-control, self-regulation [3].

Relationships of a person (i.e., their needs, interests, inclinations) are not a product of any abstract historical conditions, but primarily the result of how a person manages to interact with a completely specific environment for them and how much this environment gives scope for the manifestation and development of his individuality and in the subject of activity, and in interaction with other people. I.F. Kharlamov interprets attitude as "experiencing and expressing certain connections that are established between a person and other people, as well as various aspects of the surrounding world, and which, affecting the scope of its needs, knowledge, beliefs, actions and volitional manifestations, in one way or another affect the behavior of the individual and its development" [7, p. 61]. An attitude that has become fixed and habitual, according to the scientist, is a personal quality that determines the nature of human behavior.

Moral quality, or attitude, is a certain higher mental function that regulates the nature of the interactions of the individual with the environment. On the basis of research by psychologists, it was concluded that higher mental functions are internalized relations of the social order, the development of which is one of the most important aspects of the cultural development of the individual [8]. Consequently, the formation of higher mental functions and moral qualities and relationships is based on general psychological patterns. "Any function in the child's cultural development comes into being twice, on two planes, first – social, psychological, first – between people as an interpsychic category, then – inside the child as an intrapsychic category" [9, p. 142].

The position that personal quality was at first a form of psychological cooperation of people and only then became an individual way of behavior and activity allowed psychologists to assert that any higher psychological function, during this transition to an individual way of behavior and activity, "retains all the main features of its symbolic structure" [9, p. 56]. Thus, the structure of the higher mental function and the structure of social relations in which a person is included have common "features of the social structure", which allows us to suggest that the structure of the educational impact on the personality of the student should correspond to the "features of the symbolic structure" of the quality being formed. In determining the sequence and content of the educational process, we used the structure of personal quality developed by K.V. Gavrilovets. Scientists have identified the following components of a moral attitude: needs, interests, emotional states, knowledge, value orientations, beliefs [10, p. 32], to the development of which the educational process should be directed.

The components of humanity – needs, emotions, interests, knowledge, value relations, beliefs – have different dynamics of development [10]. The most subject to pedagogical influence are the emotional states of pupils. Therefore, the process of humanistic education begins with the enrichment of the emotional sphere with humane experiences. Quite dynamically, knowledge about this quality is formed. The ideas and concepts acquired by students can cause highly moral emotional states. Knowledge that reveals the significance of the quality being formed affects value orientations and makes their content more moral. The role of moral concepts in moral development was pointed out by L.S. Vygotsky: "Only in the concept and through the concept does a person acquire a relation to a thing and to himself" [9, p. 198]. The concept that arises in the mind of the individual determines the further development of thought, thereby influencing the subsequent activity of the subject. This allows us to conclude that the behavior and activities of a person in society depend on the formed concepts. Thanks to concepts, the student can realize the contradiction that exists between his level of development of moral quality, determined by this concept, and the essence of this quality. Thus, we can say that the concept acts as a motivating beginning of the moral development of the individual.

Concepts allow the student to penetrate into inner reality, into the world of his own experiences. The word, according to L.S. Vygotsky, is a means of understanding oneself [9], which is why, with the emergence of concepts, a person acquires the ability to perceive himself, observe himself, and know himself. The concept is a product of thinking and encourages its further movement, which leads to a deeper knowledge of reality, the discovery of connections and patterns that cannot be achieved through simple contemplation, therefore mastering concepts is so important for a morally developing person who builds his relationship with the world.

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However, it is impossible to broadcast, transfer the understanding of value to another. This content cannot become a value without personal understanding, without gaining personal meaning. Worldview knowledge gives rise to orientations that become prerequisites for needs, therefore ethical education is a humanization factor.

More than time, the development of humanistic needs and beliefs requires life experience, on the basis of which the transition of a humane attitude towards people from a situational, unstable to a higher, ideological level is ensured. Their development takes place in an institution of higher education as a creative space for self-realization of the individual in the formation of the student's lifestyle, as well as the development of the value aspect of consciousness [10].

Thus, consideration of the scientific and methodological foundations of the moral education of a person allows us to conclude that the process of moral education of a student's personality should include:

– formation of interest in the problems of moral development;
– development of moral motives and needs;
– formation of moral knowledge, skills and behavior and activities;
– inclusion in moral activity;
– assessment of the facts of reality and human behavior in accordance with moral standards.

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I. A. Mazurok

TECHNOLOGICAL ASPECTS OF MORAL EDUCATION OF STUDENTS-PEDAGOGUES

The article is devoted to the problem of technologization of moral education of students of pedagogical specialties. The substantive characteristics of the technology are given, the

implementation of the principles that acted as a methodological justification of the technology, the structure of the personality of the teacher, the content of its structural components is justified, the main components of the technological scheme are revealed, its educational possibilities are justified.

As a result of studying the initial level of moral education and the nature of the activity position of students of pedagogical specialties, a number of contradictions were revealed.

Those are the contradictions between the sufficiently developed need of future teachers for moral improvement and the underdevelopment of cultural pedagogical methods of initiating and managing moral development, as well as self-development, including in the field of knowledge about the patterns of formation of the moral sphere of the individual; reflections; thinking; understanding; skills of moral behavior; evaluation and self-assessment of moral behavior.

The problem is aggravated by the fact that the future teacher is, first of all, an educator, and therefore a manager of the moral development of future students, who must have the necessary knowledge about the moral development of the individual, be able to form and implement a program of actions aimed at achieving the goal, track current changes, adjust their actions, predict possible changes. Insufficient orientation of professional pedagogical education to this function is a programmed factor in the professional incompetence of the majority of students.

Another contradiction is between the internal need of the majority of pedagogical workers to act as a manager of the moral education of students and the lack of both material and technological pedagogical means to achieve this goal. At the same time, the demand for such pedagogical technologies was revealed that would not break the evolutionary and historically established education system, but harmoniously combining traditions and innovations in a single frame, provided a trajectory for the development of educational systems and, together with them, the development of a teacher and a student.

Thus, when starting to organize the process of moral education of students of pedagogical specialties by means of the studied disciplines, one should be aware that this activity should achieve the goal, that is, be effective, that it will be subject to adjustment and, in this regard, the process of moral education is significant if it is not of a one-time nature, but is reproducible. These properties of activity are provided by its manufacturability [1]. Technology, according to V.P. Bespalko, implies strict scientific design and accurate reproduction in the classroom of the pedagogical processes that guarantee the success [1, p. 3]. N.K. Katovich notes that the term "technology" is often rejected by individual scientists when it comes to the process of education, and explains this by the confusion of terminology, the synonymous use of the terms "method" and "technology". "The methodology is a system of scientifically based methods, rules, techniques. The technology of education seems to be a broader concept, it is "a set of means and methods for implementing the educational process to achieve the goal, taking into account the nature of the pedagogical impact on the child in the process of interacting with him" [2, p. 320].

The technological approach, in the understanding of V.M. Monakhov, involves a radical renewal of the instrumental and methodological means of pedagogy and methodology, provided that continuity is maintained in the development of pedagogical science and school practice [3, p. 59]. They highlighted the following aspects of technological renewal:

– conversion of the pedagogical plan into a technological chain of pedagogical influences, operationally built strictly in accordance with the target settings, translated into the form of a specific result;

– the functioning of pedagogical technology as an interrelated activity of a teacher and students on an agreed basis, taking into account the principles of individualization, differentiation, optimal implementation of human and technical resources;

– phased design and subsequent implementation of the elements of pedagogical technology, reproduced by any teacher, and the guarantee of the achievement of the planned learning outcomes by all students;

– inclusion in the pedagogical technology of diagnostic procedures containing parameters, criteria, tools for measuring the results of activities [4, p. 59].

According to O. S. Anisimov, the construction of technology involves a description of real activity; identification of procedural lines addressed to the behavior of the actor; finding a continuous component in the line of processes; isolating units in it on the basis of taking into account the internal and external components of causal transitions and building a causal chain of units, actions; giving a prescriptive character to the description [5]. The basis for the development of technology was for us to understand it as a description of the characteristics of the means and methods of their application, necessary for the transition of the initial material of activity from one intermediate state to another, up to obtaining the final product [6].

Thus, the next type of activity in developing the technology of moral education of students in the learning process after studying the initial level of moral education and the nature of the activity position of students at the stage of ascertaining experiment, identifying and describing in the conceptual part of the project the qualities of the final and intermediate products of activity in accordance with the dynamics of the formation of moral quality, based on the goal-value bases, was the choice of means and methods for achieving each intermediate product in the identified, theoretically justified pedagogical conditions.

The principles of consistency, systematicity, unity and continuity of educational influences, which involve the construction of such a pedagogical system, the elements of which form an integral unity, became the methodological justification for the process of moral education. The listed principles acted as basic positions for us, against the background of which the specifics of the experimental process of the moral education of students in the learning process were manifested, concretized in the following principles: the principle of "cultivating" reflective abilities; the principle of unity of education and training; the principle of the unity of moral consciousness and activity; the principle of taking into account individual characteristics; the principle of compliance of the process of education with the logic of the moral development of the individual.

The implementation of each of the principles on which the activity projected in this study was based predetermined the selection of its technological means. In accordance with the principle of "cultivating" reflexive abilities, the technological characteristics of the stages included reflexive techniques that allow developing reflexive abilities.

The principle of the unity of education and training can be realized only if there is educational material that evokes moral feelings and experiences in students and allows them to expand their moral ideas and concepts.

Achieving the goal of moral education in accordance with the principle of unity of consciousness of the individual and his activity can be guaranteed only if knowledge is converted into beliefs, that is, if knowledge about proper, necessary behavior and activity is realized in activity and behavior. Such an opportunity can be provided by socially significant activities, development and participation in projects, collective forms of organization of educational activities. They successfully use the teaching and educating effects of interpersonal communication. These forms allow you to bring up responsibility for your own activities and the activities of your comrades, to express and argue your point of view, to correlate your understanding of the issue with the opinions of others, which increases the social significance of students' activity. Such democratic and humane relations are a favorable environment both for the assimilation of knowledge and for the development and education of the individual.

In accordance with the principle of taking into account individual characteristics, we used teaching methods that ensure the subjectivity of the carriers of the projected activity, allowing to take into account the specifics and individual qualities of students, outside of whose individual activity no changes occur. Therefore, it is possible to solve the set task only through the construction of the corresponding task of the individual activity of the educated, only if they consciously adapt their actions to the content of the pedagogical goal.

The principle of compliance of the process of education with the logic of the moral development of the individual determined the choice of strategic planning, the peculiarity of which lies in the correspondence of the content of education to the structural components of moral quality. In our case, this principle was guaranteed by the fixation in the technological scheme and the implementation in the learning process of activities aimed at the formation of all structural components of the moral quality of the individual. The intermediate product of each stage advanced to a higher level of moral development, which is also associated with the principle of continuity, the guarantor of which is the presence of stages and relay races in the formation of moral culture.

The implementation of the technology involves the passage of four successive stages, the tasks of which involve the development of the emotional sphere of the individual, the development of moral concepts and the formation of a value attitude towards them, the emergence of moral views, moral beliefs, skills and habits of moral behavior in various types of activity (including educational).

The main components of the technological scheme were the direction and stages of the moral development of the individual; educational material on which it can be implemented; reflective activity of students; subjective position of participants in the educational process; forms of organization of the learning process, allowing to bring up responsibility for one's own activity and the activity of one's comrades, to express and argue one's point of view, to correlate one's understanding of the issue with the opinion of others, contribute to the creation of cooperation relations between teachers and students who act as subjects of activity. The technology of moral education is built as a result of correlating the structures of personality and morality, the structural components of moral quality and the dynamics of their formation, the stages of moral development and the levels of moral education, as well as the functions, types and levels of reflection, which made it possible to determine the content and form of organization of activities at each of the stages.

In understanding the mechanism of reflection, we adhere to the interpretation of I.N. Semenov, S.Yu. Stepanov, who consider it as a rethinking and restructuring by the subject of the content of his consciousness, his activities, communication, that is, his behavior as a holistic relationship to the world around [7, p. 37].

At the same time, reflection is a multifunctional process, which should also be taken into account when organizing it. Reflection is a process of introspection by the subject of his behavior, consciousness, internal mental acts and the state of his own experience, personal structures, therefore it acts as the most important factor in the development, formation of a holistic mental culture of the individual.

Due to the fact that the development of moral culture is an internal process, then the subject of development can judge about it first of all, which gives reason to consider reflection as a form of fixing the state of development by the subject and use its materials as diagnostic.

Reflection acts as a source of personality development, since a necessary component of the reflective process is the awareness of one's limitations and the desire to expand the boundaries of one's capabilities, that is, the contradiction between the existing level of development and the one that one would like to achieve.

When organizing reflective activity, the following functions of reflection were also taken into account:

– diagnostic – reflection states the level of moral development of students and the effectiveness of the teacher's activity in creating external conditions;

– sense-creative – reflection determines the formation in the minds of students of the meaning of their activities, contributes to the appropriation of moral standards by them, from the point of view of which they evaluate the value for themselves of what is happening in educational activities;

– motivational – reflection determines the direction, nature, effectiveness of students' educational activities in terms of moral orientation;

– correctional – reflection encourages participants in the activity to correct it [4, p. 83–84].

The conclusion is that the object to which the reflexive activity of the subject is directed can be: a) knowledge about the role structure and positional organization of collective interaction; b) ideas

about the inner world of another person and the reasons for certain of his actions; c) their actions and images of their own "I" as an individual; d) knowledge about the object and ways of working with it, allows to form the possible products of each of the four types of reflection of students in the process of moral education.

Based on the opinion that "as a result of the simultaneous deployment of several types of reflection, that is, in their interaction, qualitatively different and more complex neoplasms arise than with the functioning of only one type of reflection" [7, p. 39], for the purposes of the moral development of students, it seemed to us necessary to develop tasks both for activating one of the types of reflection, and for cultivating all of them at the same time.

The developed technology allows:

– develop the emotional sphere of students;

– to increase the level of moral knowledge among students, since their insufficient depth prevents the provision of assimilated norms of personal meaning, as well as the development of a stable moral position;

– establish unity between moral consciousness and activity;

– expand the scope of moral relations by including them in educational activities;

– to enrich the reflective practice of students.

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THE INFORMATIVE STRATEGY IN THE MEDIA DISCOURSE (IN CHINESE AND ENGLISH NEWS COMMENTARIES)

The article is devoted to the research in one of the communicative strategies – the informative strategy which aims at delivering different types of information to the addressee of the media discourse through one of the discourse genres – the news commentary. The set of tactics of the

implementation of the informative strategy and language means of their verbalization in Chinese and British press have been identified.

The modern world of media is rapidly expanding its influencing potential, as there are processes of diffusion of genres, genre convergence, erasure of boundaries, borrowing of various information channels to interact with the addressee. Due to the combination of these phenomena, works that study and identify the features of the implementation of the main functions of the media – informative and influencing ones – come to the fore in linguistic research. These functions have coexisted for more than one century, but the means of their implementation are constantly expanding, their set varies, which makes their study relevant. In this paper, the attention of the authors is paid to such an issue as the informative communicative strategy and tactics for its implementation in one of the media genres of the Chinese and English-language press – the news commentary. The study is due to the need, first of all, to develop a unified interpretation of this term, as well as to give a holistic, systematic description of the repertoire of strategies implemented in various types of institutional discourse. Identification of a set of tactics for the implementation of the informative communicative strategy and the features of their verbalization in the comparative aspect will contribute to the development of the theoretical base in the field of pragmalinguistics, genre studies and discourse analysis.

First of all, it should be noted that the terminological definition of the concept of the strategy in communication is highly variable. So, according to T. A. Van Dyck, the communicative strategy is "a kind of general instruction for each specific situation of interpretation" [1, p. 274]. V. P. Zernetsky understands the communicative strategy as the creative implementation by the communicant of the plan of his speech behavior [2]. B. Yu. Gorodetsky interprets this concept as a unity of communicative and practical goals [3], while O. S. Issers defines it as "a set of speech actions aimed at achieving a communicative goal" [4, p. 54].

Among Chinese linguists, the study of communicative strategies was carried out by Dai Weidong and Shu Dingfang. They define the communicative strategy as follows: language communication should include two aspects of perception/understanding and expression. The mechanisms for processing language perception and language expression in the human brain are different, so the communication strategies in expression and understanding will also be quite different. The study of communicative strategies has achieved some results, but also has limitations. Different views on communicative strategies and different research angles and methods will produce different classification standards [5, p. 78–81].

Liu Xun believes that communicative strategies are planned measures or methods that learners consciously adopt in order to carry out language communication activities smoothly (that is, understand the interlocutor's intention and express their own meaning) [6, p. 214].

Zhou Xiaobing and Li Haiou believe that the communicative strategy is a psychological plan that reflects part of the communicative ability of language users, a potential conscious activity, and a compensation for the generative plan that the learner failed to implement [7, p. 92].

In this paper, we understand the communicative strategy as "a set of practical steps planned in advance and implemented in the course of a communicative act aimed at achieving a communicative goal" [8, p. 18]. If the strategy is considered as a general outline of communicative behavior, then the tactic is a way of speech influence, which is a set of linguistic means and, at the same time, a way to implement the strategy [9]. The strategic plan determines the choice of means and methods for its implementation, therefore, the speech strategy and tactics are related as a kind and a type [4].

The material was 30 news commentaries from the Chinese newspaper "Guangming" and the British newspaper "The Guardian".

As the practical analysis has shown, the most common tactic that implements the informative strategy in Chinese and English news commentary is *the tactic of referring to the source event*, which aims to report the original news, which needs to be commented on in the opinion of the author of the news commentary. Let's consider the following examples from the Chinese press: *'在今年全国两会上，新闻出版领域全国政协委员潘凯雄、谭跃、赵东亮提交了《关于加速推动图书价格立*

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*法的再提案》（简称《提案》）. 这也是**他们**自2020年以来，连续3年提交呼吁加速图书价格立法的提案.* 恶性竞争造成实体书店不堪重负，也造成了出版方不得不提高图书定价. 《提案》认为必须尽快落实图书"限折令' [10]. /At this year's National Two Sessions, **Pan Kaixiong, Tan Yue, and Zhao Dongliang, members of the National Committee of the Chinese People's Political Consultative Conference in the field of press and publication, submitted the "Re-Proposal on Accelerating the Promotion of Book Price Legislation" (referred to as the "Proposal").** This is also the third consecutive year since 2020 that **they have submitted proposals calling for accelerated book price legislation.** Vicious competition has caused physical bookstores to be overwhelmed, and has also caused publishers to increase book prices. The "Proposal" believes that the "restriction order" for books must be implemented as soon as possible.*

As further practical analysis has shown, in the verbalization of this tactic in the Chinese-language news commentary, the verbs of action *(submit)* are actively used in combination with personal pronouns, verbs, and adjectives that are related to the news considered in the news commentary.

In the English-language news commentary, we find the following examples of verbalization of the tactic of referring to the source event: '*You read of David Carrick, the officer who kept his uniform, his badge and, for many years, his gun even as he pursued a parallel career as a prolific sex offender, and of course you are sickened by the evil he has done: dozens of rapes and sexual offences against 12 women, over two decades, including imprisoning one of his victims, naked and terrified, in a tiny cupboard under the stairs. But an equal horror comes when you learn that the police had been warned eight times about Carrick's behaviour – eight – but did nothing. In fairness, that's not quite right; they did do something. They promoted him in 2009 to an elite armed unit*' [11].

The verbalization of this tactic in the English-language news commentary is provided by the verbs of information *read, learn,* which are actively used in combination with proper names, as well as common nouns that name administrative institutions, organizations, positions that are related to the news considered in the news commentary *(David Carrick, the police).*

In comparison with English-language news commentaries, in Chinese ones the authors prefer direct mentioning of the event sources of news commentaries while in English ones the authors widely use the appeal to readers (you+verb of information).

The fact of temporal, quantitative and geographical reference is also obvious, which aims to create the most complete picture of the previous news event. So, in the example from the Chinese press we see the following: *'近日，王女士入住**内蒙古呼和浩特**的一家**全季酒店**，却遭遇"夜半惊魂"。**晚上11点40分左右**，有酒店保安敲门声称要送水果，在她拒绝后，对方竟刷卡闯入'* [12]. /**Recently**, Ms. Wang stayed at a **Ji Hotel in Hohhot, Inner Mongolia**, but suffered a "midnight horror". **At around 11:40 in the evening**, a hotel security guard knocked on the door and claimed to deliver fruit. After she refused, the other party swiped her card to break in./*

*'事实上，**该品牌酒店**出现类似问题已经**不止一次**了。去年7月，一名女子入住上海市一家全季酒店时，凌晨三点多遭遇一男子全裸闯进房间，她因受到惊吓而大声呼叫，随后该男子退出房间。事后，公安机关对该**男子猥亵他人的违法行为处以行政拘留5日的处罚'* [12]. /In fact, **this brand hotel** has experienced similar problems **more than once**. **Last July, when a woman was staying at a JI Hotel in Shanghai**, a naked man broke into the room **at three o'clock in the morning.** Afterwards, the public security organ imposed administrative detention on the **man for 5 days** for his illegal act of molesting others/.*

In Chinese and English-language examples, the most common are mentions of the location, date, quantitative indicators are connected with a news event itself and/or other events which took place earlier in this place or closely related to the news event under study: *'I remember the first time wind energy emerged as a serious contender **in the UK's energy provision**. It was **6 November 2012**, and the country's electricity use from wind hit an all-time high in the middle of the afternoon, at **9.3%.** The casual observer wouldn't have noticed, and the expert wouldn't have been surprised, but for people*

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between those poles, it was astonishing. Windfarms were then perceived as a nascent technology, so infant and speculative they needed endless subsidy, intervention, special pleading' [13].

Further analysis of the tactical set involved in the implementation of the informative strategy made it possible to identify *the tactic of reviewing and analyzing previous news events* that formed the basis of the publication. This tactic is aimed at presenting a brief content of a news event that took place earlier, as well as its analysis. Consider an example from the Chinese press: '恶性竞争造成实体书店不堪重负，也造成了出版方不得不提高图书定价.《提案》认为必须尽快落实图书"限折令".

说到"限折令"，消费者 – 般是有抵触情绪的，谁都希望低价买到好书，在家里就能"坐拥书城". 但是，图书也是 – 种特殊商品，并不是价格越低就越好，相反，可能形成 – 个"劣币驱逐良币"的局面，特别是考虑到庞大的图书电商和式微的出版方之间不平等的关系' [10]. /*Vicious competition has caused physical bookstores to be overwhelmed, and has also caused publishers to increase book prices. The "Proposal" believes that the "restriction order" for books must be implemented as soon as possible/.*

When it comes to the "discount limit order", consumers are generally resistant. Everyone hopes to buy good books at a low price and "sit in a bookstore" at home. However, books are also a special commodity, and the lower the price, the better. On the contrary, it may form a situation where "bad money drives out good money", especially considering the disparity between the huge book e-commerce business and the declining publishers' equal relationship/.

The review and analysis of a news event is implemented through verbs of cause and effect, verbs of motion (cause, come to, form, increase, drive out), adversative conjunctions and introductory words (However, On the contrary), comparative constructions (the lower the price, the better), antonyms (*good* books at a *low* price, *bad* money drives out *good* money, the *huge* book e-commerce business and the *declining* publishers' equal relationship).

As the analysis of the English-language news commentaries has shown, this tactic is implemented through comparatives of adjectives to show the changes (*higher, more, more profound*) and the opposition of facts (*higher death rates among relatively young adults, while the dreadful Covid death toll continues to mount, many of these excess deaths are driven by other factors; while the virus raged before mass immunisation, and in the aftermath; Some are the direct consequences of Tory policy, some are more profound*) together with the verbs of existence (be) and motion (come, continue, mount, drive, rage, organize, go):

'*Even this data uncovered something disturbing – higher death rates among relatively young adults, and as spring came, more dying than in 2019. And here's the thing: while the dreadful Covid death toll continues to mount, many of these excess deaths are driven by other factors.*

Britain is scarred by features that have made it particularly vulnerable, both while the virus raged before mass immunisation, and in the aftermath. Some are the direct consequences of Tory policy, some are more profound: about the way our society is organised. That means today's excess deaths go way beyond Covid' [14].

Thus, we see that in both language variants of the news commentaries the same tactics are used. They have practically the same linguistic set of their implementation.

The informative strategy is also implemented through the tactic of bringing the opinions of other famous people, institutions, other news reporters, etc. which is most often implemented by references and various types of citations. Let's consider the following examples:

– '从此次事件的应对来看，小鹏汽车董事长兼CEO向该公司其他人员提出"看看这个情况怎么处理"，比后者答复的"在优化"更准确' [15]. /*Judging from the response to this incident, **the chairman and CEO of Xiaopeng Motors asked other employees of the company to "see how to deal with this situation", which is more accurate than the latter's reply of "optimizing"**/.*

– '*It's an extreme solution, but the problem is extreme. The Metropolitan police fails the two tests that count. It cannot demonstrate efficiency – **see last September's damning report by the police***

inspectorate, finding that the Met is failing when it comes to investigating crime and protecting the vulnerable – and it has lost legitimacy' [11].

The analysis shows that the most common form of citation is the indirect one. In general, this tactics adds value to the news commentaries. Of course, this tactic is also used in the implementation of the strategy of persuasion when constructing arguments based on citation to prove a particular thesis, which will be discussed in the next work. But in comparison with its use while augmenting, in the implementation of the tactic of bringing the opinions of other famous people, institutions, other news reporters, etc. the citation just stresses the informative side of the utterance.

The tactic of repeating information about the essence of the described research, drawing attention to it and explaining it, also contributes to the implementation of the informative strategy. For example, in the news commentary from the Chinese press "The car owner was misjudged by the system due to small eyes, not just a problem of "optimization"" the lexemes driving (17), system (12), car (11) and optimization (10) were the most often used. Throughout the news commentary in the British press "What to do with a Met police that harbours rapists and murderers? Scrap it and start again" the lexeme *police* occurs 20 times, done – 9, met – 9, officer(s) – 9, is – 9, women (woman) – 9. The repletion of lexemes points at the key informative points of the news commentaries forming their thematic core.

Having analyzed the informative strategy and tactics of its implementation in Chinese and English news commentaries we have come to the conclusion that the language means that are used by the addressers are practically the same in both language variants, which proves the commonality of the informative strategy because of its functional purpose – to inform.

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W. Niu, A. V. Sazhyna, X. Liang, Y. Cai

DISSEMINATION OF CHINESE CULTURE
AMONG CENTRAL ASIAN COLLEGE STUDENTS THROUGH NEWS TEXTS: COMMUNICATIVE AND PRAGMATIC MODELLING

The article is devoted to one of the most relevant topics in linguistics – the communicative and pragmatic modelling of the news texts devoted to dissemination of Chines cultural values among college students from Central Asia. The results obtained can be helpful in further modelling of didactical means which can be used in the teaching process for clear understanding and interpreting of the information on cultural values of China.

Chinese culture undoubtedly has a long history, which, unfortunately, has not yet been precisely defined in scientific circles. In our study, we adhere to the views of Liang Shuming who believes that culture is just the way of life of a nation [1]. Liang Shuming points out the essential meaning of culture. From the perspective of content, culture is represented by various aspects of a nation's life, including spiritual life such as religion, philosophy, science, art, etc.; social life such as family, friends, society, country, life in the world, etc.; material life such as food, daily life, various enjoyments, and human beings' survival in nature and so on [2].

In 1926, Hu Shi defined culture and distinguished culture from civilization in his article "Our Attitude toward Modern Western Civilization". According to the author, "Civilization is the total achievement of a nation in coping with its environment. Culture is a way of life formed by civilization" [3].

Qian Mu points out that "Chinese culture, the simplest induction, is to let people be a good person, that is, to be a perfect person in the world, as the basic spirit of culture [4].

To these definitions, we will add the understanding of culture as a verbal product of spiritual production, reflected in texts. Thus, culture is the relationship of man to people, a way of spiritual and practical activity in relation to the world and a set of material and spiritual achievements (cultural values) as a product of continuous spiritual and material production, expressed by certain symbols, various ideas and concepts created in practice as well as in written and oral texts.

As we know, the millennium generation is increasingly losing interest in the humanities, and therefore the transmission of cultural and historical values, in the minds of young people, is losing its relevance. The socio-economic transformations taking place in the world can also be considered as

one of the factors influencing value attitudes. Therefore, the identification of the most effective forms and means of disseminating information about the cultural values of China is relevant for studying the value-semantic sphere of adolescents studying in colleges and universities, which can contribute not only to the revival of interest in the cultural values of China, but also to the dissemination of information about them in other countries through news texts, since the press is currently not only one of the most accessible media, but are also of particular interest in terms of their communicative and pragmatic organization, since they have a certain pragmatic potential, which receives different verbal representation in the material of different languages.

The preliminary analysis of newspaper articles showed that in the Chinese press the topic of cultural values is covered in the genre of the event note, which is characterized by a strict structure and a certain set of language means that serve to realize the communicative goal of the genre.

Therefore, the object of the study is the verbal means of the texts of event notes about the cultural values of China, which have the influencing potential.

The subject of our research is the communicative-pragmatic model of the texts of event notes about the cultural values of China.

The research material is represented by examples from Chinese English-language newspaper articles on the cultural values of China. The data are obtained from 100 publications of the Chinese English-language newspaper Guangming Online, with a total of 110 printed pages, selected by random sampling. These texts were used in cultural teaching practice at the Confucius Institutes in Armenia and Kazakhstan.

As the analysis of the practical material has showed, the event note, representing a kind of relaying of information about events related to the cultural values of China, is characterized by a small volume (about 2,000 characters) and presents the answers to the questions "what, where and when" this or that cultural event took place. There are no conclusions and assessments, which is a key characteristic of an event note, the structure is quite rigid. Since the linguistic description of the communicative-pragmatic organization of the text of an event note can serve as the basis for identifying certain specific speech patterns on the material of texts of different genres in different languages, the attention of the authors was drawn to the identification of structural and pragmatic patterns of organizing the news note.

First of all, we should say that the communicative-pragmatic model of the event note is seen as a set of structural elements in compositional fragments, each of which performs a specific communicative function and carries a pragmatic load.

The structural-compositional elements of the event note are represented by the title, the lead and the main body of the text. The title of the event note represents a short presentation of information on the cultural values of China and performs nominative, informative and advertising functions simultaneously. Let's consider the following example from Guangming Online:

Feature: Discover cultural treasures in Chinese New Year celebration at Malaysia's Penang, Miao people celebrate Seedling Planting Festival in SW China's Guizhou, Folk artists performing "iron flowers" during Spring Festival in NW China's Xinjiang, Miao people participate in traditional dancing activity in SW China's Guizhou, Scenic spots in Xi'an welcome legions of tourists with colorful lights and lanterns, Miao people participate in traditional dancing activity in SW China's Guizhou, etc.

As seen above, in most cases the title indicates the place and time of an event (Malaysia's Penang, SW China's Guizhou, NW China's Xinjiang, SW China's Guizhou, Xi'an, SW China's Guizhou), the names cultural events which take place at a particular time (Chinese New Year celebration, Seedling Planting Festival, Spring Festival, traditional dancing activity). Thus, we see that the title presents the main information on the cultural events to arouse interest in further reading and inform on the cultural values which can be associated with this or that activity.

Then comes the lead, which informs the addressee briefly about what, where and when took place. In the structure of the event note on the topic of Chinese cultural values the lead mentions the date, place of the event and the name of the news agency, thus performing the informative function:

'GEORGE TOWN, Malaysia, Jan. 30 (Xinhua) – With the sound of the gongs and drums, a golden-haired "lion" jumped on two-meter high poles, demonstrating its amazing flexibility and agility. The scene attracted large crowds taking photos and videos on their phones' [5].

'BEIJING, Jan. 26 (Xinhua) – Lord Rabbit, the most popular and beloved bunny in Beijing, is expected to have the busiest year of its career as the Chinese celebrate the Year of the Rabbit, which comes around once every 12 years.

So do the Lord Rabbit makers.

With a human body and rabbit ears and mouth, Lord Rabbit, known as Tu'er Ye in Chinese, is a traditional handicraft and a festive clay toy for children, especially in Beijing. People believe it can bring happiness and good luck, as well as ward off disease.

At a store in Xicheng District, products featuring Lord Rabbit, including clay figurines and fridge magnets, attract crowds of tourists.

"My orders soared at the beginning of the year," said 60-year-old craftsman Zhang Zhongqiang who owns the store. "To attract more fans, elements such as praying for good luck and health in the post-pandemic era are added to the rabbit design."

The Chinese Lunar New Year, or Spring Festival, fell on Jan. 22 this year. Of the 12 Chinese Zodiac animals, the fourth is the rabbit, while the others are the rat, ox, tiger, dragon, snake, horse, goat, monkey, rooster, dog and pig' [6].

In the first example, we see how a golden-haired "lion" performs various tricks to the sounds of gongs and drums. In the second example, the author presents us with a Rabbit, who is waiting for a laborious year. In both examples, the lead provides information about what the news item will be about, thus performing the informative, influencing and advertising functions.

The main body of the text includes the narrative about the history of a particular cultural event, actively using precedential texts and text references to earlier events closely linked to the event that is taking place. This technique helps to make the structure of the text circular, which provides meaning completeness of the text of the event note:

'Legend has it that a plague once broke out in Beijing before the Mid-Autumn Festival, so the Chinese goddess of the Moon Chang'e dispatched her pet Jade Rabbit to help cure the disease.

In the iconic image, Lord Rabbit usually wears a golden helmet and armor and holds a pestle, a tool for pounding medicine.

According to Shuang Yan, a well-known Lord Rabbit craftsman, the rabbit is actually a female. She borrowed a helmet and armor from a deity in a temple and dressed like a man to help her treat patients in the feudal society of the time.

People used to honor Lord Rabbit during festivals such as the Mid-Autumn Festival, praying for the health of family members. Although the rituals have faded away, Lord Rabbit is still a cultural icon in Beijing.

Zhang believes Lord Rabbit will find renewed favor with customers this year.

<…> In 2000, Zhang opened a shop specialized in making and selling Lord Rabbit figurines. To improve his skills, he learned traditional rabbit-making techniques from Shuang.

The making of Lord Rabbit figurines was inscribed on the list of national intangible cultural heritage in 2014. The production process is quite complicated, consisting of selecting the clay, kneading it, modeling the clay into various shapes, then airing and painting them.

"Getting started with traditional clay sculptures is not difficult. But the deeper you go, the more challenging it is to stick to it," Zhang said. "When I was a kid, I took it as a hobby. As I grew up, it became my rice bowl, and I have to keep innovating to keep a tight grip on it." [6].

Here we see the mention of the cultural value of the event, its historical bachground as well as the importance of continuation of the tradition. The use of the interviewing technique is aimed at adding value to the information provided in the event note.

Further analysis of the structure of the event note had shown that such a structural component as the conclusion is not typical of the genre under study, which can be explained by the purpose of these texts.

Thus, the structure of the event note on disseminating Chinese cultural values is represented by the title, the lead and the main body of the text. The specific feature of the structure is that there is no conclusion. The structural components of the even note on Chinese cultural values perform several fucntions: the informative, the influencing and the advertising ones.

As further analysis has showed, for an event note, important categories are the categories of locativity and eventfulness with elements of evaluativeness, in the verbalization of which mainly lexical means take part, marking the place of the event for its subsequent correlation with the cultural value referred to in the news item. The use of proper names adds value to the informative aspect of the text, too:

'The children visiting **Miaohui** were curious to watch and take part in traditional cultural activities, such as paper-cutting and making dough figurines.

According to Chief Minister of Penang Chow Kon Yeow, Penang Miaohui began in 1999, the Year of the Rabbit. This year **Penang Miaohui is 24 years old**. Despite the harsh challenges posed by the COVID-19 pandemic **over the last two years**, this celebration was still held online and was not canceled.

Nowadays, Penang Miaohui is not only **a celebratory feast** during **the Spring Festival**, but also a platform to illuminate **traditional Chinese culture**.

In different ancestral halls, visitors can learn **myriad cultural aspects and facets**. For example, **in Ng See Kah Miew, or the ancestral temple of Ng clan, which was built in 1897 by the Ng forefathers**, they can learn **the architectural structure of mortise and tenon**.

In Lee Sih Chong Soo, or the clan association for the Chinese surnamed Lee, they can learn about the different categories of **traditional Chinese medicine**, understanding the influence of **Li Shizhen, a Chinese scholar of the Ming dynasty (1368-1644), and his highly-influential Ben Cao Gang Mu (Compendium of Materia Medica)** on modern society.

In the Nin Yong Temple, young people, in particular, can learn about **the spirit of Guan Yu, the famous ancient Chinese general known as the Chinese god of war**, through the related **exhibition** inside and are educated on benevolence, brevity, and intelligence' [5].

The event note is marked by lower expressiveness than any other media genre but still there are expressive language means that colour the information and add influencing force to the material which is presented to the reader, thus creating the necessary emotional atmosphere as well as implementing the goals and objectives of the communicative-pragmatic model of the event note.

The analysis of the grammatical side of the communicative-pragmatic model of the event note, we have come to the conclusion that this genre is characterized by the wide use of nouns and adjectives, which is explained by the purpose to actualize the thematic component of such texts – cultural values of China, and the description of participants, objects, etc. related to one of these values:

'*Leong Keng Fei, **Chairman of the Penang Chinese Clan Council**, the **organizer** of the **event**, said that since the Penang Miaohui was held in 1999, it always focused on promoting **traditional cultures**. **Visitors** were encouraged in the **ancestral halls** and **temples** to experience and learn the **cultural treasures** left by **ancestors**, and to find the **roots deep** in their **souls**.

The **organizer** hopes that through this **method**, **every Chinese descendant** will have the **opportunity** to receive and pass on the **essence, energy**, and **spirit** inherited from their **ancestors**.

Penang is a **state** with a **high population** of Malaysian-Chinese. More than 200 **years** ago, many **Chinese** came here and made **contributions** to its **economic** and **social development**.

Nowadays, Malaysian-Chinese still cherish and pass down **traditional Chinese culture** to **future generations** through celebrating **Chinese festivals** like the **Spring Festival**, which falls on Feb. 22 this **year**.

Zhou Youbin, **Chinese Consul General in Penang** said that this **year** marks the 10th **anniversary** of the **establishment** of the **China-Malaysia comprehensive strategic partnership**, and **next year** is the 50th **anniversary** of the **establishment** of **diplomatic relations** between the two **nations'** [5].

As we see from the example above, the abundant use of nouns and adjectives can be also explained by the aim to attract the attention not to the actions but to the descriptive side of the information stressing the importance of facts presented in the event note. Quantifiers, in turn, add value the information about the number of museums, festivals, age of the cultural value, etc. thanks to which the author's intention is realized.

As for the syntax of the event note, we have found out the following characteristics: complex sentences with a number of subordinate clauses of the adverbial type, simple sentences accompanied by participial phrases, simple nominative sentences.

Speaking about the communicative-pragmatic aspects of the event notes on Chinese cultural values, we have managed to identify the communicative strategies that are used there: positioning strategies, i.e. strategies that form a certain perception of the presented object (image), the optimizing strategy, i.e. a strategy aimed at optimizing the impact of the message, at stimulating an emotional reaction from the addressee and forming a certain assessment. They are aimed at achieving the communicative goal to inform and stimulate certain emotional and evaluative reactions from the addressee.

The developed methodology of modeling the communicative-pragmatic space of the event note genre has been tested on the example of 100 publications from the Chinese English-language newspaper "Guangming online" with a total volume of 110 printed pages which were selected by random sampling and cover the topic of Chinese cultural values. The choice of the English-language version is explained by the wide spread of English and easy access to information in it in different countries all over the world.

Thus, the communicative-pragmatic model of the event note about the Chinese cultural values is a combination of constant structural components such as the headline, the lead, the body of the text and non-permanent (the interview) structural components. The language means in the communicative-pragmatic space of the event note are aimed at creating an attractive image of the cultural values of China.

The proposed methodology for building the communicative-pragmatic model of the event note can help build and study the functioning of the same models on the material of other types of texts, as well as in courses of general linguistics and typology, pragmatics, stylistics and linguistics of the text, also in teaching such disciplines as "Cultural Studies", "Intercultural Communication" in higher educational institutions as well as for college students.

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N. G. Novak, Yu. A. Maslik

CHARACTERISTICS OF SELF-ATTITUDE AND LIFE VALUES
OF MODERN HIGH SCHOOL STUDENTS

The article deals with the problem of life values and self-attitudes of modern high school students, presents the results of empirical research and their interpretation. The article emphasizes that the study of life values, the attitude of high school students to themselves and others is an urgent psychological and pedagogical task, the solution of which will allow to identify trends in the development of modern society and determine the strategy of personal development of the younger generation.

The modern stage of development of society, characterized by political, economic instability, growth of social tension, can be accompanied by a significant reassessment of both universal and personal values, as a result of which there is a "blurred" image of the future, uncertainty of life prospects, the formation of pseudo-values that are not consistent with the real goals and interests of a person.

Today, specialists are faced with the task of finding a solution to the problem of devaluation of humanistic values and low self-worth, self-esteem of high school students in combination with the prevalence of material orientations and high self-esteem. In the modern world, teenagers are very susceptible to the influence of external, environmental factors, which can largely determine the transitivity of their system of values, meanings and worldview in general. Public opinion imposed from outside and modern socio-political trends have a significant impact on the ratio and self-esteem of adolescents, sometimes imposing a non-existent "ideal" on them. This problem is realized by the attachment of the individual to the modern social trend – the desire for success and self-realization, which makes the assessment and attitude of surrounding people extremely important for high school students, leaving their own ideas without due attention. However, individualization, which emphasizes the uniqueness and originality of a person and supports a certain range of youthful values and preferences, is impossible without a corresponding self-attitude. This shows the importance of this psychological category and its crucial role in the development of high school students.

The system of value-semantic orientations of high school students is characterized by an unstable worldview, little life experience. The value structures of the maturing personality are still at the stage of formation, mobile, subject to significant external influence, including negative. In this regard, the study of the structure of life values and attitudes of modern high school students is an urgent task, the solution of which will reveal trends in the development of modern society and determine the strategy of personal development of high school students.

In modern psychology, there is no single approach to understanding and defining the phenomenon of self-attitude, despite its active study by foreign and domestic researchers. The analysis of works on the problem of self-attitude allows us to talk about the variety of categories that are used to describe it, including "self-esteem", "global self-esteem", "self-confidence", "attitude to oneself", "self-acceptance", "self-worth", "self-esteem", "emotional-value attitude to oneself" [1, p. 150].

The term "self-relation" was first introduced into scientific circulation as a special concept by the Georgian psychologist N. I. Sarjveladze in 1974, understanding it as a subclass of a social attitude. The scientist believed that the concept of self-attitude reflects a wide range of personality phenomena, including: self-awareness, self-knowledge, self-esteem, emotional attitude, self-control, self-regulation [2, p. 213]. However, the American psychologist William James wrote about the phenomenon of self-attitude before N. I. Sarjveladze at the end of the XIX century, using the term "global self-esteem" [3].

In the work "Personality and its interaction with the social environment", N. I. Sarjveladze identifies three components in the structure of self-attitude as the center of personality: the cognitive

component, including self-esteem; the emotional component, containing an emotional attitude to oneself; the conative component, including a willingness to act towards oneself. The components of the self-relationship are coordinated with each other. According to the author, it is necessary to distinguish between the concepts of "self-attitude" and "emotional-value attitude to oneself", which are considered by some researchers as synonyms. The concept of an emotional-value relationship is commonly used in the three-component structure of self-relationship as a component with its own functional meaning [2, p. 215].

Thus, by self-attitude we mean a complex structural personal education, including an emotional, evaluative and value attitude to oneself, formed on the basis of self-assessments in the process of interaction with other people and reflection, carrying out self-regulation, self-expression and self-realization.

The system of self-relation is multifunctional. The functions of self-attitude in the social life of an individual are: the function of self-reflection; preservation of internal stability and continuity of the "I"; self-regulation of self-control; the function of intracommunication [4, c. 59]. The system of self-relations acts as a basis for such intracommunication processes: psychological protection, self-expression and self-realization in the activity of the individual (N. I. Sarjveladze), the function of signaling about the meaning of "I" (V. V. Stolin) [5, c. 99].

The purpose is to study the self–attitude and life values of modern high school students.

The study was conducted on the basis of the GUO "Secondary School № 57 of Gomel". The study involved 30 high school students (15 boys and 15 girls).

The following methods were used as psychodiagnostic tools: the methodology of self–attitude research (S. R. Panteleev, V. V. Stolin), is designed to identify self-attitude - an emotional and value component of self-consciousness (the understanding of self-attitude is based on the concept of self-consciousness, which distinguished three dimensions of self-attitude: sympathy, respect, intimacy); morphological test of life values (V. F. Sopov, L. V. Karpushin), which allows to determine the value structure of personality; test of interpersonal dependence (R. Girshfield in the adaptation of O. P. Makushina).

The analysis of the results of the study of self-attitude indicates that the parameters "closeness" (83.3%) and "conflict" (80%) are expressed at a high level among high school students. A low level of severity was revealed relative to the parameters "self-confidence" (70%), "mirror self" (93.3%) and "self-acceptance" (73.3%). Such parameters of high school students' self-attitude as "self-guidance" (46.7%), "self-worth" (50%), "self-attachment" (46.7%), "self-blame" (40%) are expressed at the average level. Consequently, high school students are characterized by a tendency to avoid open relationships with themselves, the presence of internal conflicts and a negative background of attitude towards themselves, disrespect for themselves associated with insecurity in their abilities. They treat themselves as unable to arouse respect from others, have a general negative background of self-perception, a tendency to perceive themselves too critically.

According to the "Closeness" scale, high scores were obtained in 83.3%, and average scores in 16.7% of high school students. High school students are characterized by pronounced defensive behavior, a tendency to avoid open relationships with themselves; the reason may be a lack of reflection skills, or a conscious unwillingness to reveal themselves, to recognize the existence of personal problems. Closeness can also be associated with uncertainty and inconsistency in the development of children in adolescence.

The indicator "Self-confidence" was expressed at an average level in 30% and at a low level in 70% of respondents. This indicator characterizes reveals self-esteem, attitude to oneself as a confident, independent, strong-willed and reliable person who knows that he has something to respect himself for. Self-esteem is a key component of a high school student's self-esteem structure. They are characterized by disrespect for themselves, associated with uncertainty in their abilities, with doubt in their abilities.

In 20% of high school students, the indicator of "Self-guidance" is expressed at a high level, in 46.7% at an average and in 33.3% at a low level. The "Self-guidance" scale reflects a person's idea

of the main source of their own activity, results and achievements, about the source of their own personality development, emphasizes the dominance of either their own "I" or external circumstances. High school students in their habitual conditions of existence, in which all possible changes are familiar and well predictable, may show a pronounced ability to personal control. In situations new to themselves, their regulatory capabilities of the Ego weaken, the tendency to submit to environmental influences increases.

For 6.7% of respondents, the "Mirror Self" indicator turned out to be expressed at an average level, and for 93.3% at a low level. The data obtained characterize the subject's idea of the ability to evoke respect and sympathy from other people. High school students treat themselves as unable to arouse respect from others, as causing others to condemn and censure.

According to the "Self-worth" scale, 23.3% of the subjects received a high level of severity, 50% average 26.7% low. This scale conveys a sense of the value of one's own personality and the perceived value of one's own "I" for others. High school students are characterized by average self-worth, they tend to appreciate a number of their qualities, to recognize their merits; other qualities are clearly underestimated, so the comments of others can cause a feeling of low value, personal insolvency. It can be said that at this age there is a contradiction between a teenager's critical attitude towards himself, dissatisfaction with himself, on the one hand, and the need for a generally positive attitude towards himself as a person, on the other.

The indicator of "Self-acceptance" was expressed at a high level for 23.3% of high school students. For 50% of high school students, this indicator was pronounced at an average level, and for 26.7% at a low level. The data obtained allows us to judge the severity of feelings of sympathy for oneself, agreement with one's inner motives, acceptance of oneself as one is, despite shortcomings and weaknesses. High school students are characterized by a general negative background of self-perception, a tendency to perceive themselves too critically, a negative assessment of themselves.

43.3% of the subjects had a high level of expression of the indicator "Self-attachment". For 46.7%, this indicator was pronounced at an average level, and for 10% at a low level. The data obtained allows us to judge the degree of desire to change in relation to the present state. High school students are characterized by selectivity of attitude to their personal properties, the desire to change some of their qualities while preserving others.

Of the entire sample of subjects, 80% of the subjects have "Conflict" expressed at a high level and 12% on average. This scale determines the presence of internal conflicts, doubts, disagreement with oneself, the severity of tendencies to self-examination and reflection. The emotional response of the brain of high school students to stimuli is much higher than in children and adults. Thus, outbursts of emotion, sensitivity and demonstrative behavior seem unreasonable. Therefore, high school students are characterized by high internal conflict, a negative background of attitude towards themselves.

For 36.7%, the indicator of "Self-accusation" was expressed at a high level. For 40% on average and for 23.3% on low. The data obtained characterizes the severity of negative emotions towards one's self. High school students show a selective attitude towards themselves; blaming themselves for certain actions and actions is combined with expressing anger at others.

According to the results obtained by the method of "Morphological test of life values" (V. F. Sopov, L. V. Karpushina), "education" is in the first place in importance (in combination with achieving a high financial position in the future). On the second – "hobbies". In the third place in importance is the "profession", which in the future will bring a high position in society and a high financial position. The fourth place is occupied by "physical activity" due to the fact that many are engaged in various sports sections. The family as a significant sphere is placed in fifth place. Public activity is in sixth place. In the whole sample, the value of the family is in fifth place and is higher only than the value of social life.

The results of the diagnosis of interpersonal dependence (the method of R. Girshfield) showed that a high level of emotional reliance on others was revealed in 26.4% - they are characterized by an orientation towards emotional support of other people, a focus on getting high marks from them; a tendency to expect a lot from them. 16.4% showed a low level of emotional reliance on others - they

are not characterized by sensitivity to disapproval and criticism of others, they do not feel the need for close people and anxiety about their possible loss.

A high level of self-doubt was revealed in 6.4%, which indicates that there are doubts about their ability to deal with most of the personal problems that a person faces in life, about the expectation of negative assessments from strangers, about uncertainty in their judgments, about the preference for a leading position in a group and a tendency to ask for advice when the need to make independent decisions. At the same time, 6.4% of the subjects have a low level of uncertainty, therefore, they are not characterized by a tendency to easily concede in an argument and quickly agree with the opinion that is expected by others, they are able to ask for help.

20% of the subjects showed a high level of desire for autonomy, which indicates that they have a pronounced desire to rely only on themselves, to achieve their goals without the help of other people. A low level of desire for autonomy was noted in 13.40% of the subjects, which indicates that they have a desire for isolation, self-determination of their positions, taking responsibility for their actions and feelings, freedom of choice, a way of behavior appropriate in this situation despite the surrounding influence.

The study showed that the majority of high school students have an average degree of dependence in interpersonal relationships, which may correspond to the norm and indicate the possibility of building a "healthy" relationship. At the same time, there is a high need for emotional closeness and reliance on others, as well as the need for acceptance from significant people. A high integral indicator of interpersonal dependence was noted in 13%. They are characterized by a pronounced need for emotional closeness, love and acceptance from significant others, a rigid desire to receive help and support against the background of a constant feeling of helplessness and weakness regardless of the specific situation; self-doubt, low self-sufficiency, a sense of helplessness, anxiety about possible rejection and loneliness; passive expectation of events, hope that they will be taken care of.

Thus, the results of an empirical study of respondents' self-attitudes suggest that modern high school students are characterized by pronounced defensive behavior, a tendency to avoid open relationships with themselves. The reason may be a lack of reflection skills or a conscious unwillingness to reveal oneself, to admit the existence of personal problems, disrespect for oneself, associated with uncertainty in their abilities, with doubt in their abilities. In the conditions familiar to themselves, in which all possible changes are familiar and well predicted, they may show a pronounced ability to personal control, but in new situations their regulatory capabilities weaken, the tendency to submit to environmental influences increases. The majority of respondents perceive themselves as unworthy of respect from others, expect condemnation and censure from other people. High school students are characterized by selectivity of attitude to their personal characteristics, high internal conflict, negative background attitude to themselves. They tend to blame themselves for certain actions and actions in combination with expressing anger at others. Most modern high school students are characterized by an average level of dependence in interpersonal relationships, which indicates the possibility of building healthy interpersonal relationships. In the system of life values of modern high school students, the first place in importance for the subjects is "education" in combination with the desire to achieve a high financial position, the second is "hobbies", and the third is "profession", which in the future will bring a high position in society and a high financial position.

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N. G. Novak

CRISIS EVENTS IN THE STRUCTURE OF LIFE WAYS OF PERSONALITY

The article considers the problem of a person's life path from the perspective of a subject-activity approach, describes crisis events as personally significant, nodal moments of the life path, and considers indicators of the subjective significance of events. The classification of stressors of different levels underlying crisis events is presented.

In the late XX – early XXI centuries in psychological science and practice, the views of scientists regarding the role of personality in the construction of their own individual history have changed significantly. Personality began to be considered not only as an element of social relations, but also as an independent subject capable of creating and regulating his life. The process of being a subject was endowed with dynamism and plasticity due to the high variability of individual situations of human behavior – behavior acting as a solution to the continuous flow of life tasks.

This idea was most fully revealed within the framework of the event-biographical approach, whose representatives emphasized the uniqueness of the fate of each person, due to the individual way of experiencing the events of the life path. Since that time, the systematic study of the life path and the biographical method (as the main method of its research) have occupied an important place in the sciences of man. The life path of a personality is characterized by integrity and continuity: each element of life is prepared by the course of past events of individual history, determines the self-realization of the personality in the present and affects the subsequent direction of life. The dynamics of this process can be represented as a constant change of personality in the direction of constructing oneself as a subject of one's own life path. The latter becomes possible thanks to higher personal formations (consciousness, activity, responsibility, maturity, etc.), which perform the functions of organization, regulation, ensuring the integrity of the life path [1].

The primary role in a person's life is played by personally significant events these are events of a "special kind", defined by S. L. Rubinstein as "nodal moments and turning stages of an individual's life path, when, with the adoption of a decision for a more or less long period, the further life path of a person is determined" [11, p. 643]. The significance of such events is determined by the fact that they are connected with the "inner core" of the personality, its value-semantic structures, require special emotional and cognitive transformation and reflection in the inner world of a person [10].

A significant event acquires a significant significance for a person as its accomplishment, outcome (positive or negative), changes his current state [12, p. 258]. Indicators of the subjective significance of events are: actualization of the life plan or, on the contrary, a sense of the meaninglessness of life, awareness of the need to rethink the stages of the life path, their reassessment, the need to search for new ways of life, the desire to change oneself, one's life, re-examination of values, transformation of goals, etc. [12].

In some cases, a significant event can be assessed by the subject as a "crisis event", i.e. complex, critical, beyond control [2]. Such an event requires a person to be particularly active, to mobilize resources in order to cope with the situation, in order to overcome it. In a brief psychological sense, the concept of "crisis" (from Greek. crisis - decision, turning point, outcome) is defined as "an emotionally significant event or a radical change of status in personal life" [8, p. 174].

Characteristic signs of a crisis event are the urgency of the onset; excess for a given person; dynamic, progressive changes in the situation, in the conditions of life, in social roles; complication of life processes due to the appearance of previously unknown and unparalleled in the human experience of uncertain elements of life; the emergence of contradictions with oneself or others that require prompt resolution and at the same time the lack of human experience in solving a conflict of this kind; the transition of the situation into a phase of instability, reaching the limits of human adaptive resources. As L. A. Pergamenshchik noted, the system-like elements for the category under consideration are "the negativity of the phenomenon" and "joint danger" [9, p. 11].

The criticality of such events lies in the fact that they "create a potential or actual threat to the satisfaction of fundamental needs" [14, p. 816]. At such moments in life, a person is aware of the presence of a problematic situation, "from which he cannot escape and which he cannot resolve in a short time and in the usual way" [13, p. 525]. The number of crisis events include the death of a loved one, a serious illness, separation from parents, family, friends, a change in appearance, a change in social status, marriage, abrupt changes in social status, etc. [3, p. 17].

Individual reactions of a person to a crisis event and their intensity are diverse, therefore it is more appropriate to classify not the consequences (types of reactions), but the events themselves as more objective parameters of the psychotraumatic experience [6]. For example, R. Stensrud proposed a classification, the criterion of which is the localization of a stressor in the environment, and on this basis identified environmental stressors (existing in the physical environment); stressful life events; annoying little things of life; self-induced stressors are lifestyle stressors and consciously used stressors (caffeine, nicotine, medications) [cit. on 10, pp. 852–853].

In modern psychology, one of the most complex is the classification of stressful events of a person's life path, developed by S. A. Vekilova on the basis of approaches already existing in the scientific literature [5]. Based on the analysis of genograms and content analysis of texts of family histories of 85 multi-generational families (5,608 people), S. A. Vekilova compiled a general list of 27 events divided into corresponding groups. Crisis events caused by macro-social stressors occur unexpectedly, develop in an avalanche-like manner and cause a state of social anomie in a person. Such events have an impact on large groups of the population, pose a direct threat to life, dramatically reduce the level of predictability of events and make it impossible to control them. The cause of the crisis events of the second group are social stressors (a change in the immediate social environment, but the preservation of the general cultural system of values and life orientations of the subject).

Within the framework of this work, critical events arising in interpersonal relationships (conflicts in the family; divorce; deprivation of parental rights, abandonment of a child; adoption, custody; exposure to various kinds of violence, leaving the family or death of a family member) deserve special attention. Such events occur most often on the life path of a person, and in addition to high stress, they also cause a violation of the system of habitual social support for a person, lead to a decrease in the level of emotional security, an increase in the sense of vulnerability, vulnerability. Some of these events violate the system of human values (for example, the absolute value and inviolability of human life, the value of the institution of the family). As S. A. Vekilova notes, often in the process of experiencing such events, the subject develops a hypertrophied sense of guilt, which pushes him to "expiate guilt" actions [4]. So already in childhood, "order-bearers", "champions", "heroes" (compensation mechanism) appear in the family, who then choose professions related to helping others (psychologist, teacher, doctor, etc.) or with the need to restore justice, save the victims, punish the guilty (an employee of law enforcement agencies, the Ministry of Emergency Situations, the Ministry of Internal Affairs, a lawyer, a prosecutor, etc.) [7].

The fourth group includes crisis events related to personal stressors, which include role conflicts of personality, destruction of life prospects, goals and values, as well as events related to awareness of the limitations of one's own capabilities and the finiteness of one's life. This group includes the facts of alcohol and drug use, which are the result of stress already suffered and, in turn, are self-induced stressors, since they lead to stress escalation in the user and his relatives [4].

Any stressful situation can become the main cause of mental and emotional disorders. The consequences of stress, especially long-term (prolonged) can be: a feeling of emptiness and

inferiority; depression; suicidal thoughts (it would be better if I didn't exist); violation of communicative interaction, fears, neurotic and obsessive states, psychosomatic diseases, etc. However, mental disorders develop under the influence of a whole range of conditions, and therefore many people who have experienced, for example, a divorce or the death of their parents, cope with a crisis state and build their future lives quite effectively. But in any case, the stressful event experienced leaves an imprint on the mental state and psycho-emotional stability of the individual.

The need to submit to the influence of a crisis situation can simultaneously cause both resistance in a person (the law of homeostasis as the basic law of the development of any system) and the need for changes, i.e. the need to transform value-semantic formations in order to cope with the situation, for the purpose of socio-psychological adaptation to the changed conditions of external and/or internal life. In other words, under the influence of a stressful situation, a value-semantic conflict arises in the consciousness of the subject, which can become both an impulse to self-development in the direction of post-traumatic growth, and act as a destabilizing factor preventing the choice of constructive coping behavior.

In previous studies, factors of psychological well-being of boys and girls who survived a crisis event in the family were identified. The relationship of the level of psychological well-being of the individual with such parameters as age at the time of the crisis event and the experience of experiencing crisis events at previous stages of life is revealed. It has also been proved that the possibility of maintaining the level of psychological well-being and the productivity of coping with a crisis state are determined by the following conditions: attitude to oneself, the presence of a reference person who is able to provide support, the meaningfulness of what is happening, the ability to plan one's own life (time perspective), as well as methods used in a crisis situation to overcome life difficulties. The most sensitive and susceptible components of psychological well-being are life goals and social competence (environmental management). This means that for a person who has experienced a crisis event, it is especially necessary to restore the lost sense of direction, meaningfulness of life, to form / strengthen beliefs that contribute to the realization of the purpose of life in the present, as well as to increase the level of competence in managing the environment. This will make it possible to control external activities to a greater extent, effectively use the opportunities presented, capture or create conditions and circumstances suitable for meeting personal needs and achieving goals [15].

Thus, an event that is subjectively regarded by a person as unexpected and/or excessive becomes a crisis for a person, since it carries a threat of destruction of the subject's internal balance and leads to a violation of the stability of the flow of his life path.

The cause of a crisis event can be stressors of different levels. The described groups of stressors are not independent: the stressful experience of the overlying level will inevitably lead to stressful experiences of each next level, as it changes the personal characteristics of a person and reduces his adaptive capabilities. At the same time, it is the crisis events that arise in interpersonal relationships that most often cause intrapersonal crises, since they lead to a change in the value and semantic orientations of the individual and disrupt the network of social support.

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N. G. Novak

THE LIFE VALUES OF THE DIGITAL GENERATION

In the article, the system of personality values is considered as one of the most important factors regulating human behavior. Particular attention is paid to the problem of the values of young people studying, because in the future it is the activities of highly qualified specialists that will determine the level of development and stability of the country in various spheres of life.

The value-semantic sphere regulates the behavior of a person, is a criterion of choice, a moral assessment of actions. In modern psychology, more and more attention is paid to the consideration of a person as a subject of life changes, the importance of a subjective understanding of the world is recognized, the importance of value and semantic aspects of human existence is increasing.

In foreign psychology, values and value orientations as the main characteristic of the value-semantic sphere of personality were studied by A. Maslow, M. Rokich, S. Schwartz, E. Spranger, V. Frankl and others. In Russian psychology, the problem of the development of the value-semantic sphere was covered in the works of L. S. Vygotsky, A. N. Leontiev, B. G. Ananyev, B. S. Bratusya, A. G. Asmolov, V. V. Stolin, D. A. Leontiev, V. A. Yadov, F. E. Vasilyuk, N. K. Kashirsky, S. V. Merzlyakova, S. V. Molchanov and others, while in the Republic of Belarus – by E. M. Babosov, S. E. Babosov, K.V. Gavrilovets, V. T. Kabush, A. I. Kochetov, G. M. Gribov, L. G. Titarenko, S. Ya. Ermolich, A. M. Golub, A. L. Aisenstadt, N. V. Babosov, K. V. Gavrilovets,

V. T. Kabush, A. I. Kochetov, G. M. Gribov, L. G. Titarenko, S. Ya. Ermolich, A. M. Golub, A. L. Aisenstadt, N. I. Novikova, I. I. Kruk, T. N. Rodevich, S. A. Konyukh-Tit, etc.

Since the end of the twentieth century, the interest of scientists in various aspects of the value-semantic sphere of the younger generation has significantly increased, which is currently only increasing. This is primarily due to the intense social, economic and political changes that are taking place in the world. Youth is the most sensitive age group to changes: the worldview is actively developing and becoming more stable, moral consciousness is being formed, a fairly stable hierarchy of life values is being established [1]. The indicator of the nature of the consequences of the influence of external and internal processes on the development of personality is the content-structural changes in the value-semantic sphere.

Young people of the digital generation are capable of rapid learning and information processing, quickly switch from one type of activity to another, successfully operate in a multitasking environment, but differ in clip thinking and fragmented consciousness [2], [3]. According to psychologists, an important feature of this generation is the virtual nature of interpersonal communications, but at the same time high mobility, absence or low expression of attachment to their permanent place of residence and social environment [4].

The appeal to the problem of the values of the younger generation to a certain extent is intended to help in solving three main problems that every developed society faces: the regulation of the relations of the individual and the reference group (autonomy-integration of personality); prosocial motivation of members of people; adaptation to the outside world and careful attitude to nature, the external environment [5]. The ways of solving these alternatives are reflected in the value priorities established in society.

The category "value" is widely used in sociology and philosophy to denote "objects, phenomena and their properties, as well as abstract ideas embodying social ideals and acting as a standard of due" [6]. In modern psychology, values are considered as subjective criteria on the basis of which a person makes a choice, evaluation and justification of his actions. The same yardsticks act as a standard when evaluating other people and their behavior, when evaluating current and past life events. The value system of a person determines the choice of direction and the nature of her activity, the justification of her own actions. Thus, life values are life guidelines formed in consciousness, which a person adheres to in life, especially in vitally difficult, critical situations.

The following components are distinguished in the structure of a person's value orientations: cognitive (formation of judgments, logical justifications and arguments, opinions and beliefs related to a certain object); affective (emotions about a certain object and their corresponding vegetative manifestations); behavioral (willingness to act in a certain way based on cognitive information and emotional reaction) [7].

The importance of the topic under consideration is also due to the fact that modern youth "not only perceives the values of older generations in the process of socialization, but also forms a system of values of the society of the future through juventization" [4, p. 48]. The phenomenon of "intergenerational transformation of values", which is presented in detail in the concept of intergenerational change of values, is of significant importance in the study of youth values: people of the same age group from generation to generation have significant differences in the structure and content of value priorities (R. Inglehart) [8].

Let us turn to the results of the study of the values and values of the digital generation presented in the works of modern authors. In the studies of the value orientations of Russian youth (2017), it was revealed that the majority of respondents make happy family (65.9%), love (66.5%), loyal friends (64.4%); when everything works out (54.9%); health (54.6%), achieving dreams (50.8%). Quite often, respondents associate ideas about happiness with the opportunity to realize themselves in different areas: self-realization in general (41.1%); academic success (41.2%); having a favorite job (26.7%). For many respondents (41.6%), harmony and mutual understanding are an integral part of happiness. One in three of the respondents (34.8%) considers peace on earth to be the key to happiness. Almost half of the respondents indicate that happiness is associated with material well-being (46.1%).

The same study shows that the majority of young people in their future children will bring up honesty, kindness, responsiveness (85.4%), love for family, home, loved ones (75.9%). 72.5% of the respondents consider it important to give their children a good education, and 62.7% consider it necessary to educate children willpower, to form an active life position, perseverance. More than half of young people point to the importance of forming such qualities in children as organization, self-discipline, responsibility, tolerance, flexibility, ability to adapt to a situation (58.5%), purposefulness, business skills, "acumen" (54.8%). 44.7% of respondents are sure that it is necessary to provide their children with a decent social circle, dating. Every third young person (31.5%) would like to form a civic position, beliefs, and love for the Motherland in their children. 18.5% of respondents consider it absolutely necessary to cultivate faith in God in the upbringing of their future children [9, p. 42].

The study by A. P. Makarova (2018) involved 60 students of educational institutions in Yakutsk (aged 18 to 22 years). As a result of the application of the method "Value orientations-36" by S. Schwartz in the modification by V. N. Kunitsyna, almost similar data were obtained: the dominant values of boys and girls are "family protection", "health", "understanding and trust in the family", "achieving success", "true friendship" and "self-respect". The values of "religiosity", "self-indulgence", "courage", "tolerance" and "authority" received the lowest rank. Based on the presented results, modern boys and girls do not have the desire for risk, the search for adventure, as well as the right to lead, to lead. When considering the differences in value preferences by gender, A. P. Makarova noted that both girls and boys unambiguously highlight the value in the first place – "family protection", "health", "success", "understanding and trust in the family", then the value of "family protection" is in the first place true friendship", and girls have "self-respect" [10].

An empirical study conducted by A. N. Zakharova and G. S. Dulina (2019) involved 110 students aged 18–22 years (57 girls and 53 boys). As a result of the diagnosis of students using the methodology "M. Rokich's Value orientations modified by V. A. Khashchenko", it was revealed that the following were typical for the general sample in the hierarchy of values: "health", "family", "love", "freedom", "material security", "work", "cognition" [11, p. 63]. The analysis of the results taking into account the gender of the respondents allowed us to note significant differences regarding the following life values: "love" (3rd rank for men and 4th for women), "work" (6 and 7), "wealth" (8 and 10), "active life" (13 and 15), "beauty (15 and 16), "entertainment" (17 and 18), "property" (16 and 17). At the same time, the following values were rated more highly in the sample of girls: "material security" (3rd rank for girls and 4th for boys), "self-confidence" (8 and 10), cognition (6 and 7), "happiness of others" (13 and 14), "creativity" (14 and 18) [11, p. 64].

A study by a team of Russian scientists is very informative, the results of which were published in the scientific article "The system of value orientations of Generation Z" (2019). The sample included 1,251 people aged 16 to 25 years (839 girls and 412 boys) [4]. The features of the individual value hierarchy were studied using the methodology . S. Schwartz. In the described study, in order to conduct a comparative analysis, the results were compared according to a number of criteria: the age of the respondents, ethnic and religious affiliation, place of residence, education profile.

An analysis of the value system of the entire sample described at the level of normative ideals shows that for the youth of "generation Z", such life principles and general ideas of what is due as independence (average score 4.88), achievements (4.71) and safety (4.68) are the most priority. Less important are values such as hedonism (4.67), kindness (4.61) and conformity (4.26). The least significant are universalism (4.03), stimulation (3.83), power (3.66) and traditions (3.27). At the level of individual priorities corresponding to real social behavior, the hierarchy of values of "generation Z" naturally differs somewhat: independence (2.59), hedonism (2.49) and kindness (2.32) occupy the leading positions; achievements (2.27), stimulation (2.21) and universalism (2.08) are relatively indifferent; safety is of least importance (2.07), conformity (1.75), power (1.51) and tradition (1.22) [4].

In the value hierarchy of young men (both at the level of normative ideals and at the level of individual priorities), independence, achievements and hedonism occupy the first places. Representatives of the "generation Z" discover differences in the hierarchy of value preferences from the value system of previous generations. The results obtained by the researchers also confirm the

greater orientation of girls towards traditional collectivist values, while the value system of young men has a noticeably more pronounced individualistic character [4].

340 young men and women took part in our study of the life values of Belarusian youth: students of the Francysk Skoryna Gomel State University and students of the Gomel State Vocational College.

Based on the data obtained, it can be said that in the hierarchical system of life values of the surveyed boys and girls, the dominant position is occupied by the "family" (57%). Consequently, the majority of respondents are focused on creating and maintaining strong family ties, taking care of each other, and tend to put the interests of close people above their own.

A significant part of the respondents are focused on recreation: 56% have an average, and 15% have a high level of expression of this value. Recreation and entertainment, of course, are an integral part of the full-fledged life of boys and girls, but the priority of this value over others may indicate social immaturity of the individual or chronic fatigue (the need for rest).

A high level of orientation towards "service" as the highest moral value is characteristic of 16% of respondents, and the average is for 45% of respondents. This value is characterized by the desire to sacrifice their interests for the sake of the interests of other people, to show mercy and compassion, without expecting a reward or gratitude.

It is important to note that the average level of expression of the value of "health" was revealed in 53% of respondents, and a high level of significance – in 9% of respondents.

The following values have a low level of significance for the surveyed boys and girls: "fame" (61%), "creativity" (55%) and "material security" (43%).

It follows from the presented results that the majority of the surveyed boys and girls are characterized by a focus on the value of family, service and recreation, the desire for fame, creativity and material security are expressed to the least extent in the value hierarchy of respondents.

Analysis of the results of diagnostics of the dynamics of respondents' life values indicates that in the sample of first-year students, the family occupies the highest position in the hierarchy of life values, however, significant changes occur by the end of training: the proportion of people for whom this value is of paramount importance decreases (from 59% to 42%). By the end of their studies, the number of students who are willing to sacrifice their interests for the sake of the interests of other people, even strangers, to show mercy and compassion without expecting a reward or gratitude is significantly reduced (from 27% to 5%). The share of respondents focused on recreation and entertainment is practically unchanged.

In the sample of college students, the importance of family and the expression of the vital value of "service" does not decrease as they study. Orientation to recreation and entertainment is important for every tenth of the first-year students surveyed, and by the fourth year the number of such students grows to 22%.

Thus, in conditions when complex, in many ways extraordinary and contradictory processes are taking place in society (revaluation of values, breaking of old stereotypes, rethinking of social and moral ideals), it is extremely difficult for young people to determine their true place in life, their value orientations and positions.

As a conclusion, it can be noted that personality values act as a regulator of a person's social behavior, play a motivational role and determine the choice of activity and self-realization.

In the hierarchy of values of modern Russian and Belarusian boys and girls, the hierarchy of values is dominated by "family", "love", "freedom", "rest", to a lesser extent – "material security", "work". Most people believe that it is necessary to bring up honesty, kindness, responsiveness, love for family, home, and loved ones in children. At the same time, they indicate independence, achievements and security as important instrumental values. For Russian boys and girls, health as a value is a more significant value than for Belarusian ones.

It is interesting that most studies indicate that traditional values are characteristic of modern boys and girls, but the importance of respect for traditions occupies the last place in their value hierarchy.

Consequently, the dominance of moral values in combination with the desire for independence and independence is characteristic of the representatives of generation Z, at the level of normative

ideals, the determining focus on the values of "self-aggrandizement", at the level of individual priorities – openness to the new, to self-change.

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A. V. Sazhyna

THE ARGUMENTATIVE STRATEGY AND TACTICS OF ITS IMPLEMENTATION IN THE POLEMIC DISCOURSE OF THE PRINT MASS MEDIA (IN ENGLISH AND RUSSIAN)

The paper studies the specifics of one of the communicative strategies in the polemic discourse of the print media – the argumentative strategy. Since for the successful organization of the communicative process in the polemic discourse of the print media there is a need to involve a whole range of communicative strategies, the identification of the features of the mechanisms for their implementation, as well as the ways of their verbalization, seems to be relevant. The communicative

argumentative strategy, in turn, represented by a number of tactics, has specific features that have not yet been studied on the material of non-closely related languages in the polemic discourse of the print media.

The issues of effective communication, which have been in the focus of attention of linguists for more than a decade, encourage scientists to analyze various types of discourse, including the polemic discourse of the print media, whose purpose is to find a solution to an urgent problem. For this purpose, the addresser turns to various techniques. These techniques are a set of communicative tactics that serve to implement a specific communicative strategy. The study of such strategies and tactics, which are typical for the polemic discourse of the print media, is the key to understanding how effective the communication is in non-closely related languages. The results obtained have an important practical value, since they can be used in comparative studies of linguistic models of tactical and strategic organization of various types of discourse on the material of other languages.

The material for the study includes the examples from English-language and Russian-language problem articles devoted to urgent social, political, economic and other issues. The data is obtained from 30 problem articles from "The Guardian" and "SB. Belarus Today" with a total volume of 210 printed pages selected by random sampling over a period of three years beginning in 2019 and ending in 2021.

Despite the fact that "speech does indeed serve as a means of conveying messages, this transmission is not the ultimate purpose of communication" [1, p. 5–18], the main purpose of the sender of the message lies outside of speech activity and may be associated with a change in the attitude of the addressee to any object, a change in the connotative meaning of the object for the subject, the formation of a general emotional mood, the restructuring of the categorical structure of individual consciousness, with the introduction of new categories into it [2]. Therefore, gaining authority, persuading them to do something, to accept a point of view, to cooperate, etc. may be the purpose of the strategy [3]. At the same time, it is important for the organizer of communication to change and manage the activities and behavior of the interlocutor, i.e. in the course of communication, the addresser has a speech effect on the consciousness of the addressee, who is the object of the speech effect [4]. To implement successful speech influence, it is necessary to master communicative strategies and tactics. In this paper, attention is drawn to the study of one of the communicative (speech) strategies – the argumentative strategy.

Any communicative strategy includes a comprehensive planning of the process of influencing the addressee in the process of verbal communication, depending on the specific conditions of communication, personal characteristics of communication partners, their communication purposes, forecasting the results of communication, as well as the implementation of this plan. Since the mechanisms of planning and forecasting "mostly do not have indicators "on the surface of speech" and, therefore, are inaccessible for linguistic analysis" [3], we can say that the communicative strategy stands "behind the text, or above the text" and is a hypothetical category [5]. Accordingly, tactics can be subjected to analysis.

Communicative tactics are the practical tools of the speaker and express, in contrast to the strategy, individual communicative intentions of the addresser. A tactics is aimed at certain aspects of the model of the world of the addressee and his psyche (knowledge, assessments, desires). The essence of applying a specific tactics is to change the configuration of these parameters in the direction desired by the sender of the message, transform the image of a situation [3]. A tactics is a set of speech techniques for constructing a text that allow you to achieve your purposes in a specific communication situation at a certain stage of communication. At the same time, tactics, unlike strategies, can be identified through text analysis, since each tactic is updated with the help of a certain set of language tools. Tactics can change depending on the conditions of communication.

In the polemic discourse of the print media, the tactical and strategic set has not been sufficiently studied, especially in a comparative perspective, which makes it difficult to create a complete picture of the model of successful communication on the material of non-closely related languages and determines the relevance of this work.

In the course of practical analysis, the following results were obtained.

In the problem articles in "The Guardian" there were 182 argumentative blocks while in "SB. Belarus Today" – 164 argumentative blocks. This fact allows us to conclude that English problem articles are more argumentation oriented. The blocks were identified with the use of the algorithm of the communicative-pragmatic method which let us find the boundaries of argumentative blocks formed by the thesis, the argument/counterargument and the consequence. Let's consider the examples:

'Any fair reckoning of what went wrong in Afghanistan, Iraq and the other nations swept up in the "war on terror" should include the disastrous performance of the media (the thesis). Cheerleading for the war in Afghanistan was almost universal, and dissent was treated as intolerable. After the Northern Alliance stormed into Kabul, torturing and castrating its prisoners, raping women and children, the Telegraph urged us to "just rejoice, rejoice", while the Sun ran a two-page editorial entitled "Shame of the traitors: wrong, wrong, wrong ... the fools who said Allies faced disaster". In the Guardian, Christopher Hitchens, a convert to US hegemony and war, marked the solemnity of the occasion with the words: "Well, ha ha ha, and yah, boo. It was ... obvious that defeat was impossible. The Taliban will soon be history." (the arguments)

The few journalists and public figures who dissented were added to the Telegraph's daily list of "Osama bin Laden's useful idiots", accused of being "anti-American" and "pro-terrorism", mocked, vilified and de-platformed almost everywhere' (the consequence) [6].

The author makes the thesis that the media deliberately support the enthusiastic approval of the actions of the authorities in Afghanistan and, on the other hand, subject all dissenters to harsh criticism. In support of his thesis, he provides arguments, where he lists the facts: the Telegraph urged us to "just rejoice, rejoice", while the Sun ran a two-page editorial entitled "Shame of the traitors: wrong, wrong, wrong … the fools who said Allies faced disaster". In the Guardian, Christopher Hitchens, a convert to US hegemony and war, marked the solemnity of the occasion with the words: "Well, ha ha ha, and yah, boo. It was … obvious that defeat was impossible. The Taliban will soon be history." Then he provides the consequences: the few journalists and public figures who dissented were added to the Telegraph's daily list of "Osama bin Laden's useful idiots", accused of being "anti-American" and "pro-terrorism", mocked, vilified and de-platformed almost everywhere'. As we have mentioned earlier, there were 182 such blocks in "The Guardian".

In analyzing "SB. Belarus Today" we followed the same algorithm and found 164 examples like the following one:

'The lies that fill in "independent" sites and social networks seem to be becoming dangerous (the thesis). Because it is no longer verified, comprehended, refuted. On the contrary, it is perceived as "everyone knows" (the arguments). And on its basis conclusions are made, actions arise, actions lead to crimes' (the consequence) [7].

The thesis that lies, spread through websites and social networks, become dangerous is supported by arguments that information is not verified, comprehended, refuted, but presented as known to everyone. Therefore, as a result of such presentation of information, actions arise that lead to unpleasant consequences.

The analysis of the argumentative blocks has shown that the tactic of reasoned assessment in the English-language polemic discourse is implemented through evaluative vocabulary in combination with an indication of a person and / or event directly related to the problem:

'Any fair reckoning of what went wrong in Afghanistan, Iraq and the other nations swept up in the "war on terror" should include the disastrous performance of the media. Cheerleading for the war in Afghanistan was almost universal, and dissent was treated as intolerable. After the Northern Alliance stormed into Kabul, torturing and castrating its prisoners, raping women and children, the Telegraph urged us to "just rejoice, rejoice", while the Sun ran a two-page editorial entitled "Shame of the traitors: wrong, wrong, wrong ... the fools who said Allies faced disaster". In the Guardian, Christopher Hitchens, a convert to US hegemony and war, marked the solemnity of the occasion with the words: "Well, ha ha ha, and yah, boo. It was ... obvious that defeat was impossible. The Taliban will soon be history." [6].

In this example, employing the tactic of reasoned assessment, the author seeks to convince readers that the media are trying to whitewash themselves in the eyes of readers against the failure of the operation to withdraw troops from Afghanistan. The assessment is accompanied by such emotive-evaluative lexics as *wrong, disastrous, intolerable, torturing, rejoice, disaster, solemnity* which create the necessary background for understanding the right position of the author. The addresser uses mainly the adjectives in creating the evaluative environment for his opinion.

In the Russian-language press, we find similar cases of employing the tactic of reasoned assessment, when the addresser convinces the addressee of the correctness of his point of view:

'The lies that fill in "independent" sites and social networks seem to be becoming dangerous. Because it is no longer verified, comprehended, refuted. On the contrary, it is perceived as "everyone knows". And on its basis conclusions are made, actions arise, actions lead to crimes.' [7].

The reasoned assessment in the Russian-language press is made with the help of nouns and adjectives: *lies, dangerous, verified, comprehended, refuted, tutbikes, foul-smelling*.

Further analysis of the material made it possible to find the cases of employing the tactic of contrastive analysis, where the addresser analyzes and compares the facts, events, results that led to the emergence of the problem, described in the problem article. Now we will study the examples from the Russian-language problem article:

'After all, even if you just start calling a spade, you will see a lot of things differently. The way it really is. Instead of "bringing the whole truth to people" – "paid work on a telegram channel broadcasting from abroad."

Instead of "walking around the city" – "illegal mass events." Instead of "help funds" – "foreign anonymous private e-wallets." Instead of "I went on strike" – "I recorded a video and got paid for it." Instead of "we are millions" – "we, ten percent of those who disagree." You can even negotiate with those who disagree. With insane people who have everything upside down in their heads – hardly. But how?' [8].

In the Russian-language example, we see the opposition of actions ("bringing the whole truth to people" – "paid work on a telegram channel broadcasting from abroad"; "walking around the city" – "illegal mass events"; "help funds" – "foreign anonymous private e-wallets"; "I went on strike" – "I recorded a video and got paid for it"; "we are millions" – "we, ten percent of those who disagree"), thanks to which the implementation of the argumentative strategy achieves its purposes: the contrastive analysis allows seeing the true essence of anti-government speeches. At the linguistic level, the tactic of contrastive analysis is implemented through the use of the conjunctive word *instead of* and verbs of motion, as well as numerals to demonstrate contrast.

Now we will study the examples from the English-language problem article:

'If prisoners are to be employed to work for private companies, then they should have workers' rights, be paid the same rate for the job as anyone else, and pay tax and national insurance. They must not be exploited as cheap labour to take on the roles for which companies do not want to raise wages. Public acceptance of such endeavours will depend on prisoners competing fairly with people in the community and not being used to undercut or undermine working conditions.

The barrier to expanding opportunities also lies with the extremely risk-averse attitude in the Prison Service. Currently, prisons are restricted as to how many people may apply for work in the community, but this could easily be expanded. Prisons would need to focus on getting people work-ready, which means providing practical things such as showers, breakfast, transport and encouragement. Companies would prosper, but so would the wider community, as we all know that having a job – along with having somewhere to live and someone to care for you – provides the best hope for successful reintegration after release.' [9]

As we see from the example, the English version also contrasts not objects, but actions: if prisoners are to be employed to work for private companies, then they should have workers' rights, be paid the same rate for the job as anyone else, and pay tax and national insurance; the barrier to expanding opportunities also lies with the extremely risk-averse attitude; prisons have a limited number of people who can apply for jobs in the community, but this could easily be expanded;

companies would prosper, but so would the wider community, as having a job, along with having somewhere to live and someone to care for you – provides the best hope for successful reintegration after release. The use of the conditional mood and the subjunctive mood stresses the contrast and allows the addressee make the necessary conclusions.

As the analysis has showed, the implementation of the tactic of contrastive analysis is very common in both linguistic variants of the polemic discourse. The differences lie in the linguistic representation of this tactic. In the Russian-language problem article the addresser uses mainly compound sentences with the subordinate comparative clause introduced by the conjunctive word *instead (of)*. In the English-language problem article, the addresser mostly uses the conditional mood or the subjunctive mood.

Further analysis of the tactic of implementing the argumentative strategy in the polemic discourse of the print media has showed that it employs the tactic of forecasting. It's worth saying that the forecasting of the development of the consequences of the existing problem is given, but the mention of the positions and intentions of the addresser is omitted. In terms of language, for English-language problem articles the use of the subjunctive mood is more frequent, while for Russian-language problem articles, categoricalness is inherent, expressed by verbs in the future tense:

'The success of companies such as Timpson has shown that the public supports the employment of people who have transgressed. It is the best way to make sure they live a law-abiding life and contribute to the common good. Bringing businesses into prisons would benefit prisoners, their families, and the prisons themselves. It would help prevent people from becoming victims in the future.' [9]

The addresser makes the forecasting that the success of different companies, which could employ prisoners, would give the latter the opportunity to live a law-abiding life and contribute to the common good, benefit prisoners, their families, and the prisons themselves. But the forecasting is not categorical but milder due to the use of the subjunctive mood.

In the Russian-language example due to the use of the Future Tenses the forecasting is more straightforward:

'Having betrayed the country themselves, they desperately need the same around them. Because their revolution from "colorful" has long become frankly dirty. And because no one likes traitors, which means that just about – and their owners will also turn away. By the way, the first non-motorists, despite all their today's promises, will leave precisely those people in white coats who fell for their luhta. Do you know why? Out of jealousy for the level.' [10].

Further analysis of the material has showed that the most common tactic for implementing the argumentative strategy is the tactic of illustration, with which the authors of problem articles provide facts. It is noteworthy that for the English-language polemic discourse, the verbalization of this tactic through textual references is most typical:

'There are two groups of prisoners who can come to the aid of business. The first and easiest to get working are the 3,000 men and women in England and Wales held in open prisons who have been assessed as low-risk and who are coming to the end of their sentence. Some are already employed outside through the "release on temporary license" (ROTL) system. The second group are the 40,000 men, and a handful of women, serving long sentences, many of whom will simply idle for years and years unless progress is made' [9].

As we see in the example, the most typical linguistic means of verbalization of textual references are numerals and quantitative pronouns, adjectives and nouns (two groups, 3,000 men and women, some, 40,000 men, a handful of women, many of whom), as well as place names (England and Wales).

For Russian-language publications the use of the citation is most characteristic:

'But people are not fools, our people – for sure. "Analyzing the open sources of traffic to the TUT.by resource, we see that they are experiencing a sharp drop in traffic," said the Minister of Information of the Republic of Belarus Igor Lutsky. "And it seems to me that the owners of the portal – this is not some

kind of requirement, it's just such a vision – they need to think about changing the editorial policy, perhaps changing the team."

It would not hurt. Because in recent years, the portal has become a skillful (and therefore even more dangerous) detractor of our history' [11].

The addresser uses the citation as a documentary argument to confirm the accuracy of the information. The citation is usually accompanied by the author's opinion to make the tactics of illustration more efficient (people are not fools; It would not hurt. Because in recent years, the portal has become a skillful (and therefore even more dangerous) detractor of our history…).

Speaking about the usage of different tactics of the argumentative strategy, the analysis has revealed the following fact: in English-language polemic discourse of the print media 41.7% of cases belongs to the tactic of illustration, the tactic of reasoned assessment is employed in 27.2%, the addresser employs the tactic of contrastive analysis in 19.1% of cases, 9.4% belongs to the tactic of forecasting, the rest 2.6% belongs to other tactic of implementing the argumentative strategy which are quite rare. In Russian-language polemic discourse of the print media the tactic of reasoned assessment is employed in 37.9%, the tactic of contrastive analysis – in 29.1% of cases, 21.6% of cases belongs to the tactic of illustration, 8.2% belongs to the tactic of forecasting, the rest 3.2% – to other tactics of implementing the argumentative strategy which are not common. Thus, we see that there is difference in the usage of the tactics in two language variants of the discourse under study which can be explained by the difference in language cultures.

At the language level the tactics are implemented in different ways, i.e. different language means are used in order to verbalize them to achieve the purpose of communication successfully.

Due to the identified sets of tactics based on the English-language and Russian-language polemic discourse of the print media, it is possible to develop possible communicative models of the polemic discussion, as well as study the language means of implementing the tactics of the communicative argumentative strategy in order to stimulate the response of the maximum number of addressees. The results obtained are also of interest for implementation in the educational process in higher educational institutions within the framework of courses for students of linguistic specialties and future translators, as well as journalists.

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A. S. Seudaleva

THE METHODOLOGY OF USING ELECTRONIC LEARNING TOOLS IN TEACHING FOREIGN LANGUAGE GRAMMAR ON THE EXAMPLE OF STUDENTS OF THE SPECIALTY "SPORTS-PEDAGOGICAL ACTIVITY"

The article is devoted to the description of the methodology for the use of electronic learning tools (ELT) in teaching grammar of a foreign language. The presented methodology is applicable for higher educational institutions in specialties where a foreign language is not the main subject. It was revealed that the application of the methodology using ELT in foreign language lessons in the group of students of the specialty "Sports-Pedagogical Activity" had a positive effect on their level of motivation to study grammar, as well as on the overall level of mastering the material, which contributed to improving the efficiency of learning.

The inclusion of modern technologies in the educational process is the result of the so-called *digital transformation of education*, which brings a fundamental change in the implementation of the learning process itself. Modern teachers need to develop themselves together with the technology and adapt to the rhythm of the ever-changing world, which is why the modern learning process cannot be imagined without the use of information technologies.

One of the ways to include modern technologies in the process of teaching any subject, including foreign languages, is ***electronic learning tools*** or *e-learning tools (ELT)*, which include such learning tools as electronic testing systems, electronic simulators, information and reference systems, didactic computer games, multimedia resources, electronic teaching aids, mobile applications, etc. According to D. V. Nakhaeva, ELT have many undeniable advantages that not only positively affect the degree of knowledge acquisition by students, but also increase their cognitive activity and motivation to learn the subject [1, p. 197]. In addition, with the help of ELT, any teacher can successfully diversify and modernize the educational process, thus increasing the efficiency of teaching and learning. It is also important to use ELT to provide students with remote access to educational materials, which has recently become of particular relevance due to the speedy development of online classes system.

However, the use of modern information technologies, in particular electronic learning tools, is especially relevant when teaching foreign languages. The expediency of introducing ELT into the process of teaching a foreign language is confirmed by the following reasons: firstly, with the help of ELT such activities in a foreign language class as working with audio and video text can successfully be carried out, and therefore, the speech activity of students is activated and their speech competence develops; secondly, through the use of ELT, it is possible to expand students' knowledge about the country of the language studied, increase the amount of linguistic knowledge, which is carried out by

introducing students to authentic sources and participating in electronic communication [2, p. 61]; thirdly, the clear advantages of using ELT in a foreign language lesson are the motivational potential of these teaching tools, ensuring the diversity of the educational process and its modernization. Thus, the use of ELT has become an integral part of modern foreign language class.

One of the most difficult aspects of learning any foreign language is grammar, which most teachers habitually teach using traditional teaching tools. However, the use of ELT can not only simplify the process of mastering grammatical knowledge by students, but also make it more interesting and even exciting for them.

It is known that nowadays almost all curricula of higher educational institutions of the Republic of Belarus include the study of a foreign (mainly English) language. However, foreign languages are an important part of the educational process not only of the specialties directly related to their study, such as "Foreign Languages" or "International Relations". The study of a foreign language is also a component of the educational process of other specialties, in particular, of specialties related to sports activities. According to A. V. Levchenko and N. V. Mayorova, knowledge of at least one foreign language is a necessity for athletes, Physical Education teachers, coaches of various types of sport, due to the following factors: firstly, representatives of the professions mentioned above need to constantly improve their knowledge and experience, which is impossible without getting acquainted with new international achievements in the field of theory and practice of physical culture and sports [3, p. 74]; secondly, competitive practice, in which all professional coaches and athletes are involved, implies communication in a foreign language, constant international contacts; thirdly, participation in international seminars for coaches and judges of various sports, the implementation of written contacts in order to participate in competitions, the need to study constant changes in the rules of competitions, the opportunity to participate in international congresses, symposiums, seminars and conferences on the development of physical culture and sport in the world are also the reasons for the importance of knowing a foreign language for the professional development of athletes, coaches and specialists in the field of physical culture and sports [3, p. 74]. All of the above-mentioned factors determine the relevance of research aimed at finding the most effective methods of teaching a foreign language for students of the Faculty of Physical Education, especially of the specialty "*Sports-Pedagogical Activities*", which implies fairly frequent communication in a foreign language due to promising participation in various international competitions.

Based on the above-mentioned, the teaching of a foreign language to students of the specialty "Sports-Pedagogical Activities" should be organized taking into account the peculiarities of the development of modern pedagogical technologies, and therefore, should include e-learning tools. The process of teaching a foreign language, in its turn, includes classes devoted to the introduction, practicing and control of the understanding of studied grammatical material. The grammar aspect of learning a foreign language causes particular difficulties for students of specialties where a foreign language is not the core subject. Thus, *the purpose of this study* is to develop a methodology for using ELT in the process of teaching foreign language grammar to students of the specialty "Sports-Pedagogical Activities".

To test the methodology of using ELT in teaching the grammar of a foreign language two groups of the first-year students of the Faculty of Physical Education of the Gomel State University named after F. Skorina of the specialty "Sports-Pedagogical Activities" were picked out for participating in this research: SPD-14 (1) (12 students) and SPD-14 (2) (13 students). In both groups, according to the curriculum, there are two foreign language lessons per week during the semester. During the first semester of the 2022-2023 academic year, in the SPD-14 (1) group, the above-mentioned classes were conducted using the ELT: there was a combination of traditional teaching tools and e-learning tools, with the predominant use of the ELT. In the SPD-14 (2) group, classes were conducted with the predominant use of traditional teaching tools.

Before the start of the semester the knowledge of the basic topics of English grammar was tested in both groups in order to determine the students' level of understanding the material taught in school. The following topics were included in the test: the group of tenses (active voice and passive

voice), the use of definite and indefinite articles, singular and plural forms of nouns, degrees of comparison of adjectives in English, the use of groups of pronouns in English. The above-mentioned grammatical topics are also included in the curriculum of the classes held in the first semester for both groups that took part in testing the methodology. After taking the grammatical test both groups showed approximately the same level of proficiency in grammatical material: on average, the students of the groups received a result of 40-50% correct answers.

Thus, during the semester, when teaching English grammar in the SPD-14 (1) group, the following types of electronic learning tools were used:

1. *Demonstrative software* – provide a visual representation of educational material, its visualization. This type of ELT was used to introduce new grammatical material and do exercises on it. In particular, for the introduction of grammatical material a multimedia presentation (*Microsoft Power Point, Canva*, etc.) was used, which simplified the presentation of grammatical diagrams, graphs, tables. Grammatical schemes as well as examples that contribute to a better perception of the material were presented on the slides of the electronic presentation. According to M. V. Eremenko, the use of multimedia tools during class improves the memorability of the studied language constructions and the relationships between these constructions, contributes to the successful training of certain skills and abilities, which occurs due to the visibility and clarity of the demonstrated material [4, p. 37].

The use of electronic presentations in class to explain new material received positive reaction by the students of the group. The multimedia presentation of the material contributed to the visualization of information at a pace, sequence and form convenient for students, which was especially effective when explaining new grammatical rules. The introduction of grammatical constructions was carried out with the display of examples on slides, including vocabulary related to the professional orientation of students of the Faculty of Physical Education, which was also perceived by them with enthusiasm. In addition, the use of demonstrative software reduced the need for printed materials and additional handouts: students could take notes on their own, at their own pace. These advantages contributed to a more productive and speedy assimilation of grammatical material during foreign language lessons.

2. *Electronic textbooks and interactive materials*. According to M. V. Shirobokova, for effective assimilation of the material an electronic textbook should include three blocks: informational, training and controlling [5, p. 25]. That is why with the help of this type of ELT, not only the introduction of new grammatical material can occur, but also its training (practicing), as well as the control of mastering the material. During classes with the group SPD-14 (1) grammatical material (examples of grammatical structures, theoretical material, various exercises) was taken from electronic textbooks and other electronic materials (for example, such electronic textbooks as "Language in Use", "Grammarway") and were presented by the teacher using the above-mentioned demonstrative software.

The use of electronic textbooks and other interactive materials allowed students to use their own electronic devises (tablets, laptops, etc.) in class, make notes and highlight the information they need, which contributed to the development of students' independence, self-organization of their educational process.

3. *Educational and game software* (game simulators). To practice and test the knowledge of the material game software simulators were used during classes. Such ELT gives users the ability to create their own quests or tasks that can be solved by students with the current or subsequent supervision of the teacher. In particular, the interactive program "*Kahoot!*" allowed to create a game environment during class, which is rarely possible when learning a particular grammatical structure of the language. With the help of this gaming simulator the teacher creates an online-test or survey, to which students respond in real time from any device connected to the Internet. In the course of the lesson, students perform tasks on a particular topic and compete in getting the maximum set of points. The whole process is accompanied by various animations, images or audio and video materials. For example, to study the topic "*plural forms of nouns*" an online-test in the above-mentioned game

software was created, where students had to type the correct plural form of a noun in each question. Each stage of the test was limited in time and accompanied by an image. After completing each question intermediate results were displayed on the screen, with the award of first, second and third places, according to the number of correct answers. The competitive element of this game received a particularly positive reaction from students, and atypical tasks designed in the form of a game increased students' motivation to study grammar. Thus, the interactive program "Kahoot!" introduced diversity into the educational process, and consequently, improved the quality of learning the grammatical material.

4. *Educational gaming applications* – electronic (most often mobile) applications that are used to practice the learned material. Work in such applications was carried out as homework or independently organized extracurricular work of students. In particular, during classes, the "*Quizlet*" educational and gaming application for learning a foreign language was used, which allows to master subjects using the so-called "*cards*" (memory cards, flashcards) and tests. Cards for memorizing the material can be created by the teacher and by the students themselves. In addition, the application has pre-created modular sets of cards that can be used by students to study or review topics. This application has become particularly popular among those who study foreign languages, since the method of learning new vocabulary using memory cards is one of the most convenient and effective, especially for beginners. To study grammar in this application, there are ready-made modules with terms and structures for memorization, as well as convenient tests on various grammar topics. For example, a set of memory cards with nouns that have a special plural form was created by us using the "Quizlet" app and was offered to students for practicing this topic.

5. *Software tools for monitoring and measuring the level of knowledge.* This type of ELT is used to conduct current or final control on a particular grammatical topic in a test or open questions format (for example, the dot3 system, Google Forms). Such software tools help to optimize the system of control and self-control, facilitate the work of the teacher, and also develop the independence of students.

The table below describes the stages of the process of teaching students the grammar topic "*Plural forms of nouns*" using e-learning tools (*Table 1*).

Table 1 – The stages of the process of teaching students using e-learning tools

Stage of the learning process	Type of ELT used	The method of introducing ELT into the educational process
The stage of introducing new grammatical material	Demonstrative software (Power Point Presentation)	Casting of grammar rules and examples on presentation slides.
The stage of practicing and revising the grammatical material	Electronic textbook "*Grammarway*", educational game program "*Kahoot!*", Demonstrative software	Using exercises from the electronic textbook and educational game program for practice. Using demonstrative software tools for revising the material (*Power Point Presentation*).
Homework and extra-curricular work of students	Educational game application "*Quizlet*"	Practicing new material with an electronic set of memory cards
The stage of control of the understanding of the material	Software tool for monitoring and measuring the level of knowledge (*Google forms*)	Electronic test on the studied topic (open questions)

Thus, during the first semester of 2022-2023 in the SPD-14 (1) group foreign language classes devoted to grammar were carried out in the manner indicated in *Table 1*, and in the SPD-14 (2) group

with the minimal use of ELT. At the end of the semester a grammar test was conducted in both groups, aimed at assessing the effectiveness of the presented methodology. The final test included the same topics as the primary test, taken by both groups before the first semester. The results of both tests are shown in the table below (*Table 2*).

Table 2 – The results of primary and final grammar tests

Group	The number of students, n	The average percentage of correct answers for the **primary test**, %	The average percentage of correct answers for the **final test**, %
SPD-14(1)	12	47	84
SPD-14(2)	13	45	65

Thus, from the results of both grammatical tests in SPD-14 (1,2) groups, it can be seen that during teaching grammar of a foreign language, the use of ELT (such as demonstrative software, electronic textbooks and interactive materials, educational and game software, educational gaming applications, software tools for monitoring and measuring the level of knowledge) helps to increase the effectiveness of learning through its individualization and differentiation, positively influencing the level of students' motivation to study grammar and also contributes to the organization of new forms of interaction in the learning process and changes in the content of activities during the class. In addition, the use of ELT greatly facilitates the work of a teacher, allowing the constant professional development using new ways of learning in the process of work. All of this determines the relevance and expediency of introducing ELT into the process of teaching grammar of a foreign language.

However, for the methodically correct use of the above-mentioned electronic learning tools, it is necessary to comply with some important conditions, such as the technical equipment of the classrooms, as well as the readiness of the teacher to work using modern technologies. In addition, it is important not to resort to excessive use of ELT: it is most advisable to alternate them with traditional teaching methods. In this case, it is possible to fully realize the advantages of ELT in a foreign language lesson when teaching its grammatical aspect.

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T. G. Shatiuk, A. N. Redyuk

SCIENTIFIC AND METHODICAL BASES OF WORKING
WITH STUDENTS' RESENTMENT

The article is devoted to the research of the scientific and methodological foundations of coping with resentment, which often triggers a negative life scenario, somatic diseases of the individual. The research revealed that resentment is associated with excitable, cyclothymic, exalted, emotive, anxious, dysthymic, jamming and pedantic types of character accentuations. Students with high resentment, scores on the "resentment" parameter are characterized by an increased tendency to irascibility, touchiness, indirect aggression, irritation, suspicion, guilt, they also have more pronounced indicators of verbal aggression, intransigence and vindictiveness, that's why they need psychological help.

One of the emotions with which the child communicates with the environment is resentment. At the heart of resentment lies the mismatch between our expectations and the actual behavior of another significant person. The child grows up, and the ways of interacting with the outside world remain the same. With the help of resentment, a person controls loved ones and even weaves maladaptive reactions into the production environment [1].

The immediate environment of the child is the environment for the formation of touchiness as a stable personality trait. The child is forbidden to openly express anger, aggression and other manifestations of discontent aimed at protecting the rights to satisfy physiological and personal needs.

Resentment, like any other repressed emotions directed at oneself, can cause various psychosomatic disorders in a person that destroy a person from the inside. At the level of physiological manifestations, resentment is felt as a lump in the throat, heaviness in the chest and back pain, which indicates words not spoken in time, suppression of vital energy and an unbearable burden for a person. Thus, overcoming resentment is also a means of improving health and well-being, which has important consequences for both the labor activity of an individual and the people across the country [1].

Often repeated negative experiences lead to the consolidation of unfavorable emotional states and negative personal qualities, such as touchiness, irritability, anxiety, pessimism, which, in turn, negatively affects the quality of life.

Resentment, being one of the most common reasons for contacting a psychologist, is at the same time one of the little-developed topics in modern psychology [2]. This can be explained by the huge changes that can follow after overcoming the feeling of resentment and which the psyche so resists, striving for stability and providing sustainable ways for a person to interact with the social world.

An analysis of the literature on such issues indicates both a weak methodological base and the absence of psychodiagnostic tools that allow us to speak about the presence of this quality in a person. The absence of well-designed correctional programs is the result of insufficient understanding of the destructive impact of this phenomenon on the social life of the individual and society.

Scientists O. A. Apunevich, Z. A. Ageeva, A. Bass, A. V. Beltyukova, E. Bern, M. S. Gritsenko, N. Yu. Gusakov, R. F. Ibragimbekova, E. P. Ilyin, R. Cattell, M. Klein, K. Leonhard, A. K. Lichko, Yu. M. Orlov, F. Perls, Yu. V. Pechin, N. L. Puzyrevich, A. G. Sviyash, A. Freud, Z. Freud, K. Horney, E. Shostrom and others researched the feeling of resentment.

Of particular importance, the problem of resentment and touchiness acquires in student age – a difficult and critical period. Young people are very sensitive to what others think and how others treat them, since it is the quality of relationships with others that determines their success and, ultimately, satisfaction with their lives. Therefore, at this age, negative reactions of the personality are especially pronounced, vulnerability, conflict and resentment increase. Resentment, being a

dominant character trait, hinders the normal development of the individual and determines all further interaction with society.

Resentment negatively affects the health and well-being of students, the quality of their relationships with other people, the development of their personality and the success of the educational process as the main activity in this age period. Therefore, it is so important to organize timely assistance to students in overcoming this feeling, understanding their personal characteristics and teaching constructive ways of interacting with the outside world and with themselves. This can be achieved through the use of existing and the development of new methods for coping with resentment.

The research of resentment and touchiness among students was carried out on the basis of the educational institutions "Francisk Skorina Gomel State University" and "Belarusian State University of Transport". The research sample consisted of 302 students aged 17 to 21 years. Methodics "Diagnostics of indicators and forms of aggression" by A. Bass-A. Darki in the adaptation of S. N. Enikolopov, "Personal aggressiveness and conflict" by E. P. Ilyin and P. A. Kovalev, test questionnaire "Type of accentuation of character and temperament» by C. Leonhard, G. Shmishek were used as psychodiagnostic tools.

During the research, it turned out that half of the students have character accentuations. The main reason for their manifestation is the impulsiveness and inability to control one's emotions and actions characteristic of this age. The presence of accentuations makes a person extremely prone to external and internal conflicts, most often manifested in the form of resentment (and other forms of aggression) against significant others, as well as self-directed aggression (guilt).

The correlation analysis carried out according to Spearman revealed that there is a direct relationship of high (at $\rho \leq 0.001$) and medium degree (at $\rho \leq 0.01*$) reliability between the level of students' resentment feelings and such character accentuations as excitability (rs = 0.465), cyclothymness (rs = 0.401), exaltation (rs = 0.361), emotivity (rs = 0.339), anxiety (rs = 0.319), distimness (rs = 0.325), jam (rs = 0.252*) and pedantry (rs = 0.237*).

According to a comparative analysis, students with high scores on the "resentment" parameter are characterized by an increased tendency to display other forms of aggression, indicating deprivation and frustration of the actual needs of the individual, which negatively affects the productive self-realization, health and creativity of an almost adult person. Therefore, the main emphasis when working with accentuated students should be on their awareness of their specific features, situations and relationships in which their aggressiveness, sensitivity and vulnerability are manifested, on awareness of their own actions leading to this vulnerability, on overcoming resentment as the main obstacle to personality development.

The issues of overcoming feelings of resentment among students are not sufficiently developed in the scientific literature today. This problem was studied by Ts. L. Mkrtchyan, I. G. Samoilova, L. V. Tyurina [3; 4]. Taking into account age characteristics, several ways to overcome this negative feeling were identified, which can be divided into group and individual (implemented with the help of a specialist and independently).

Various practices of forgiveness have become widespread, thanks to which there is an awareness of resentment as a destructive experience, and forgiveness as a necessary, but requiring great courage, strength and time, the process of getting rid of negative feelings that cause suffering and do not allow living a full life. Among the representatives of this direction, one can note K. Tipping, E. Worthington, R. Enright, M. McCullough, E. A. Gassin, Yu. V. Pechin, A. S. Chukova and others.

Based on the method of K. Tipping, a questionnaire was compiled, designed for self-study of feelings of resentment. Within the framework of the "Giving forgiveness" model developed by R. Enright, four phases can be distinguished:
– awareness – disclosure of anger;
– decision – the decision to forgive;
– action – work for forgiveness;
– result – liberation from emotional shackles.

As the main methodological postulate of R. Enright, forgiveness (like resentment) is experienced at all three levels of personality manifestation:

– the level of affects – feelings;

– cognitive level – judgments and thoughts;

– the level of behavior – specific actions [5, p. 199; 6].

Ts. L. Mkrtchyan, based on the theory of R. Enright, developed a methodology for preventing students from feeling offended, combining lectures, seminars and practical classes. It consists in creating certain conditions for the constructive interaction of persons who find themselves in a situation of conflict, crisis of interpersonal relations or resentment [4, p. 84].

Based on the ideas of the psychology of forgiveness, A. G. Sviyash proposed a way to overcome resentment, adapted for independent work. A. G. Sviyash believes that any desired changes in a person's life are hindered by emotional blocks stored in the body, which corresponds to Z. Freud's theory of emotions not reacted in time, which take part of the vital energy for their existence. To do this, he proposes to perform a certain algorithm of actions, consisting of five steps, where the subconscious mind needs to give a command in a clear and understandable form to remove these emotional blocks.

Emotional blocks contain information that protects a person from danger, that is, if someone once harmed an individual, then survival instinct remembers this person in this particular situation as an enemy, so that a person should be careful when interacting with the enemy in the next once. But fears are not always rational, the situation may no longer be repeated, and the person may change over time, and the subconscious mind will still protect him from danger.

This is the path of forgiveness and acceptance of everything that a person does not agree with, where it is necessary to forgive a specific person for a specific event. And the released energy spent on the fight against this person can be used more constructively.

The author has developed a five-step formula for forgiveness. First, the object of forgiveness is selected (a specific person, organization, life in general, etc.) and a text is drawn up for further work in steps: "I apologize", "I completely forgive", "I completely take all the energy from my memories of that ... "I completely erase all memories of how...", "From now on, I make a decision." The author proposes to rewrite the formulas of forgiveness several times until they cease to cause any emotional and bodily reactions, that is, until the existing affect is fully worked out [7, p. 146].

N.L. Puzyrevich believes that two erroneous and deep convictions lie at the heart of resentment:

– "all people are like me, if they are not similar, then they are somehow strange";

– "People can understand me the way I understand myself. If they are able, they should support me in everything. If they don't support, then either they don't want to understand, or they want to offend" [8, p. 35].

That is, a person expects that the other will somehow understand the desires of a person, and will meet the expectations of a person. Otherwise, the person believes that others deliberately want to harm the person, and are offended. N.L. Puzyrevich sees the resentment washed away in the defense of our positive self-image, although this threat is most often irrational. She selected exercises that can be recommended for individual or group correction of students' feelings of resentment.

N.L. Puzyrevich gives several recommendations for coping with resentment:

– to admit your offense openly;

– to understand the direction of resentment;

– to realize that no one owes anything to anyone, is not obliged to love, care, do something, share their thoughts and feelings

– to recognize that any actions of others are their own choice, and they do something for others only because they themselves want it;

– to understand there is no "absolute understanding", therefore it is necessary to clearly formulate your desires, and not wait until someone guesses about them;

– to give up unrealistic expectations and do not associate the satisfaction of their needs with other people; you can only rely on yourself, and you need to be grateful for any help;

– to talk openly with the offender about the harm done, after the emotional state returns to normal;

– to understand that the actions of other people are determined not by the desire to offend, but by the peculiarities of the situation and their personal characteristics, plans, desires and interests;

– it is necessary to form the habit of forgiving yourself and others;

– it is necessary to analyze the offense and benefit from it.

O.A. Apunevich found that one of the effective and accessible ways of coping with resentment among students is socio-psychological training of an integrative type, worked out in three directions: cognitive, emotional and behavioral. The training exercises are aimed at developing the following skills: to understand the position of another, to control one's aggressiveness, to adequately interact with others, to increase self-esteem [9; 10].

The theoretical analysis of this issue became the basis for the development of a training session on managing emotions "Resentment, anger, guilt, forgiveness" and a motivational booklet. The developed training refers to personality development trainings and is aimed at developing tactics, strategies and emotions management skills. During the training, students are given useful knowledge and develop the necessary skills to manage emotions. The enlightenmental part is aimed at understanding the relationship between the emotions of anger, guilt and resentment, to familiarize with the phenomenon of forgiveness as a necessary element for increasing personal potential. The training is aimed at the formation of desire and the search for opportunities to get rid of accumulated grievances and other negative experiences in relation to oneself and others, to identify one's anger and find ways to constructively use the energy of anger. During the training, students expand the behavioral repertoire of the individual in the process of confrontation with other people, form a more adequate self-esteem based on feedback, begin to be more tolerant of the characteristics of other people, develop the ability to be open and accept themselves and others.

Since resentment often arises in childhood due to deprivation of the child's needs necessary for normal development, various individual corrective or therapeutic methods may be required to effectively work with resentment. Various projective methods will be interesting and effective for students: art therapy, sand therapy, collages, applications, plasticine modeling, drawing techniques, unfinished sentences. In the course of individual work, deep psychological traumas can be revealed, which are problematic to detect and / or work through in the course of independent or group work.

One of the possible options for overcoming the feeling of resentment can be individual psychotherapeutic work using metaphorical associative cards [11]. Sand therapy can be used as a non-verbal tool within the framework of individual psychotherapeutic work with resentment [12].

Students will also be interested in various techniques of working with the body. Unreacted emotions may subsequently manifest in the body in the form of rigidity (blocks) of certain bodily areas. Rigidity is excessive muscle tension that impedes the free movement of energy in these places. When the muscle clamp is eliminated, a significant part of the energy is released, which manifests itself in the form of an emotional upsurge, a feeling of warmth, cold or tingling. In the process of bodily therapy, a person consistently goes through periods of his childhood, where he learned to suppress his feelings (anger, resentment, love, etc.) and re-learn spontaneity. Release from muscle clamps occurs through massage, bodily exercises, singing, spontaneous movements in dance movement therapy. As people work with the body, they become more flexible, which manifests itself both at the level of the body and in relationships with others [13].

The cognitive method of working with resentment in student age – sanogenic thinking – was proposed by Yu.M. Orlov. He believes that resentment arises when we decide that the other is obliged to act precisely in our interests and thereby do not recognize his right to independent action. It is necessary to recognize the right of people around us to determine their own behavior, and then we will have less reason to be offended. He sees the main cause of resentment in the mental habit of attributing certain behavior to other people [1; 14].

Yu.M. Orlov believes that one should not fight with one's emotions and feelings, not suppress them (do not worry, do not show, do not feel, be silent), but express a negative feeling directly (if you are angry,

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then you need to be angry, if you are ashamed, be ashamed if offended, take offense), and then the opportunity to learn a lesson will be not only for the offended, but also for the offender. Moreover, you need to express your emotions in such a way that no one feels bad from this to the maximum.

According to Yu.M. Orlov, resentment enables a person to better understand oneself, his expectations and requirements, as well as change his beliefs, behavior strategies and find the best ways to solve difficult problems.

S.N. Morozyuk in her dissertation work proved the effectiveness of sanogenic thinking for optimizing character accentuations and increasing educational motivation and student achievement. She believes that the more accentuated the character, the less plastic it is, that is, the behavior of such a subject is less variable, which significantly limits its adaptive abilities [15].

Thus, based on the analysis of the scientific literature, group and individual (implemented with the help of a specialist and independently) ways of overcoming resentment among students were identified.

Group methods include: lectures, practical and seminar classes, trainings, various group classes within the framework of dance-movement, body-oriented and art therapy.

All types of projective methods (metaphorical association cards, sand therapy, unfinished sentences, etc.), art therapy methods (sculpting, isotherapy, music therapy, water therapy, color therapy, etc.) and conversational psychotherapy.

You can independently use such methods as "effective forgiveness", and any other methods learned in the framework of individual and group sessions with a teacher-psychologist.

In general, resentment coping sessions should focus on:
– development of the ability to listen and hear yourself, your needs and motives;
– development of the ability to direct and environmentally friendly expression of their emotions and desires;
– developing the ability to manage your emotions;
– increasing self-esteem, faith in yourself, in your strengths and abilities;
– the formation of a more adequate perception and acceptance of oneself, others and reality;
– expansion of the behavioral repertoire in the process of interaction with other people;
– stimulation of motor and creative activity, contributing to the disclosure of the innate potential of the individual.

Thus, teaching students more productive patterns of thinking and behavior helps smooth out negative personality traits and contributes to more effective interaction with others, more complete satisfaction of needs and a sense of satisfaction with their lives.

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S. S. Shchekudova, A. V. Gavrilenko

**FEATURES OF THE VOLITIONAL SPHERE
OF STUDENTS-PHYSICS AND STUDENTS-PSYCHOLOGISTS**

The article is devoted to topical problems of studying the volitional sphere of students. The results of a comparative analysis of quantitative indicators of the levels of development of subjective control, willpower, perseverance, impulsivity among physics students and psychology students are presented. Statistical analysis of empirical data was carried out using Fisher's multifunctional test to establish statistically significant differences.

The relevance of studying the volitional sphere of students is determined by the fact that educational influences from adults are perceived critically by adolescents, as they strive for independence, for this reason they cannot always show volitional regulation.

The level of development of volitional qualities, according to V.K. Kalina, affects the effectiveness of volitional regulation, and, consequently, activity in general. The formation of volitional qualities is the emancipation of attitudes from the subject content of activity [1].

Base of the study: Francisk Skorina Gomel State University.

Characteristics of the study sample: 94 people aged 17–21 years (physics students – 44 people, psychology students – 50 people).

The purpose of the work: to study the volitional sphere of physics students and psychology students.

Psychodiagnostic methods: test «Self-assessment of willpower» (N.N. Obozov); questionnaire «Assessment of perseverance» (E.P. Ilyin, E.K. Feshchenko); test questionnaire «Level of subjective control» (E.F. Bazhin); questionnaire «Research of impulsivity» (V.A. Losenkova).

The results of the empirical study of volitional regulation among physics students and psychology students on the test «Self-assessment of willpower» (N.N. Obozov) are presented in Table 1.

Table 1 – Quantitative indicators of the development of willpower among students of physics and students of psychology (data are presented in %)

The level of development of willpower	Students-physics	Students-psychologists	Reliability of differences according to the criterion φ* – angular
High	20	30	φ*emp = 3,12 with ρ≤0,01
Average	75	64	φ*emp = 2,98 with ρ≤0,01
Low	5	6	φ*emp = 0,5 with ρ≤0,05

From Table 1 it follows that the majority of respondents had an average level ofwillpower (75 % – students of physics, 64 % – students of psychology), which indicates that in different situations these respondents act differently, sometimes showing compliance and pliability, and sometimes – perseverance and perseverance.

A high level of willpower development was found among students of physics and is 20 %, and among students of psychology – 30 %. Such respondents have endurance, perseverance and the ability to find compromises in various situations. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found between physics students and psychology students (φ*emp = 3.12 with φ*cr = 2.28 ($\rho \leq 0.01$)).

The average level of willpower development was found in 75 % of physics students and in 64 % of psychology students. Statistically significant differences were found between physics students and psychology students (φ*emp = 2.98 with φ*cr = 2.28 ($\rho \leq 0.01$)).

A low level of willpower was found in 5 % of physics students and 6 % of psychology students, which indicates that such subjects are characterized by unawareness of what they want, in conflict situations they yield to the other side and do not solve the problems that arise. Statistically insignificant differences were found between physics students and psychology students (φ*emp = 0.5 with φ*cr = 2.28 ($\rho \leq 0.05$)).

Thus, students of physics and students of psychology equally act in different situations in different ways, sometimes showing compliance and compliance, and sometimes persistence and perseverance. They have endurance, perseverance and the ability to find compromises in different situations.

The results of studying the levels of development of perseverance among students of physics and students of psychology according to the questionnaire «Assessment of perseverance» (E. P. Ilyin, E. K. Feshchenko) are presented in table 2.

Table 2 – Quantitative indicators of the development of perseverance among students of physics and students of psychology (data are presented in %)

The level of development of perseverance	Students-physics	Students-psychologists	Reliability of differences according to the criterion φ* – angular
High	46	51	φ*emp = 1,48 with ρ≤0,05
Average	48	40	φ*emp = 2,72 with ρ≤0,01
Low	6	9	φ*emp = 1,11 with ρ≤0,05

From Table 2 it follows that 48 % of physics students showed an average level of perseverance, which indicates that the subjects are characterized by a balanced and balanced approach to learning and business, which distinguishes them from others. In 51 % of psychology students, a high level of perseverance prevails, which means that these subjects have perseverance in all deeds and undertakings, and they are also active and purposeful individuals who are able to realize their abilities in the prevailing circumstances. To achieve more, you need to think about what abilities can be deeper and wider and they can be used more productively.

A low level of perseverance development was found in 6 % of physics students and 9 % of psychology students, which indicates that such respondents are soft and compliant, and are also not able to complete the work they have begun. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically insignificant differences were found between physics students and psychology students (φ*emp = 1.11 with φ*cr = 2.28 ($\rho \leq 0.05$)).

The average level of development of perseverance was found in 48 % of physics students and 40 % of psychology students. Such respondents are characterized by a balanced and balanced approach to study and business, which distinguishes them from others. Statistically significant differences were found between physics students and psychology students (φ*emp = 2.72 with φ*cr = 2.28 ($\rho \leq 0.01$)).

A high level of development of perseverance was found among students of physics and is 46 %, and among students of psychology – 51 %. This means that these subjects have perseverance in all deeds and undertakings, and they are also active and purposeful individuals who are able to realize their abilities in the prevailing circumstances. Statistically insignificant differences were found between physics students and psychology students (φ*emp = 1.48 with φ*cr = 2.28 ($\rho \leq 0.05$)).

Thus, students of physics and psychology are equally characterized by a balanced and balanced approach to study and business. They have perseverance in all deeds and undertakings, and they are also active and purposeful individuals who know how to realize their abilities in the prevailing circumstances.

The results of the study of physics students and psychology students according to the test questionnaire «Level of subjective control» (E. F. Bazhin) are presented in Table 3.

Table 3 – Quantitative indicators of the levels of development of internality among students of physics and students of psychology (data in %)

The level of development of internality	Students-physics	Students-psychologists	Reliability of differences according to the criterion φ* – angular
High	15	30	φ*emp = 4,68 with $\rho \leq 0,01$
Average	81	70	φ*emp = 3,24 with $\rho \leq 0,01$
Low	4	0	–

From Table 3 it follows that the subjects had an average level of internality (81 % – students of physics, 70 % – students of psychology), which indicates that the features of their subjective control may vary somewhat depending on whether the person imagines the situation is complex or simple, pleasant or unpleasant, and so on.

However, their behavior and the psychological sense of responsibility for it depends on specific social situations, yet it is possible to establish the predominance of one or another type of locus of control in them.

A low level of development of internality is observed in 4 % of physics students. Such subjects do not consider themselves capable of controlling the development of events in their lives and believe that most of these events are the result of an accident or the actions of other people.

«Externals» are emotionally unstable, prone to informal communication and behavior, unsociable, they have poor self-control and high tension. Consequently, physics students trace the connection between their actions and life events that are significant for them.

The average level of development of internality was revealed in 81% of students in physics of the course and in 70 % of students in psychology. Such subjects are characterized by the fact that the features of their subjective control may vary somewhat depending on whether the situation seems to the person complex or simple, pleasant or unpleasant. But although their behavior and the psychological sense of responsibility for it depend on specific social situations, it is still possible to establish the predominance of one or another type of locus of control in them.

With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found between physics students and psychology students (φ*emp = 3.24 with φ*cr = 2.28 ($\rho \leq 0.01$)).

A high level of development of internality was found among physics students (15 %) and psychology students (30 %). Subjects demonstrate a high level of subjective control over any significant situations. People with this locus of control believe that most of the important events in their lives were the result of their own actions, that they can control them and feel responsible for these events and for the way their life develops in general.

«Internals» have emotional stability, perseverance, determination, are distinguished by sociability, good self-control and restraint. Statistically significant differences were found between physics students and psychology students (φ*emp = 4.68 with φ*cr = 2.28 ($\rho \leq 0.01$)). This indicates that there are differences between physics students and psychology students with a high level of internality.

Thus, psychology students to a greater extent show a high level of subjective control over any significant situations, that is, they are students who believe that most important events in their lives were the result of their own actions, that they can manage them and feel responsible for them. these events, and for the way their life as a whole develops.

The subjective locus of control is associated with a person's feeling of his strength, dignity, responsibility for what is happening, with self-esteem, social maturity and independence of the individual. For the majority of students, it is equally characteristic that the features of their subjective control may change somewhat depending on whether the situation seems to the person to be complex or simple, pleasant or unpleasant. But their behavior and the psychological sense of responsibility for it depends on specific social situations; it is possible to establish the predominance of one or another type of locus of control.

The results of studying the levels of development of perseverance among students of physics and students of psychology according to the questionnaire
«Research on impulsivity» (V.A. Losenkova) are presented in Table 4.

Table 4 – Quantitative indicators of the development of impulsivity in students of physics and students of psychology (data are presented in %)

The level of development of impulsivity	Students-physics	Students-psychologists	Reliability of differences according to the criterion φ* – angular
High	8	24	φ*emp= 4,98 with $\rho \leq 0,01$
Average	90	70	φ*emp = 6,24 with $\rho \leq 0,01$
Low	2	6	φ*emp = 1,48 with $\rho \leq 0,05$

From Table 4 it follows that the majority of the subjects had an average level of impulsivity (90 % – students of physics, 70 % – students of psychology), which indicates sufficient self-control of the subjects in communication and activity, they are purposeful, have clear value orientations, show perseverance in achieving goals, striving to bring the work begun to the end. It is also necessary to take into account the features of the locus of subjective control.

A low level of impulsivity was found among physics students (2 %) and psychology students (6 %), which indicates that such subjects are goal-oriented, have clear value orientations, show perseverance in achieving their goals, strive to complete what they have started. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically insignificant differences were found between physics students and psychology students (φ*emp = 1.48 with φ*cr = 2.28 ($\rho \leq 0.05$)). This indicates that indicators of a low level of development of impulsivity do not statistically significantly change in students of physics and students of psychology.

The average level of impulsivity was found in 90 % of physics students and in 70 % of psychology students. These indicators indicate that such subjects are characterized by sufficient self-control in communication and activities, have clear value orientations, but sometimes they lack self-education skills, sometimes there are no such strong-willed qualities as purposefulness and perseverance. Statistically significant differences were found between physics students and psychology students (φ*emp = 6.24 with φ*cr = 2.28 ($\rho \leq 0.01$)). This indicates that there are differences between physics students and psychology students with an average level of impulsivity.

A high level of impulsivity was found among physics students of the course and is 8 %, and among psychology students – 24 %. Such subjects have insufficient self-control in communication and activities. Impulsive people often have uncertain life plans, they do not have stable interests, and they are addicted to one thing or another. Statistically significant differences were found between physics students and psychology students (φ*emp = 4.98 with φ*cr = 2.28 ($\rho \leq 0.01$)). This indicates that there are differences between physics students and psychology students with a high level of impulsivity.

Thus, psychology students are more characterized by sufficient self-control incommunication and activity. Psychology students are more purposeful and have clear value orientations, show perseverance in achieving their goals, strive to complete the work they have begun.

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UDC 159.944.4:677.017.87-057.875:616.8-009.17

S. S. Shchekudova, Y. A. Shevtsova

**STRESS AND SUBJECTIVE COMFORT IN STUDENTS
WITH DIFFERENT LEVEL OF NEUROTISATION**

The article is devoted to topical problems of studying the psychological characteristics of students of higher education institutions. The results of studying the levels of subjective control, stress, neuroticism are presented. A comparative analysis of the data was carried out. To calculate the significance of differences, Fisher's multifunctional test was used.

The relevance of studying subjective comfort in students with different levels of neuroticism is due to the fact that constant stress, increased anxiety, tension in interpersonal interaction and many other factors determine the formation of neurotic states in all subjects of the educational process.

Base of the study: Francisk Skorina Gomel State University.

Characteristics of the study sample: 72 students aged 18–22 years.

The purpose of the study: to study the subjective comfort and stress of students with different levels of neuroticism.

Psychodiagnostic methods: «Diagnostics of the level of neurotization of L. I. Wasserman» [1], «Subjective Comfort Rating Scale» (E. Grohl, M. Haider, adapted by A. B. Leonova); «Differential assessment of states of reduced performance» (A. B. Leonova, S. B. Velichkovskaya) [2].

As a result of the methods «Diagnostics of the level of neurotization of L. I. Wasserman», «Subjective Comfort Rating Scale» (E. Grohl, M. Haider, adapted by A. B. Leonova) quantitative indicators of the levels of subjective comfort in students with different levels of neuroticism were obtained. The data are presented in table 1.

Table 1 – Quantitative indicators of subjective comfort in students with different levels of neuroticism (data are presented in %)

Level of neuroticism	Level of subjective comfort			
	low	reduced	acceptable	high
High	53	30	17	0
Average	24	66	10	0
Low	0	65	35	0

From Table 1 it follows that among respondents with a high level of neuroticism, a low level of subjective comfort prevails (53 %), a high level of subjective comfort in persons with a high level of neuroticism was not revealed. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found among respondents with a low level of subjective comfort and a reduced level of subjective comfort in individuals with a high level of neuroticism (φ*emp = 2.51 with φ*cr= 2.28 ($\rho \leq 0.01$)), with a low level of subjective comfort and an acceptable level of subjective comfort in individuals with a high level of neuroticism (φ*emp = 3.45 with φ*cr= 2.28 ($\rho \leq 0.01$)). Therefore, we can say that respondents with a high level of neuroticism have a low level of subjective comfort, that is, there is a low level of well-being, low mood and attention, and increased fatigue is often observed. Statistically insignificant differences were also found among respondents with a reduced level of subjective comfort and an acceptable level of subjective comfort in individuals with a high level of neuroticism (φ*emp = 1.38 with φ*cr= 1.64 ($\rho \leq 0.05$)). Therefore, no differences were found in these categories.

For a more detailed study of the level of subjective comfort in individuals with different levels of neuroticism, the following calculations were carried out. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found among respondents with a high level of neuroticism and an average level of neuroticism (φ*emp = 2.82 with φ*cr= 2.28 ($\rho \leq 0.01$)) with a low level of subjective comfort. Consequently, these students have a low level of well-being, low emotional background, lack of energy. Students have fatigue, a feeling of exhaustion, drowsiness, tension, and vegetative disorders also occur. They themselves describe their condition as bad. Among respondents with a low level of neuroticism, a low level of subjective comfort was not revealed.

In persons with an average level of neuroticism, a reduced level prevails on the scale of subjective comfort (66 %). A high level of subjective comfort in persons with an average level of neuroticism was not revealed. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found among respondents with a low level of subjective comfort and a reduced level of subjective comfort in individuals with an average level of neuroticism (φ*emp = 4.11 with

φ*cr= 2.28 (ρ ≤ 0.01)), with a reduced level of subjective comfort and an acceptable level of subjective comfort (φ*emp = 5.79 with φ*cr= 2.28 (ρ ≤ 0.01)), as well as with a low level of subjective comfort and an acceptable level of subjective comfort in individuals with an average level of neuroticism (φ*emp = 2.58 with φ*cr= 2.28 (ρ ≤ 0.01)). Consequently, the respondents have a situational low mood. Depending on the circumstances, inattention, drowsiness, and symptoms of fatigue are manifested by the end of the day.

Statistically significant differences were also found in respondents with an average level of neurotization and a high level of neurotization (φ*emp = 3.54 with φ*cr= 2.28 (ρ ≤ 0.01)), with a low level of neurotization and a high level of neurotization (φ *emp = 3.78 with φ*cr = 2.28 (ρ ≤ 0.01)). Consequently, people in this category have drowsiness, a lack of energy reserves for the day, a special impotence at the end of the day, and a reduced emotional tone. However, at the same time, students can be active in society and adequately respond to situations. Statistically insignificant differences were also found with an average level of neuroticism and a low level of neuroticism (φ*emp = 0.33 with φ*cr= 1.64 (ρ ≤ 0.05)), that is, no differences were found.

In persons with a low level of neuroticism on the scale of subjective comfort, a reduced level of subjective comfort prevails (65 %). Respondents of this category did not have low and high levels of subjective comfort. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found among respondents with a reduced level of subjective comfort and an acceptable level of subjective comfort in students with a low level of neuroticism (φ*emp = 3.45 with φ*cr= 2.28 (ρ ≤ 0.01)). Consequently, people in this category have a reduced state of health, symptoms of fatigue, and disorganization.

For a more detailed study of the level of subjective comfort in individuals with different levels of neuroticism, the following calculations were carried out. With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found among respondents with a low level of neuroticism and with a high level of neuroticism in terms of a reduced level of subjective comfort (φ*emp = 3.01 with φ*cr= 2.28 (ρ ≤ 0.01)), with a high level of neuroticism and with an average level of neuroticism (φ*emp = 3.07 with φ*cr= 2.28 (ρ ≤ 0.01)). Respondents are characterized by a low level of well-being and emotional tone, inhibition of mental activity. Statistically insignificant differences were also found with an average level of neuroticism and a low level of neuroticism (φ * emp = 0.55 with φ * cr = 1.64 (ρ ≤ 0.05)), that is, no differences were found in these groups.

As a result of the method «Differential assessment of the states of reduced performance» (A.B. Leonova, S.B. Velichkovskaya), quantitative indicators of the states of reduced performance were obtained: stress. Table 2 presents the results of studying students with different levels of neuroticism, taking into account the severity of stress symptoms.

Table 2 – Quantitative indicators of the severity of stress symptoms in students with different levels of neuroticism (data are presented in%)

Level of neuroticism	Severity of stress symptoms			
	low	Moderate	pronounced	high
High	0	14	64	22
Average	0	28	66	6
Low	0	72	28	0

From Table 2 it follows that in students with a high level of neuroticism, a pronounced degree of manifestation of stress symptoms prevails (64 %), a low degree of severity of stress symptoms in this category was not revealed. Using Fisher's multifunctional test, statistically significant differences were established among respondents with severe and moderate stress symptoms in individuals with high levels of neuroticism (φ*emp = 4.28 with φ*cr = 2.28 (ρ ≤ 0.01)), with a pronounced and high degree of manifestation of stress symptoms (φ*emp = 4.28 with φ*cr = 2.28 (ρ ≤ 0.01)). Therefore,

we can say that subjects with a high level of neuroticism have a pronounced degree of manifestation of stress symptoms, that is, there is a state of increased mobilization of the body's psychological and energy resources, which develops as a response to an increase in the complexity of the activity performed. Statistically insignificant differences were also established among respondents with moderate and high severity of stress symptoms in individuals with a high level of neuroticism (φ*emp = 0.66 with φ*cr = 2.28 ($\rho \leq 0.05$)). Therefore, no differences were found in these categories.

Statistically insignificant differences were found among respondents with high and medium levels of neuroticism in terms of the degree of manifestation of stress symptoms (φ*emp = 0.24 with φ*cr = 2.28 ($\rho \leq 0.05$)). Therefore, no differences were found among the respondents of these categories. Statistically significant differences were found in students with high and low levels of neuroticism in terms of the degree of manifestation of stress symptoms (φ*emp = 3.54 with φ*cr = 2.28 ($\rho \leq 0.01$)), with medium and low levels of neuroticism in a pronounced degree of manifestation of stress symptoms (φ*emp = 4.22 with φ*cr = 2.28 ($\rho \leq 0.01$)). Consequently, persons with medium and high levels of neuroticism are equally characterized by the predominance of procedural motives – the motives of self-preservation and psychological protection in the course of their activities.

In students with an average level of neuroticism, a pronounced degree of manifestation of stress symptoms prevails (66 %), a low degree of severity of stress symptoms was not found in this category. Statistically significant differences were found among respondents with moderate and severe degree of manifestation of stress symptoms in students with an average level of neuroticism (φ*emp = 4.54 with φ*cr = 2.28 ($\rho \leq 0.01$)), with moderate and high degree of neuroticism. manifestations of stress symptoms in individuals with an average level of neuroticism (φ*emp = 2.52 with φ*cr = 2.28 ($\rho \leq 0.01$)), as well as with a high and pronounced degree (φ*emp = 6.06 with φ*cr = 2.28 ($\rho \leq 0.01$)). Therefore, we can say that respondents with an average level of neuroticism have a moderate degree of severity of stress symptoms, that is, sometimes in situations of tension when performing tasks, apathy, fussiness, nervousness, inability to relax, and anxiety are observed.

Statistically insignificant differences were found among respondents with high and medium levels of neuroticism in terms of the degree of manifestation of stress symptoms (φ*emp = 0.24 with φ*cr = 2.28 ($\rho \leq 0.05$)). Therefore, no differences were found in individuals of these categories. Statistically significant differences were determined among respondents with high and low levels of neuroticism in terms of the degree of manifestation of stress symptoms (φ*emp = 3.46 with φ*cr = 2.28 ($\rho \leq 0.01$)), with medium and low levels of neuroticism in terms of a pronounced degree of manifestation of stress symptoms (φ*emp = 4.54 with φ*cr = 2.28 ($\rho \leq 0.01$)). Consequently, persons with medium and high levels of neuroticism are equally characterized by a pronounced degree of manifestation of stress symptoms.

In students with a low level of neuroticism, a moderate degree of severity of stress symptoms prevails (72 %), high and low severity of stress symptoms were not found in this category. Statistically significant differences were found among respondents with moderate and severe manifestation of stress symptoms among students with a low level of neuroticism (φ*emp = 4.12 with φ*cr = 2.28 ($\rho \leq 0.01$)). This suggests that individuals in this category, with a low indicator of neuroticism, tend to respond in an acceptable form to a subjective increase in the complexity or significance of an activity.

Statistically significant differences were determined in students with medium and low levels of neuroticism (φ*emp = 4.24 with φ*cr = 2.28 ($\rho \leq 0.01$)), in students with low and high levels of neuroticism according to the severity of symptoms stress (φ*emp = 5.22 with φ*cr = 2.28 ($\rho \leq 0.01$)). Consequently, individuals with a low level of neuroticism tend to situationally present symptoms of tension in activity. Statistically insignificant differences were revealed with high and medium levels of neuroticism (φ*emp = 1.32 with φ*cr = 2.28 ($\rho \leq 0.05$)). Therefore, no differences were found in these groups.

Thus, in students with high and medium levels of neuroticism, a pronounced degree of manifestation of stress symptoms prevails, that is, they have tension, irritability, an increase in the

subjective significance of activity, which leads to an increased and exhausting mobilization of all body resources. Students with a low level of neuroticism have a moderate degree of severity of stress symptoms, that is, they have a situational nature of the manifestation of symptoms.

Students with a high level of neuroticism have a low level of subjective comfort. Consequently, these respondents are prone to low mood and well-being, drowsiness, and throughout the day they experience increased fatigue. In students with low and medium levels of neuroticism, a reduced level of subjective comfort prevails. Consequently, these respondents are more prone to fatigue, low mood, and their adaptive abilities decrease as stress increases, by the end of the day they often turn out to be exhausted and exhausted.

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S. S. Shchekudova, Y. A. Shevtsova

STUDENT PERFORMANCE WITH DIFFERENT LEVEL OF NEUROTISATION

The article is devoted to the actual problems of studying the working capacity of students of institutions of higher education. The results of the study of the state of fatigue, monotony, satiety are presented, which reflects the assessment of the states of reduced performance. A comparative analysis of the data has been carried out. Fisher's multifunctional test was used to calculate the significance of differences.

The relevance of studying the subjective states of reduced performance in students with different levels of neuroticism is due to the fact that the variety of external and internal conflicts arising from the impact of adverse environmental conditions and internal contradictions lead to an increase in the number of neurotic deviations, and also worsens the overall level of students' well-being.

Base of the study: Francisk Skorina Gomel State University.

Characteristics of the study sample: 72 students aged 18-22 years.

The purpose of the study: to study the subjective comfort and stress of students with different levels of neuroticism.

Psychodiagnostic methods: «Diagnostics of the level of neurotization of L.I. Wasserman» [1], «Differential assessment of states of reduced performance» (A.B. Leonova, S.B. Velichkovskaya) [2].

The results of studying the symptoms of fatigue in students with different levels of neuroticism are presented in Table 1.

Table 1 – Quantitative indicators of the severity of symptoms of fatigue in students with different levels of neuroticism (data are presented in %)

Level of neuroticism	Severity of symptoms of fatigue			
	low	average	pronounced	high
High	0	18	54	28
Average	8	67	25	0
Low	0	79	21	0

Table 1 shows that respondents with a high level of neuroticism have a pronounced degree of fatigue symptoms (54 %). However, a low degree of manifestation of symptoms of fatigue in this category was not revealed.

With the help of Fisher's multifunctional test, the significance of differences between the percentages of the samples was assessed. Statistically significant differences were found among respondents with moderate and severe (φ*emp = 3.66 with φ*cr = 2.28 (ρ ≤ 0.01)), with severe and high (φ*emp = 3.01 with φ*kr = 2.28 (ρ ≤ 0.01)) by the degree of manifestation of symptoms of fatigue in persons with a high level of neuroticism. Therefore, we can say that students with a high level of neuroticism have a pronounced degree of symptoms of fatigue, that is, there is a state of exhaustion, discomfort, discoordination when performing the main activity, the dominant motivation is aimed at completing work and rest. Statistically insignificant differences were also found among respondents with a high and moderate degree of symptoms of fatigue in individuals with a high level of neuroticism (φ*emp = 0.65 with φ*cr = 1.64 (ρ ≤ 0.05)). Therefore, no differences were found in these categories.

For a more detailed study of the severity of fatigue symptoms in individuals with different levels of neuroticism, the following calculations were carried out. Statistically significant differences were found among respondents with low and high (φ*emp = 3.33 with φ*cr = 2.28 (ρ ≤ 0.01)), high and medium (φ*emp = 3.21 with φ*cr = 2.28 (ρ ≤ 0.01)) by the level of neuroticism according to the pronounced degree of manifestation of symptoms of fatigue. Consequently, the respondents are characterized by poor health, a rapid loss of strength during the performance of monotonous work, and reduced efficiency. And also statistically insignificant differences were revealed with an average and low level of neuroticism (φ*emp = 0.82 with φ*cr = 1.64 (ρ ≤ 0.05)), that is, no differences were found in these groups.

In persons with an average level of neuroticism, a moderate degree of manifestation of symptoms of fatigue prevails (67 %), a high degree of manifestation of symptoms of fatigue in this category was not revealed. Statistically significant differences were found among respondents with moderate and severe (φ*emp = 4.11 with φ*cr = 2.28 (ρ ≤ 0.01)), moderate and low (φ*emp = 6.23 with φ*cr = 2.28 (ρ ≤ 0.01)), as well as a low and severe degree of symptoms of fatigue in individuals with an average level of neuroticism (φ*emp = 2.69 with φ*cr = 2.28 (ρ ≤ 0.01)).

Therefore, we can say that respondents with an average level of neuroticism have a moderate degree of symptoms of fatigue, that is, sometimes in situations of stress for the individual, a state of fatigue and discoordination is observed when performing the main activity.

Statistically insignificant differences were established with an average and low level of neuroticism (φ*emp = 1.02 with φ*cr = 1.64 (ρ ≤ 0.05)), that is, no differences were found in these groups. Statistically significant differences were also found among respondents with low and high (φ*emp = 5.49 with φ*cr = 2.28 (ρ ≤ 0.01)), high and medium levels of neuroticism (φ*emp = 4.36 with φ*cr = 2.28 (ρ ≤ 0.01)) according to the pronounced degree of fatigue symptoms. Consequently, persons with an average and low level of neuroticism are equally characterized by a moderate degree of manifestation of symptoms of fatigue.

In persons with a low level of neuroticism, a moderate degree of manifestation of symptoms of fatigue prevails (79 %), high and low degrees of manifestation of symptoms of fatigue in this category were not detected. Statistically significant differences were found among respondents with moderate and severe symptoms of fatigue in individuals with a low level of neuroticism (φ*emp = 4.88 with φ*cr = 2.28 (ρ ≤ 0.01)). Which suggests that people in this category with a low rate of neuroticism get tired too quickly when doing everyday work.

Thus, in persons with a high level of neuroticism, a pronounced degree of manifestation of symptoms of fatigue prevails, that is, they experience exhaustion during the day, disorganization of activity when the main processes implementing the activity are involved, which develop as a result of systematic workloads.

Persons with a low and medium level of neuroticism have a moderate degree of severity of symptoms of fatigue, that is, they are characterized by a situational nature of the manifestation of

symptoms of fatigue. Respondents in this category note that they wake up sluggish in the morning, but they gradually get used to this state, at work they feel more cheerful for some time, but then fatigue and loss of strength quickly set in.

The results of studying the symptoms of monotony in students with different levels of neuroticism are presented in Table 2.

Table 2 – Quantitative indicators of the severity of symptoms of monotony in students with different levels of neuroticism (data are presented in %)

Level of neuroticism	The severity of the symptoms of monotony			
	low	average	pronounced	high
High	0	23	17	60
Average	0	57	33	10
Low	0	81	19	0

From Table 2 it follows that in persons with a high level of neuroticism, a high degree of severity of symptoms of monotony prevails (60 %), a low degree of severity of symptoms of monotony in this category was not detected. Statistically significant differences were found among respondents with moderate and high (φ*emp = 2.68 with φ*cr = 2.28 ($\rho \leq 0.01$)), pronounced and high (φ*emp = 3.42 with φ*cr = 2.28 ($\rho \leq 0.01$)) the degree of manifestation of symptoms of monotony in individuals with a high level of neuroticism.

Therefore, we can say that respondents with a high level of neuroticism have a high degree of severity of symptoms of monotony, that is, there is a state of exhaustion, boredom, drowsiness that occurs as a result of performing monotonous and routine activities for quite a long time. Statistically insignificant differences were also found among respondents with severe and moderate (φ*emp = 1.12 with φ*cr = 1.64 ($\rho \leq 0.05$)) degree of manifestation of monotony symptoms in individuals with a high level of neuroticism. Thus, no differences were found among the individuals of these categories.

Among persons with a low level of neuroticism, a high degree of severity of symptoms of monotony was not revealed. Statistically significant differences were found among respondents with a high and medium level of neuroticism in terms of a high degree of manifestation of symptoms of monotony (φ*emp = 5.36 with φ*cr = 2.28 ($\rho \leq 0.01$)).

In persons with an average level of neuroticism, a moderate degree of severity of symptoms of monotony prevails (57 %), a low degree of severity of symptoms of monotony was not detected in this category. Statistically significant differences were found among respondents with moderate and severe (φ*emp = 2.69 with φ*cr = 2.28 ($\rho \leq 0.01$)), moderate and high (φ*emp = 6.14 with φ*cr = 2.28 ($\rho \leq 0.01$)), high and pronounced (φ*emp = 3.64 with φ*cr = 2.28 ($\rho \leq 0.01$)) degree of manifestation of symptoms of monotony in individuals with an average level of neuroticism .

Therefore, we can say that students with an average level of neuroticism have a moderate degree of symptoms of monotony, that is, sometimes in situations of stress for the individual, a state of fatigue, drowsiness, a state of reduced conscious control is observed as a result of the same type of prolonged work.

Statistically significant differences were established with medium and low (φ*emp = 2.89 with φ*cr= 2.28 ($\rho \leq 0.01$)), low and high (φ*emp = 4.54 with φ*cr = 2 .28 ($\rho \leq 0.01$)), high and medium (φ*emp = 2.57 with φ*cr = 2.28 ($\rho \leq 0.01$)) level of neuroticism according to the pronounced degree of manifestation of symptoms of monotony. Consequently, individuals with an average level of neuroticism are characterized by fatigue, exhaustion as a result of the impoverishment of the external environment.

In persons with a low level of neuroticism, a moderate degree of severity of symptoms of monotony prevails (81 %), high and low severity of symptoms of monotony were not detected in this

category. Statistically significant differences were found among respondents with moderate and severe manifestations of monotony symptoms in individuals with a low level of neuroticism (φ*emp = 5.21 with φ*cr = 2.28 ($\rho \leq 0.01$)). This suggests that people in this category with a low rate of neuroticism get tired too quickly when performing monotonous work, experience drowsiness, and inhibition of cognitive processes.

Statistically significant differences were determined with medium and low (φ*emp = 2.99 with φ*cr = 2.28 ($\rho \leq 0.01$)), low and high (φ*emp = 4.16 with φ*cr = 2.28 ($\rho \leq 0.01$)), high and medium (φ*emp = 2.79 with φ*cr = 2.28 ($\rho \leq 0.01$)) level of neuroticism according to the pronounced degree of manifestation of symptoms of monotony. Therefore, we can say that respondents with a low level of neuroticism have a moderate degree of severity of symptoms of monotony, that is, in situations of stress for the individual, a state of fatigue, drowsiness, reduced conscious control as a depleted external environment, prolonged work of the same type is observed.

Thus, in persons with a high level of neuroticism, a high degree of manifestation of symptoms of monotony prevails, that is, they experience exhaustion, severe drowsiness during the day, and a weakening of the awareness of processes as a result of prolonged monotonous activity. The main motivation of respondents in this category is aimed at changing activities. With monotony, a person loses the ability to concentrate, feels bored, lethargic and apathetic, general interest in work decreases, which is the result of prolonged exposure to the stimulus on the same cells, which depletes them and causes the protective mechanism to start. Individuals with a low and medium level of neuroticism have a moderate degree of severity of symptoms of monotony, that is, they have a situational nature of the manifestation of symptoms of this category, which is not a factor in the destructive functioning of the personality in society and does not cause significant inconvenience to the individual.

The results of studying the symptoms of satiety in students with different levels of neuroticism are presented in Table 3.

Table 3 – Quantitative indicators of the severity of symptoms of satiety in students with different levels of neuroticism (data are presented in %)

Level of neuroticism	The severity of symptoms of satiety			
	low	average	pronounced	high
High	0	17	25	58
Average	0	49	26	25
Low	20	13	67	0

From Table 3 it follows that students with a high level of neuroticism are dominated by a high degree of satiety symptoms (58 %), and a low degree of satiety symptoms was not detected in this category. Statistically significant differences were found among respondents with moderate and high (φ*emp = 3.24 with φ*cr = 2.28 ($\rho \leq 0.01$)), pronounced and high degree (φ*emp = 2.77 with φ*kr = 2.28 ($\rho \leq 0.01$)) manifestations of satiety symptoms in persons with a high level of neuroticism. Therefore, we can say that students with a high level of neuroticism have a high degree of satiety symptoms, that is, the respondents have a motivation to stop working, which arose due to the subjective lack of meaningfulness of the activity. Statistically insignificant differences were also found among respondents with severe and moderate symptoms of satiety in individuals with a high level of neuroticism (φ*emp = 1.09 with φ*cr = 1.64 ($\rho \leq 0.05$)). Therefore, no differences were found in these categories.

Among persons with a low level of neuroticism, a high degree of satiety symptoms was not revealed. Statistically significant differences were found among respondents with a high and medium level of neuroticism in terms of the severity of symptoms of satiety (φ*emp = 2.87 with φ*cr= 2.28 ($\rho \leq 0.01$)). Consequently, students have a feeling of fading and lack of interest in the activities performed.

In persons with an average level of neuroticism, a moderate degree of severity of symptoms of satiety prevails (49 %), a low degree of severity of symptoms of satiety was not detected in this category. Statistically significant differences were found among respondents with moderate and severe (φ*emp = 2.85 with φ*cr = 2.28 ($\rho \leq 0.01$)), moderate and high (φ*emp = 3.33 with φ*cr = 2.28 ($\rho \leq 0.01$)) the degree of manifestation of symptoms of satiety in persons with an average level of neuroticism. Consequently, persons with an average level of neuroticism tend to show symptoms of satiety to a moderate degree. Statistically insignificant differences were also found among respondents with a high and severe degree of symptoms of satiety (φ*emp = 1.14 with φ*cr = 1.64 ($\rho \leq 0.05$)). Therefore, no differences were found between these two categories.

Statistically significant differences were found with medium and low (φ*emp = 3.15 with φ*cr = 2.28 ($\rho \leq 0.01$)), medium and high levels of neuroticism in terms of the pronounced degree of satiety symptoms (φ*emp = 3.09 with φ*cr = 2.28 ($\rho \leq 0.01$)). Consequently, persons with an average level of neuroticism are prone to a situational manifestation of disinterest in activity, as a result of its subjective uniformity. Statistically insignificant differences were revealed with high and low levels of neuroticism (φ*emp = 0.34 with φ*cr = 1.64 ($\rho \leq 0.05$)). Therefore, no differences were found.

In persons with a low level of neuroticism, a pronounced degree of severity of symptoms of satiety prevails (67 %), a high degree of severity of symptoms of satiety in this category was not detected. Statistically significant differences were found among respondents with moderate and severe (φ*emp = 4.08 with φ*cr = 2.28 ($\rho \leq 0.01$)), low and severe degree of satiety symptoms (φ*emp = 3.26 with φ*cr = 2.28 ($\rho \leq 0.01$)) in individuals with a low level of neuroticism. Consequently, in persons with a low level of neuroticism, there is a refusal of activity due to its subjective simplicity, meaninglessness and uninterestingness. Statistically insignificant differences were found among respondents with low and severe symptoms of satiety in individuals with a low level of neuroticism (φ*emp = 0.65 with φ*cr = 1.64 ($\rho \leq 0.05$)). Therefore, no differences were found between these groups.

Statistically significant differences were found among respondents with low and medium (φ*emp = 4.13 with φ*cr = 2.28 ($\rho \leq 0.01$)), low and high (φ*emp = 4.23 with φ*cr = 2.28 ($\rho \leq 0.01$)) by the level of neuroticism according to the pronounced degree of manifestation of satiety symptoms. Consequently, persons with a low level of neuroticism note the severity of motivation to change activities due to its uniformity and dullness. Statistically insignificant differences were also found among respondents with high and medium levels of neuroticism (φ*emp = 0.45 with φ*cr = 1.64 ($\rho \leq 0.05$)). Therefore, no differences were found between these groups.

Thus, in persons with a high level of neuroticism, a high degree of manifestation of symptoms of psychological satiety prevails, that is, for them the question of the saturation and interestingness of the activity being carried out, a pronounced desire to stop the activity, to get away from it is especially acute. In persons with an average level of neuroticism, a moderate degree of severity of symptoms of satiety is noted, that is, they are characterized by a situational nature of the manifestation of symptoms of psychological satiety. As for people with a low level of neuroticism, they have a pronounced degree of manifestation of symptoms of satiety, which is expressed in their subjective feeling of work as uninteresting and too simple.

It has been established that among persons with a high level of neuroticism, there is a pronounced degree of manifestation of symptoms of fatigue and stress, as well as a high degree of severity of symptoms of monotony and satiety. That is, respondents in this category are prone to a vivid manifestation of a state of reduced conscious control over activities, the work of such persons is performed automatically, without the use of their own ideas. Usually such behavior is demonstrated by persons whose work is filled with stereotyped actions and an emotionally depleted external environment. Respondents in this category experience an acute feeling of rejection of subjectively simple, monotonous and monotonous work. Against this background, they experience a state of low emotional tone, apathy, nervousness, constant mobilization of resources. The main motivation for activity is a change of activity or refusal from it.

In respondents with an average level of neuroticism, a moderate degree of severity of symptoms is noted in terms of fatigue, monotony, and satiety. That is, persons of this category experience a state of

acute mobilization of the psychological and energy resources of the body, as a result of increased requirements, the subjective significance of activity. There is tension, drowsiness, impotence, monotony of activity, the inability to show creativity. The main motivation for activity is overcoming difficulties.

Among persons with a low level of neuroticism, a moderate degree of severity of symptoms of fatigue, monotony, as well as a pronounced degree of satiety is manifested. Individuals of this category have a pronounced state of rejection of activities as boring, uniform, uninteresting and of little meaning. There is also a state of reduced activity, boredom, apathy, activity is often perceived as irritable, carrying additional difficulties.

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V. V. Shevcov

SOCIAL PREVENTION OF GADGET ADDICTION AMONG ADOLESCENTS

The relevance of this topic is determined by the rapid development of computer technologies, which in recent years have left a certain imprint on the personality of a modern person. A powerful flow of new information, the use of computer technology has a great impact on the educational space of young people and adolescents.

The gadget is an achievement of technological progress, which has made it possible to see, feel and transmit without much effort what a few decades ago we could only see with our own eyes, making a lot of effort. Nowadays, it is possible to be anywhere in the world at the push of a button or to contact a loved one who is several hundred kilometers away. And this has become so everyday that people have begun to forget about the real purpose of gadgets and use them for other purposes. In the rapid development of technology and the general technologization of the planet, the immature self-consciousness of teenagers, who because of their youth and inexperience are not able to distinguish between a useful thing and an interesting toy, has come under attack.

Gadget addiction, as one of the manifestations of addiction in the general sense, is now acquiring the features of a social disease, and possibly a global epidemic. This type of addiction covers several age groups: younger age, teenagers, older adolescence, adolescence and even early adulthood (under 35), but recently there has been a tendency to involve even mature and older segments of the population in the virtual space. The great flow of new information, the use of computer technology, and the widespread use of smartphones have a great impact on modern society. Repeatedly we encounter such a problem in a particular family, where parents are often in a state of despair, not knowing how to change the situation of absolute dependence of their child on the computer and the Internet. But at the same time they spend the "lion's share" of their free time with gadgets alone, not suspecting the example they set for their children who are still in the process of formation, and for whom any parental example is a model, not even the most positive one.

Teenagers are forced to find something to do, which could satisfy their need to communicate and get some emotions. And help them in this smartphone, tablet, computer, TV. But modern media technology has one very serious problem: most of the information does not pass the filtering stage,

often showing information that is misunerstood by teenagers, has a negative impact, or at all traumatic to their psyche.

The problem of addiction begins when the desire to escape from reality, associated with a change in mental state, begins to dominate the consciousness, becoming a central idea. This confirms the obsessive nature of hobbies, the rapidity of their transformation into addiction. As for the "escape from reality", this is one of the main features of Gadget addiction from the point of view of psychologists, because this escape turns out not figurative, not metaphorical, but real.

Dependence can arise from a variety of forms of use of information technology. It is noted that while traditional types of addiction take years to form, this period is dramatically reduced for gadget addiction. Addiction is noticed by relatives and friends of the addict by changes in their behavior, daily routine, unwillingness to perform their usual duties, to do things that this person used to be interested in.

Proper use of gadgets teaches, broadens the mind, entertains, relaxes, takes away from the oppressive reality and allows you to enjoy the beauty. However, a person who understands that it is necessary to spend less time with a smartphone in his hands, often can't help it. And in order to have a chance of winning the battle with gadget addiction, we need to understand how media technology affects us.

Prevention, in a general sense, means scientifically grounded and timely actions aimed at the prevention of possible physical or socio-cultural collisions in individual risk groups, as well as the preservation, maintenance and protection of normal life and health of people, helping them to achieve their goals and unlock their inner potentials [1].

Dependent behavior turns out to be closely connected both with the abuse of something or someone on the part of the individual and with the violation of his needs. Special literature uses another name for this reality - addictive behavior. In translation from English, addiction is a tendency, an addiction that is detrimental to one's needs. If we turn to the historical roots of this concept, then Latin addictus is someone who is bound by debts (condemned to slavery for debts). In other words, it is a person who is in deep bondage to some insurmountable power.

The concept of addiction is defined as a pathological craving for something, which increases the risk of mental illness and is associated with personal or social problems.

Social prevention is understood as an activity to prevent social problems, social deviation or to keep them at a socially tolerable level by eliminating or neutralizing the causes that generate them.

There are three levels of social prevention of teenagers from gadget addiction (according to N. I. Nikitina):

– general social level (general prevention) - provides for the activities of the state, society, their institutions aimed at resolving contradictions in the field of economy, social life, in the moral and spiritual sphere, etc;

– special level (socio-pedagogical prevention) consists of targeted impact on the negative factors associated with certain types of deviations or problems. The elimination or neutralization of the causes of these deviations is carried out in the process of the activities of the relevant actors, for whom the prevention function is professional;

– individual level (individual prevention) is a preventive activity in relation to specific individuals whose behavior has the features of deviation or problematic.

The effectiveness of social prevention of adolescents from gadget addiction is determined by the implementation of structural and functional model, which includes blocks of primary and secondary prevention in the educational environment of the educational institution:

– primary (general) prevention is a set of socio-pedagogical activities of the educational institution aimed at preventing, eliminating and neutralizing the causes and conditions that cause negative social deviations in behavior, social development, socio-psychological adaptation, education, socialization of schoolchildren with a socially acceptable level;

– secondary (special) prevention is a set of socio-pedagogical activities of specialists of the multidisciplinary team, aimed at preventing, eliminating and neutralizing the causes and conditions that cause negative social deviations in behavior, social development, socio-psychological adaptation,

education, socialization of schoolchildren with socially neutral and socially unacceptable levels of individual social health;

– tertiary prevention solves such special tasks as the treatment of neuro-psychiatric disorders accompanied by behavioral disorders. Tertiary prevention also can be directed on prevention of relapses in persons with already formed deviant behavior [2].

In the implementation of activities to prevent addictive behavior of adolescents on gadgets, the following aspects can be highlighted (according to C. P. Korolenko):

– interaction of all specialists of the educational institution;

– interaction between the school and parents (this aspect includes educational work, which has different directions);

– the existence of a comprehensive program to prevent deviant behavior among adolescents;

– consideration of the position of the adolescent as an active subject of the organization of prevention work.

The following forms of preventive work can also be distinguished:

– organization of the social environment. It is based on the ideas about the determining influence of the environment on the formation of deviations;

– active social training of socially important skills (group trainings);

– organization of activities alternative to addictive behavior. This form of work is connected with the notions of the substitution effect of addictive behavior. For example, addiction can play an important role in personal dynamics - an increase in self-esteem or integration into the reference environment.

It is assumed that people use mood-enhancing psychoactive substances until they receive something better in return. Alternative forms of activity are recognized as:

– cognition (travel);

– self-testing (mountain hiking, risky sports);

– meaningful communication, love, creativity, activity (including professional, religious-spiritual, charitable).

4. organization of a healthy way of life. It proceeds from notions of personal responsibility for health, harmony with the surrounding world and one's body.

5. Activation of personal resources. Active training of teenagers in sports, their creative self-expression, participation in groups of communication and personal growth.

Addiction to gadgets and the Internet is an urgent problem of society: in every school, university, college of the country most of the students have this addiction.

In most cases, the cause of gadget addiction becomes the discrepancy of internal and external life, problematic upbringing in the family, difficult relationships in the team, the delusion that it is safe.

Thus, according to the specific behavior of adolescents affected by gadget addiction, the following conditions of social and preventive work are identified: complexity (organization of the impact at various levels of the social space, family and individual); targeting (taking into account age, gender and social characteristics); mass (priority of group forms of work); positive information; minimization of negative consequences; personal interest and responsibility of participants; the maximum activity of the teen; aspiration for the.

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PROFESSIONAL PEDAGOGICAL EDUCATION IN THE CONDITIONS
OF INFORMATIZATION OF SOCIETY: REQUIREMENTS
FOR THE CONTENT OF TRAINING FOR FUTURE TEACHERS

Informatization and digital transformation of education require a fairly high competence in the field of ICT from a modern teacher; the level of his ICT competence ultimately determines the quality of education. It is noted that national state educational standards do not always pay due attention to the development of ICT competence of future teachers in the process of obtaining higher education. Defined the requirements for the content of professional pedagogical education in the conditions of informatization of society.

The content of a teacher's professional activity, as well as the content of education, are determined by the needs of social development. Education should solve both current and future problems. Education, as noted in UNESCO documents, should play "... a key role in determining the course of our movement within the predicted and possible scenarios of the future in the interests of choosing the preferred option for humanity and the planet for further development" [1, p. 2]. The strategic goals of education are closely linked to the problems of social development in all developed countries of the world, including Russia [2] and the Republic of Belarus [1].

The 21st century is the century of informatization of society. IR technologies are rapidly penetrating into all spheres of modern life. The modern world is characterized by rapid transformations in science and industry, in all areas of the economy. Fundamental changes in recent decades have also taken place in the worldview of man. Today, in society as a whole, and separately in each person of society, there is an increased awareness of the importance of information for human life, its processing by means of digital technologies; the real and digital worlds, natural space and digital environment are perceived by a modern person in an inseparable unity, as integrity; quite acutely modern man is aware of the need for direct ("non-digital") communication.

Features of modernity require teachers to have a confident knowledge of IC-technologies. This competence underlies the effective solution of the problems of preparing children and young people for life in a society in which all spheres of life actively use digital resources. Thus, a problem arises: to determine the key requirements for the content of continuing professional education of teachers in the conditions of modern and future needs of the information society.

The purpose of the study: to identify the key requirements for the content of continuous professional pedagogical education in the conditions of informatization of society.

The methodological basis of the study is the conceptual ideas of pedagogical schools in Russia, Belarus, the USA and European countries: the content of education (V. I. Zagvyazinsky, V. S. Lednev, V. A. Sitarov, G. P. Shchedrovitsky, W. Okon, etc.), the quality of training of teaching staff (V. P. Borisenkov, O. V. Gukalenko, A. I. Zhuk, N. N. Koshel, M. L. Levitsky, V. A. Mizherikov, M. M. Potashnik, A. N. Sergeev and others), implementation of the competency-based approach in education (A. N. Chomsky, E. L. Low, V. A. Gaisenok, I. A. Zimnyaya, O. A. Oleks, A. V. Khutorskoy and others), informatization of education (V. V. Grinshkun, A. I. Kravchuk, V. P. Polyakov, I. V. Robert, I. V. Trusevich, M. Harwardt, P. J. Niermann, S. Boyd, H. Grayson, T. Eckhardt, J.-L. Durpaire, H. Laakso, and others). The materials of the study are the factology of the state of the system of training pedagogical personnel in Russia in the conditions of informatization of modern society. Basic research methods: analysis, classification, generalization.

Research results. The modern teacher (teacher, lecturer, upbringer), as a professional, is called upon to contribute to the fulfillment of the "social order of society." The teacher, through his professional activities, solves the most important task that the education system faces – he must ensure the quality of the educational process. In the conditions of informatization of society, the

solution of this problem is connected with the inclusion of digital educational resources in the educational process. The use of ICT in education makes it possible to ensure that students achieve the required educational results, including ensuring the formation of an information culture among students. The results of numerous studies conducted in many countries of the world over the past decades show that it is the teacher who plays a key role in the transition to digital rails not only in education, but also in society as a whole. It should be borne in mind that a modern teacher can form an information culture among students only when he himself has it. The teacher himself must be competent, at least, in the use of IC technologies; ICT competence should be integrated into all components of a teacher's professional activity (we note that the problem of developing teachers' ICT competence is typical not only for the countries of the post-Soviet space, but also for all countries of the world (see, for example: [4; 5; 6])).

In Russia and Belarus, the requirements for teacher training in the field of ICT are defined by a number of state documents, among which the state educational standards of higher education play an important role.

An analysis of the state educational standards of higher education shows that the content of the teacher's knowledge of IC technologies is disclosed in them quite superficially. For example, in the Russian federal state educational standard of higher education – bachelor's degree in the field of study 44.03.01 Pedagogical education – the requirements for the formation of ICT competencies in future teachers include the "universal" competence UK-1 (provides for the formation, in particular, information search skills) and "general professional "competencies GPC-2, GPC-9 (require, respectively, the use of IC technologies in the development of basic and additional educational programs and their components and the ability to "understand the principles of modern information technologies and use them to solve problems of professional activity" [7]) . This educational standard does not regulate the presence in the group of "professional" competencies of the requirements for a graduate of a pedagogical university to have the skills to use IC technologies [8, p. 3–4]. Thus, in fact, it is recognized that this requirement does not apply to the mandatory professional competencies of a teacher.

A similar situation is observed in the educational standards of higher education in the Republic of Belarus. For example, in the layout of the educational standard of higher education of the 1st stage [9], individual components of ICT competence are affected in the "universal competencies" UK-1 (Know the basics of research activities, search, analyze and synthesize information) and UK-2 (Solve standard tasks of professional activity based on application of information and communication technologies), as well as in the "basic professional competencies" BPC-12 (Be able to analyze sources of information, highlight the most significant facts, give them their own assessment and interpretation ...) and BPC-13 (Be able to independently use printed and electronic sources to search for information on topics related to future professional activities ... independently catalog the accumulated array of information).

For comparison, we note that in international documents the formation of a teacher's ICT competence is a key requirement for his preparation [10, p. 6]. Thus, the UNESCO recommendations conceptually define the mechanisms for the purposeful level formation of a teacher's understanding of the role of IC technologies in educational policy, skills in designing curricula and their assessment using IC technologies, skills in designing and implementing pedagogical practice and working with digital technologies, skills in managing the educational process., the ability of a teacher's professional development based on the use of IC technologies [11, p. 11–13]).

Thus, today the training of a teacher both in Russia and in the Republic of Belarus is based on the assumption that a university student – a future educator, teacher, upbringer – even while studying at school, the information culture and competence in using IC technologies were sufficiently formed. However, practice shows the opposite – the level of knowledge of IC technologies, as well as the level of personal understanding of the characteristics of the information society among school graduates leaves much to be desired. In fact, the absence of a clear state regulation of the content of this competence at the level of the teacher training profile, the vagueness of the requirements for IC competencies of future teachers, the "applied" nature of these requirements are, in our opinion, the reasons for the insufficient, in general, level of professional training of teachers in the field of ICT [12; 13].

A student-future teacher must be purposefully prepared for professional activities using IC technologies; it is necessary for a practicing teacher to systematically form professionally

demanded ICT competencies. Only if these conditions are met, a modern teacher will be able to: ensure quality in achieving the goals of education and solving educational problems; promptly take into account in professional pedagogical activities the features, needs, opportunities and threats of informatization of society; effectively organize the "pervasive education" of the young generation based on the management of the integration of formal and non-formal, traditional and "electronic" education; effectively build their professional activities (educational process, methodical work) not only as a user, but also as a developer, generator of modern educational tactics, models, technologies, educational content.

When designing the content of teacher training, as well as the content of advanced training of teaching staff, all aspects and factors of informatization of society and the digital transformation of education, the possibilities of digital educational resources and IR technologies should be taken into account as much as possible [14]. The most important among them are: the requirements of society for the quality of training of teaching staff; the need for ICT competence in the professional activities of a teacher in a modern school and in the future; the need to take into account the correlation between formal and non-formal education strategies, stationary and distance learning, traditional and digital educational models and technologies; the need to take into account the influence of the information space on the formation of the worldview and life experience of young people.

Taking into account the above factors that are significant for the systems of training and advanced training of pedagogical personnel, it is advisable to single out the following requirements for the content of professional pedagogical education in the conditions of informatization of society:

– strengthening the axiological component of professional pedagogical education. Informatization of society enhances the importance of the teacher in the education of the younger generation. A modern teacher, upbringer, lecturer (both future and leading educational practice) must be aware of his mission, be confident in the importance of his profession, be personally psychologically ready to carry out educational activities, taking into account the characteristics of the information society. It should be borne in mind that today young people are being prepared for pedagogical activity, brought up on the content of the digital information space, where the role of the teacher in the development of society is downplayed, and the teacher is often, unfortunately, presented in a negative context;

– focus on the formation of the design component of professional activity among teachers. The practice of education necessitates:

– the formation of teachers' skills in developing methodologically sound educational concepts and programs aimed at achieving the requirements of educational standards (the corresponding level of education), taking into account both the actual state of informatization of the educational process and the prospects for saturation of a particular educational institution with IC technologies;

– the formation of experience for teachers in designing and filling the digital environment of an educational institution with high-quality educational content. The existing practice of training and advanced training of teaching staff is mainly adaptive – it is focused on adapting traditional models and technologies of training and education to the needs of society by means of introducing existing IC technologies into the educational process. The enginering concept assumes in the preparation of teachers, on the one hand, taking into account the traditions of national education, and on the other hand, a balanced orientation to the best examples of modern domestic and foreign educational practices. This concept is aimed at developing professional skills among teachers, implemented within the framework of a personality-oriented approach in education (see, for example: [15]) and ideas of didactic constructivism [16]: expedient equipment of the space of an educational organization with smart technology (electronic boards, virtual and augmented reality devices, etc.); engineer of professional activity and possession of modern models of organization of educational work in the electronic campus; variable application of information network resources, resource base of electronic educational systems, social networks; implementation of distance and hybrid learning models;

– targeted training of teachers for the plan and realisation of the educational process. The education system is based on the highly moral ideas of spirituality. IC technologies make it possible to seamlessly integrate the digital information environment into the existing system of education, to activate and "modernize" the process of educating children and youth. The use of ICT in education

makes it possible to remove organizational and time frames in educational labor with young people, to get closer to solving the problem of Internet addiction of young people [17], multimedia content and hypertext, social networks make it possible for adults to "get closer" to the younger generation, to understand and accept them views and worldview, daily activities and life in general [18; 19; 20];

– the formation of teachers' competence in the field of ensuring the information security of children and youth by psychological and pedagogical methods. This competence implies that the teacher has both knowledge and skills in the field of information security, and the skills to implement various measures of a psychological and pedagogical nature aimed at protecting (including at the warning stage) children and young people from information content that negatively affects their psyche, protection against cyber threats, etc. [21; 22];

– the systematic formation of future teachers' profile skills in mastering innovative ICT in their professional activities, the formation of experience among practicing teachers in the variable use of IR technologies in the educational process. The formation of the ICT competence of a teacher implies, first of all, adequate to the level of informatization of society (taking into account the prospects) the provision of the educational process of training teachers with hardware and software (saturation of the education system with various devices, smart technology and digital resources), access to resources global network. It is necessary to orient the training of teaching staff towards the widespread use of not just modern, but advanced, innovative and promising ICT, reorientation of the content, methods and forms of education and upbringing to them;

– orientation towards increasing the targeting of continuing professional education of pedagogs. Informatization goes to education, to a specific school, classroom, classroom, together with a specific teacher, lecturer, upbringer. The pedagog is always individual, his preparation should be as personalized as possible. The content of pedagogical education should make it possible to effectively implement the individual trajectory of professional training and self-realization of a teacher, educator. In particular, this will be facilitated by: diagnostics for professional suitability in the selection of applicants, a decrease in the number of students in academic groups, targeted training and early assignment of the future teacher to the school – his place of the future work, the introduction of the institute of "pedagogical internship", the introduction of a practical exam as a form of state certification of graduates of pedagogical universities , development of the institution of mentoring in educational institutions, financially corresponding compliance of the teacher's salary with his qualifications, including in the variation between use of ICT.

It is important in determining the requirements for the content of the training of teaching staff to work in the conditions of informatization of society and education, it seems to ensure the parity of interests of state and public institutions, interested commercial organizations, and the personal interests of future teachers. Training teachers, improving their qualifications in the context of informatization of society and saturation of the education system with digital resources and ICT requires the development of public-private partnerships.

Conclusion. Determining the content of teacher training and advanced training of teaching staff in the context of informatization of society is a multifaceted, complex problem. The complexity of its solution is due, first of all, to the rapid penetration of digital technologies and information resources into the life of society and every person. The rapidity of the informatization of society and the digitalization of life causes some unpredictability in the development of society and, accordingly, the uncertainty of the requirements for the education system, for the content of teacher training. The solution to the problem is seen in a qualitative, detailed, objective analysis of the trends that have manifested themselves in education and society over the past decade, as well as in the systemic integration of the efforts of all interested institutions.

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Y. A. Shevtsova, V. N. Pustovoitov

PSYCHOLOGICAL AND PEDAGOGICAL SUPPORT OF THE PROCESS OF FORMATION OF GENDER IDENTITY OF ADOLESCENTS IN THE SYSTEM OF WORK OF THE SCHOOL PSYCHOLOGICAL SERVICE

The article examines the possibilities of school psychological service as a factor determining the process of formation of gender identity in adolescence. One of the directions of this work is the development and implementation of a program of psychological and pedagogical support for the process of gender identity formation. The article analyzes the results of an experimental study of gender attitudes of adolescents, the purpose of which was to determine the effectiveness of the program to support the process of formation of gender identity in adolescents, implemented in the conditions of the school psychological service.

The process of supervision is the basis of the professional activity of school teachers and psychologists, focused on creating conditions (pedagogical, psychological, social) for successful learning and development of each child in situations of school interaction [1]. Thus, psychological and pedagogical support can be characterized as a multi-level interaction of subjects of the educational process aimed at solving urgent problems of a specific educational environment and the personality of students in accordance with age and individual characteristics.

Considering the fact that the school is one of the most important institutions of socialization, under the influence of which the child learns the elements of culture, social norms and values, that are accepted in society, the current direction in the pedagogical process in general and in the work of the school psychological service in particular becomes the support of the process of developing the gender identity of students, creating conditions, contributing to the formation of flexible life strategies, the realization of personal potential, to reveal the individuality and self-actualization of the

younger generation. The formation of egalitarian consciousness will allow modern teenagers to rethink their role in modern society, build harmonious relationships with people around them, including the representatives of other sex, which in return, leads to serious changes in their worldview, allowing them to form an active civic position. The school should give students the opportunity to develop individual abilities and interests, regardless of belonging to one or another gender, to resist traditional standards regarding the intersexual relationships.

The idea of ensuring individual development of students can have its practical implementation in programs of psychological and pedagogical support of the process of gender identity formation in adolescence.

Literature review on the topic.

The issues of gender identity in our country were dealt with by such prominent researchers as I. S. Kon, V. A. Geodakyan, T. V. Bendas, I. S. Kletsina, E. P. Ilyin, V. E. Kagan, D. E. Isaev, A. A. Chekalina, E. V. Zdravomyslova, M. Y. Harutyunyan, L. V. Popova and others. However, insufficient attention has been paid to the problem of psychological and pedagogical determination of the development of gender identity, mainly focused on solving theoretical issues of this problem, and the practical basis for supporting the process of gender identity development is in the process of formation.

Purpose and objectives of the study.

The aim of the experimental study was to determine the effectiveness of the program to support the process of formation of gender identity in adolescents, implemented in the conditions of the school psychological service.

To achieve the set goal of the study, the following tasks were outlined:

1) to identify and substantiate the possibilities of psychological and pedagogical support of the process of forming the gender identity of adolescents in the conditions of the school psychological service;

2) to develop a program of psychological and pedagogical support of the process of formation of gender identity of adolescents.

Methods and stages of research.

Based on the analysis of scientific and theoretical material on the problem of gender identity formation in adolescence, we have identified the main stages of experimental work: ascertaining, forming and control.

To solve the tasks set out in the study, a system of methods and techniques was used to cover various aspects of the formation of gender identity in adolescence. For the quantitative analysis of the results, we used standard statistical indicators and processing techniques: the statistical criterion $\chi2$ and the φ – Fisher criterion.

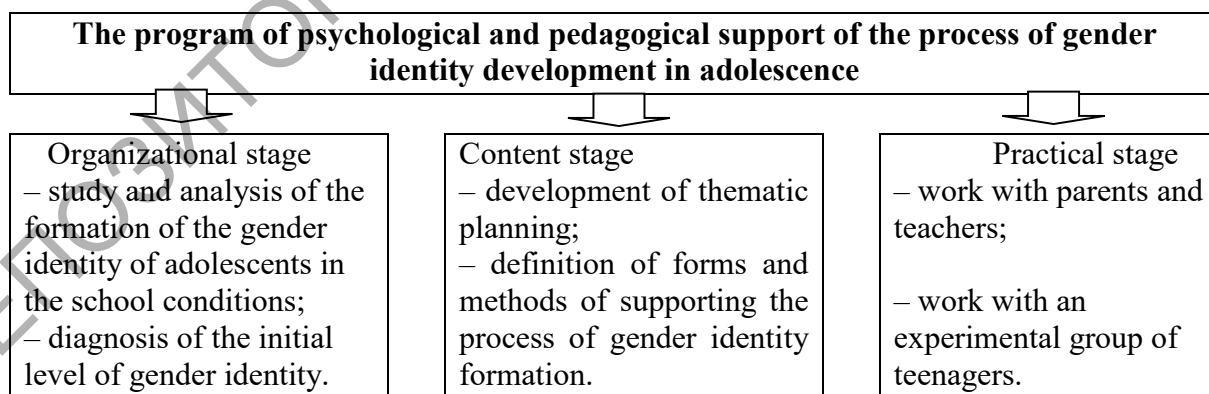| The program of psychological and pedagogical support of the process of gender identity development in adolescence		
Organizational stage – study and analysis of the formation of the gender identity of adolescents in the school conditions; – diagnosis of the initial level of gender identity.	Content stage – development of thematic planning; – definition of forms and methods of supporting the process of gender identity formation.	Practical stage – work with parents and teachers; – work with an experimental group of teenagers.

Figure. 1. Diagram of the stages of the program of psychological and pedagogical support of the process of gender identity formation in adolescence

The key direction of the experimental work was the creation and justification of a program of psychological and pedagogical support for the process of gender identity formation using methods of

active socio-psychological training, which was introduced into the educational process of the school, as one of the areas of work of the school psychological service. The program consisted of three stages: organizational, substantive and practical.

The experiment involved 246 students of grades 8–9 (127 girls and 119 boys) living in the city of Gomel. The participants of the experiment were divided into experimental (82 adolescents) and control (164 adolescents) groups.

During the justification of the support program, preliminary diagnostics of the initial level of gender identity of adolescents was carried out. The program involves the participation of teachers, parents and adolescents of the experimental group in lectures, group discussions, various types of consultations and individual conversations. The main part of the support program is aimed at working with teenagers and is presented in twenty classes using methods of active socio-psychological training.

Research results

Gender attitudes were considered as an indicator of one of the criteria for the formation of gender identity. In a broad sense, gender attitudes mean a stable system of relations to one's own and the opposite sex that has developed in the process of gender socialization. Note that these attitudes are activated not only on the conscious, but also on the unconscious levels. Therefore, we used the method of studying personality with the help of graphic presentations – "Drawing of a man and a woman" by N.M. Romanova [4].

Next, we will proceed to the consideration of the results of a psychodiagnostic study reflecting some features of the gender attitudes of the group of adolescents in question.

Table 1. Results of the study of the types of gender attitudes of adolescents of experimental and control groups at the stage of the ascertaining experiment

Type of gender installation	Experimental group		Control group	
	Girls %	Boys %	Girls %	Boys %
Cooperation	6,9	5,1	8,3	11,2
Support	6,9	7,9	9,5	12,5
Isolation	18,5	15,3	13	6,2
Independence	18,8	23	21,4	22,5
Indifference	20,9	23	22,6	28,7
Attraction	13,9	15,3	19	12,5
Aggression	13,9	10,2	5,9	6,2

The data in Table 1 indicate that there are no significant differences between the gender attitudes of adolescents in the experimental and control groups. To confirm this conclusion, we used the Fisher–φ statistical criterion.

The obtained values of the Fisher coefficients for the types of gender attitudes indicate that they fell into the zone of insignificance (fcrit > fempir), which is an indicator that at the 5% level of significance it can be argued that in the experimental and control groups the probability of similarity in these factors is high.

The participation of adolescents in classes included in the program of psychological and pedagogical support of the process of gender identity formation could not but affect the formation of dominant types of their gender attitudes, therefore, after the formative stage of the experiment, we conducted a repeated study using the projective technique "Drawing men and women" by N.M. Romanova. The results of this study are presented in Table 2.

Table 2. The results of the study of the types of gender attitudes of adolescents of the experimental and control groups at the stage of the control experiment

Type of gender installation	Experimental group		Control group	
	Girls %	Boys%	Girls %	Boys %
Cooperation	23,2	17,9	10,7	12,5
Support	18,6	25,6	9,5	13,7
Isolation	4,6	2,5	10,7	6,2
Independence	11,6	15,3	25	20
Indifference	13,9	5,1	23,8	27,5
Attraction	25,5	30,7	15,4	13,7
Aggression	2,3	2,5	4,7	6,2

It should be noted that the results in the experimental and control groups have some differences. Girls and boys of the experimental group are more likely to build relationships based on the types of gender attitudes "cooperation" (23.2% and 17.9%), "support" (18.6% and 25.6%) and "attraction" (25.5% and 30.7%). In the control group, the settings of "isolation" (10.7% and 6.2%), "independence" (25% and 20%) and "indifference" (23.8% and 27.5%) are more common. The presence of a sufficiently large percentage of girls and boys of the control group who demonstrated the attitude of "indifference" may reflect the presence of weak gender-role differentiation in the subjects, a low level of comprehension of typical female and male traits. Attention is drawn to the fact that in the control group, a negative attitude of "aggression" is diagnosed several times more often.

Thus, there are significant differences between the gender attitudes of adolescents included in the experimental and control groups. To confirm this, we used Fischer's statistical criterion – φ.

The obtained values of the Fisher coefficient - φ for the types of "Independence" and "Indifference" in girls and "Independence" and "Aggression" in boys show that they fell into the zone of insignificance (fcritic. > fampir.), this indicates that there is no difference between girls and boys in the experimental and control groups according to these types of installations. It should be noted that in girls, according to the type of gender attitude "Aggression", the fempir. = 1.58 approaches $\varphi0.05 = 1.64$. The obtained values for the types of gender attitudes are "Cooperation" (fempir. = 1.76), "Support" (fempir. = 1.68), "Isolation" (fempir. = 1, 72), "Attraction" (fempir. = 1.68) in girls of the experimental and control groups exceed the fcritic. at the level of 5% ($\varphi0.05 = 1.64$). Based on the data obtained, it can be concluded that the girls of the experimental and control groups have differences in gender attitudes.

The boys of the experimental and control groups also have differences in some gender attitudes, which is confirmed by the data obtained: "Cooperation" (fampir. = 1.68), "Support" (fampir. = 1.76), "Isolation" (fampir. = 1.64), "Indifference" (fampir. = 1.76) and "Attraction" (fampir. = 2.32).

The results obtained give a basis to assert that adolescents of the experimental group have more favorable and positive gender attitudes than adolescents of the control group.

The above results of the study of the gender attitudes of adolescents of the experimental and control groups at the control stage of the study show that during the formative experiment there were some positive changes in the gender attitudes of girls and boys of the experimental group. In order to confirm the reliability of the success of the formative stage of the experiment, we used the multifunctional $\chi2$ – criterion.

The obtained values of $\chi2$ when comparing the results of the experimental and control group girls exceed the critical value of $\chi2$, which is 3.84 for 5% significance, which indicates significant differences in the following types of gender attitudes "Cooperation", "Support", "Isolation" and "Aggression".

According to the results of the χ^2 – criterion, we can say that the girls of the experimental and control groups did not show significant differences in such types of gender attitudes as "Independence", "Indifference", "Attraction"; the boys of the experimental and control groups did not show significant differences in such types of attitudes as "Cooperation", "Isolation", "Independence", "Aggression", since the values of the χ^2 – criterion are less than the critical value (3.84) for 5% of the significance level. When comparing the results of the boys of the experimental and control groups, values of χ^2 exceeding the critical value of χ^2, which is 3.84 for 5% significance, were obtained for the following types of gender attitudes: "Support", "Indifference" and "Attraction".

The data obtained during the statistical analysis confirm the presence of significant differences in the attitudes of adolescents of the experimental and control groups at the control stage of the experiment.

The scientific novelty consists in the following: a comprehensive program of psychological and pedagogical support of the process of gender identity formation in adolescence has been developed.

The practical significance of the study lies in the fact that the technology of supporting the process of forming gender identity in adolescence, implemented in the system of work of the school psychological service, has been developed and tested.

Conclusions and prospects

Based on the analysis of scientific and theoretical material, it can be argued that the development of gender approaches in education is a new step in the development of Russian pedagogical science. The main idea of psychological and pedagogical support is a comprehensive approach to the problem of gender identity formation in adolescence. The most expedient is the creation and implementation of programs to support the process of gender identity formation using school psychological services implemented in the working conditions.

The conducted research creates a basis for further work to support the process of gender identity formation and the realization of the potential of the school psychological service within this area of work with adolescents.

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Y. A. Shevtsova, S. S. Shchekudova

A STUDY OF GENDER IDENTITY AND GENDER ATTITUDES IN ADOLESCENCE

In the article, the results of the diagnostic research of gender identity and formation of gender guidelines, including distribution the roles in a family, in the preadult are considered and analysed. The analysis of the survey results is presented, which indicates the presence of several potential role positions in the structure of family relations according to the ideas of modern boys and girls.

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From an early age a person identifies with a certain gender. He has a subjective "sense of gender" and develops certain personality characteristics – masculine and feminine. At the same time, they may not coincide with the sex – a man may have feminine features and a woman – masculine, and there are also peculiar combinations of these and other features. One of the factors influencing the formation of such characteristics is gender ideology – the society's perception of the qualities desirable for men and women. The construction of a person's gender identity takes place through the acceptance and assimilation of gender norms and rules of behavior, appearance and clothing, manners, facial expressions, gestures, values and much more, proposed by society, family, peers, school, media and other agents of socialization.

The current state of society is very unstable, which in turn leads to changes in value and moral orientations, including the relationship between the sexes, there is a change of boundaries between traditionally male and traditionally female roles, the natural institutions of socialization (family and peer community) are destroyed, the negative impact has an aggressive information environment. All this affects the formation and formation of boys and girls as full-fledged representatives of their sex. There is a need to study gender identity and identify the peculiarities of the formation of gender attitudes.

Our psychological research was conducted with the help of gender questionnaire S. Bem (BSRI), the technique of studying personality through graphic presentations - "Picture of a man and a woman" by N. M. Romanova, we also used the questionnaire "Proverbs" by I. S. Kletsina to study gender attitudes concerning the distribution of roles in the family. Along with this, the survey method was used. In the study, which was conducted from April to October 2022, 494 respondents took part. Of them, 298 were girls and 196 were boys studying at the 2–3 courses of the F. Skaryna State University of Gomel.

Next, let's move on to consideration of the results of psychodiagnostic study reflecting some peculiarities of gender identity and gender attitudes in adolescence.

In our study of gender identity, we used the BSRI – gender-role questionnaire S. Bam, in which masculinity and femininity are not opposed to each other, but are independent, autonomous dimensions. The psychological constructs of masculinity and femininity correlate with the concepts of instrumentality and expressiveness. Instrumental qualities manifest themselves in a personality's orientation toward achieving goals beyond the immediate situation of interpersonal interaction and are characterized by insensitivity (insensitivity) to the emotional reactions of others; expressiveness consists in a personality's directing interests directly toward the situation of interpersonal interaction, taking into account the emotional reactions of others. The technique determines the degree of masculinity and femininity of a personality from the point of view of the place of gender in a cultural context, rather than in the personality of an individual. The stimulus material is a list of sixty qualities from which the examinee should choose those which he/she believes are inherent to him/her. After conducting a psychodiagnostic study, we determined the percentages of masculine, feminine, and androgynous types for the surveyed group as a whole. Quantitative indicators of gender identity type in boys and girls are presented in Table 1.

Table 1 – Quantitative indicators of gender identity type in boys and girls (data presented in %)

Type of gender identity	Girls	Young men
Masculine	3	18
Feminine	20	1
Androgenic	77	81

The obtained data indicate that in general for the respondents of the given age the androgynous type is predominant (to a great extent), 77% of the girls and 81% of the boys. A person belonging to this type, regardless of their biological sex, can have both masculine and feminine features, combining both traditionally feminine and traditionally masculine qualities. The feminine type includes 20% of

girls and 1% of boys. The masculine type of gender identity was revealed in 3% of the surveyed girls and 18% of the boys.

In a broad sense, gender attitudes mean a stable system of attitudes towards one's own and the opposite sex developed in the process of gender socialization. Note that these attitudes are activated not only on conscious but also on unconscious levels. Therefore, we used the technique of studying a personality with the help of graphic presentations, "Drawing of a man and a woman" by N.M. Romanova, which assumes a picture of male and female figures to the respondent. The choice of the technique was conditioned by a high level of projectivity in the study of gender aspects of personality actualization, which allows to decrease the influence of the social desirability factor and increase the level of reliability in diagnosing features of gender socialization. Interpretation of images allows to distinguish the following gender attitudes concerning the system of relations to both sexes: cooperation, support, isolation, independence, indifference, attraction and aggression. The quantitative indicators of the type of gender attitude in boys and girls are presented in Table 2.

Table 2 – Quantitative indicators of gender attitudes among boys and girls (data presented in %)

Type of gender identity	Girls	Young men
Cooperation	8	4
Support	7	8
Isolation	10	7
Independence	32	37
Indifference	18	22
Attraction	22	19
Aggression	3	3

It should be noted that the results in the samples of girls and boys have some differences. Girls more often tend to build relationships based on the type of gender attitude "cooperation" (8%) than boys (4%) (Student's correlation coefficient t = 2.34). Positive attitude "support" was revealed in a small number of representatives of both samples and was 7% of girls and 8% of boys (t = 1.02). Presence of the results corresponding to the type of the gender attitude "isolation" can testify to the existence of some problems in the sphere of relations with the opposite sex among the examinees. The formation of this attitude can be connected with the breakdown of relations or stress in the sphere of relations between the sexes. This attitude was also found in a relatively small number of girls (10%) and boys (7%) (t = 1.68). The most frequent attitude in both samples was "independence", which can be characterized by some insecurity on the one hand or self-reliance on the other (t = 2.01). Quite a large percentage of girls (18%) and boys (22%) demonstrated the "indifferent" attitude. Such a situation may reflect the presence of weak gender differentiation, a low level of comprehension of typical female and male traits. Differences between male and female samples are insignificant (t = 1, 72). The gender attitude of "attraction" reflects a situation of interest and positive attitude toward persons of the opposite sex, which may be characteristic of 22% of girls and 19% of boys (t = 1.81). Aggression toward the opposite sex was detected in a small number of respondents, in equal numbers in the samples of girls (3%) and boys (3%).

Gender roles are sets of distinctive characteristics that include personality traits, behaviors, and attitudes culturally defined as corresponding to one gender or the other. By adolescence, young people already have largely formed ideas about gender roles. This largely determines the peculiarities of their behavior and building relationships with representatives of their own and the opposite sex, which becomes especially important at this age. In the future, ideas about gender roles and gender attitudes formed at this age are likely to be implemented in the structure of family relationships.

To study gender attitudes concerning the distribution of roles in the family we used the questionnaire "Proverbs" by I. S. Kletsina in which Russian folk proverbs collected by V. I. Dal were used as statements. The technique is designed to determine the extent to which the subjects are

exposed to traditional notions about the division of roles in the family; the results may be indicative of the gender attitudes of the subjects. The questionnaire includes 15 statements which the probationer should evaluate based on his/her degree of agreement with them. The result is evaluated by points; depending on the number of points, the examinee can be assigned to one of three groups of attitudes: traditional, egalitarian or indefinite attitudes. Quantitative indicators of the type of gender attitudes concerning the distribution of roles in the family among boys and girls are presented in Table 3.

Table 3 – Quantitative indicators of the type of gender attitude concerning the distribution of roles in the family among boys and girls (data are presented in %)

Type gender attitudes regarding the distribution of roles in the family	Girls	Young men
Traditional	33	62
Egalitarian	10	5
Undefined	57	33

The data in Table 3 show that most of the young men (62%) have traditional attitudes about the distribution of roles in the family. Only a small percentage (5%) of young people have pronounced egalitarian attitudes, and a third of respondents have indeterminate gender attitudes. The majority of girls showed results indicating uncertain gender attitudes (57%), a notable third had traditional attitudes and only one in ten had egalitarian attitudes. The results of the study indicate that young men are more likely than young women to hold traditional attitudes about the distribution of roles in the family. Almost half of the young people are undecided about their gender attitudes.

Using the Spearman rank correlation coefficient, we compared the results of a diagnostic study of gender attitudes concerning the distribution of roles in the family among boys and girls. Traditional attitudes prevail in young men (r = 0.72). As for egalitarian attitudes, there was a weak positive correlation (r = 0.34). The value obtained (r = 0.67) indicates the prevalence of ambiguous gender attitudes in the sample of girls.

We conducted a survey on the same sample of subjects. As a result of the analysis of the obtained data, several potential role positions in the structure of family relations were revealed. Thus, the material provision of the family in this sample was identified with a man, in contrast to the results of similar studies conducted among young people living in large cities, where there is a trend towards self-sufficiency and material independence. In the opinion of 63% of the girls and 59% of the boys, men should provide for the family financially. The main place in the upbringing of children has traditionally been given to the woman – this is the opinion of 67% of girls and 59% of boys. However, many respondents noted the importance of participation in the upbringing process by both parents regardless of gender. The role of the head of the family in this sample was assigned almost equally to both men and women. Forty-eight per cent of female respondents assigned this role to a man and 52 per cent to a woman. 54 per cent of males believed the man was the head of the family and 46 per cent believed the woman was the head of the family. Such results are to some extent explained by the function that, according to respondents, the head of the family performs: from financing the family and distributing income, to making decisions on various important issues, including economic ones. In spite of the fact that the majority of respondents associated housekeeping with a woman (52% of girls and 73% of boys), some of them distributed these responsibilities equally between a man and a woman. As for the problem of incomplete family, we got the following data: most of the boys believe that the family should be complete (82%) and only 18% of them have an option of incomplete family; among the girls we got the opposite results – most of them (71%) consider for themselves acceptable option of incomplete family, as many respondents said "everything will depend on the situation", 29% do not consider this option acceptable.

In its formation, gender identity is based on sex and age characteristics and gender identity. Gradually it takes the leading role, being an important factor contributing to a person's entry into

culture and social space as a unique individual. In this connection, it is noteworthy that in this sample of subjects approximately equal numbers of girls and boys belong to the masculine type, therefore possessing traditionally masculine characteristics. In general, for teenagers the predominant (to a large extent) type is androgynous, i.e. characterized by a balance between masculine and feminine traits. According to S. Bam, this type has the greatest adaptability and flexibility of behavior.

Analyzing the results of the study of gender attitudes, it should be noted that the most frequent attitude in both samples was "independence". Such an attitude cannot be assessed as positive or negative, but it can indicate some insecurity and inability to harmoniously build relationships with the opposite sex. Quite a large percentage of girls and boys showed the "indifferent" attitude, 18% and 22%, respectively. Such a situation may reflect the presence of weak gender differentiation, a low level of comprehension of typical female and male traits. Of particular concern is the presence, albeit small, of a number of girls and boys with aggressive attitudes toward the opposite sex. Only a small percentage of young people have pronounced egalitarian attitudes concerning the distribution of roles in the family, and almost half of the respondents have ambiguous gender attitudes.

Thus, as a result of the analysis of the data obtained in the course of the survey, we identified several potential role positions in the structure of family relationships. However, in our opinion, the most important data are those concerning the problem of incomplete family, especially the fact that in this sample a large part of girls allow themselves the option of incomplete family in the future. The problem of ideas about gender roles and their realization, in our opinion, is directly connected with the crisis of family in the modern society that manifests itself in the low level of sex education of the younger generation, which, in turn, leads to difficulties of young people in forming the foundations of their own family and their unpreparedness for family life.

As boys and girls socialize, they absorb various environmental influences that are not always favorable. Therefore, the question of how to help them use the information they receive in a situation that concerns them personally becomes paramount. This approach should be reflected in all programs for supporting the formation of a mature gender identity and sex education. Such programs should correct young people's motives and attitudes rather than teach them, allowing them to make informed decisions and learn communication skills that allow them to develop more responsible behavior and attitudes. Realization of this approach provides formation of a healthy motivational and semantic sphere in relation to biological and psychological sex. This process must be systematic, consciously planned and carried out, assuming a certain final result of directed influence on the mental and physical development of a boy (man) and girl (woman) in order to optimize their personal development and activities in all spheres of life related to gender relations.

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Y. A. Shevtsova, S. S. Shchekudova

**THE RESEARCH OF THE PECULIARITIES OF GENDER GUIDELINES
OF MODERN TEENAGERS**

In the article the results of the diagnostic research of the peculiarities of gender guidelines of modern teenagers are considered and analysed. The data obtained in the study are considered, which

indicate the relevance of the problem of gender identity formation within the framework of modern education and upbringing, contributing to the successful socialization and adaptation of adolescents in the socio-cultural space.

The current state of society is very unstable, which in turn leads to changes in value and moral orientations, including in the sphere of relations between the sexes, there is a change of boundaries between traditionally male and traditionally female roles, natural institutions of socialization (family and children's community) are being destroyed, an aggressive information environment has a negative impact. All this affects the formation of adolescents as of full-fledged representatives of their sex.

Adolescents still lack information about the problems of the biological and social sexes. They receive most of the information on these issues from their peers or through the media. Many moral and ethical values are losing their relevance for the younger generation, the authority of the family is falling, the number of divorces, children living in single-parent families and social orphans is increasing. Studying all these features of the current situation makes it possible to find solutions to specific problems, in particular, understanding how to build a system of modern education and upbringing.

The most important factors in the creation of gender identity are social attitudes, roles and conventional requirements of sexual adequacy of behavior, which in turn are predetermined by the social situation at each stage of the development of society. There is a need to study gender identity and identify the features of the formation of gender attitudes.

Results of experimental psychological research.

In a broad sense, gender attitudes mean a stable system of relations to one's own and the opposite sex that has developed in the process of gender socialization. One of the most important factors influencing the formation of gender attitudes is the personal experience of relationships with people of the opposite sex, especially those that belong to the category of significant. Gender attitudes determine interpersonal relationships between men and women. Note that these attitudes are activated not only on the conscious, but also on the unconscious levels. Therefore, we used the method of studying personality with the help of graphic presentations – "Drawing of a man and a woman" by N.M. Romanova, which assumes the image of male and female figures to be examined. The study, which was conducted from April to October 2022, involved 494 respondents. Of these, 298 girls and 196 boys enrolled in grades 9-11 of secondary schools in Gomel. Our choice of this technique was due to the high level of projectivity in the study of gender aspects of personality actualization, which reduces the influence of the factor of social desirability and increases the level of reliability in the diagnosis of gender socialization features. The interpretation of the images allows us to identify the following gender attitudes concerning the system of relations to both sexes: cooperation, support, isolation, independence, indifference, attraction and aggression.

Table 1 – The results of the study for each type of gender attitudes

Type of gender installation	Girls		Young men	
	Number of people	Number %	Number of people	Number %
Cooperation	24	8	8	4
Support	21	7	16	8
Isolation	29	10	14	7
Independence	95	32	72	37
Indifference	53	18	43	22
Attraction	65	22	37	19
Aggression	9	3	6	3

It should be noted that the results in the samples of girls and boys have some differences. Girls are more likely to build relationships based on the type of gender attitude "cooperation" than boys

(Student correlation coefficient t = 2.34). A positive attitude of "support" was detected in a small number of representatives of both samples (t = 1.02). The presence of results corresponding to the type of gender installation "isolation" may indicate the existence of some problems in the field of relations with the opposite sex in these subjects. The formation of this attitude may be associated with a breakup of relationships or stress in the field of gender relations. This attitude was also revealed in a relatively small number of girls and boys (t = 1.68). The most common attitude in both samples was "independence", which may be characterized by some self-doubt on the one hand or self-reliance on the other (t = 2.01). A fairly large percentage of girls and boys demonstrated the attitude of "indifference". This situation may reflect the presence of weak gender-role differentiation in the subjects, a low level of comprehension of typical female and male traits. The differences between the male and female samples are small (t = 1, 72). The gender attitude "attraction" reflects the situation of interest and positive attitude towards persons of the opposite sex, which may be characteristic of 22% of girls and 19% of boys (t = 1.81). Aggression towards the opposite sex was detected in a small number of subjects, approximately in equal numbers in samples of girls and boys.

Gender roles are sets of distinctive characteristics that include personality traits, behaviors and attitudes defined by culture as corresponding to one or another gender. Usually, these notions of conformity are shared to a certain extent by most representatives of this culture. By adolescence and adolescence, young people already have largely formed ideas about gender roles. This largely determines the peculiarities of their behavior and building relationships with representatives of their own and the opposite sex, which becomes especially important at this age, when intimate and personal communication with peers becomes the leading activity. In the future, ideas about gender roles and gender attitudes formed at this age can most likely be implemented in the structure of family relations.

To study gender attitudes regarding the distribution of roles in the family, we used the questionnaire "Proverbs" by I. S. Kletsina, in which Russian folk proverbs collected by V. I. Dahl were used as statements. The methodology is designed to determine the degree of susceptibility of subjects to traditional ideas about the division of roles in the family, the results may indicate the gender attitudes of the subjects. The questionnaire includes 15 statements that the subject should evaluate based on his degree of agreement with them. The result is evaluated by points, depending on the number of points scored, the subject can be assigned to one of three groups of attitudes: traditional, egalitarian or indefinite attitudes. The results of this study are listed in Table 2.

Table 2 – The results of the study for each type of gender attitudes

Gender attitudes regarding the distribution of roles in the family	Girls		Young men	
	Number of people	Number %	Number of people	Number %
Traditional	98	33	121	62
Egalitarian	30	10	10	5
Undefined	170	57	65	33

The data in Table 2 show that the majority of young men have traditional attitudes about the distribution of roles in the family. Only a small percentage of young people have pronounced egalitarian attitudes, and a third of respondents have vague gender attitudes. Most of the girls showed results indicating vague gender attitudes, noticeably a third adheres to traditional attitudes and only one in ten has egalitarian attitudes. The results of the study indicate that boys, to a greater extent than girls, adhere to traditional views on the distribution of roles in the family. Almost half of young people are undecided in their gender attitudes.

Using Spearman's rank correlation coefficient, we compared the results of a diagnostic study of gender attitudes regarding the distribution of roles in the family in boys and girls. Traditional attitudes prevail in young men (r = 0.72). As for egalitarian attitudes, a weak positive correlation was noted

(r = 0.34). The obtained value (r = 0.67) indicates the predominance of uncertain gender attitudes in the sample of girls.

Brief conclusions on the work.

In conclusion, it is necessary to summarize some of the results of the work done, which we regard as a prospect for further experimental research and a direction in practical work with adolescents.

Adolescence is characterized by changes in the structure of the body and new experiences related to their gender identity and gender roles. The unevenness of physiological and psychosocial development encourages a teenager to overestimate and rethink his gender identity in all its manifestations. Also, at this age, gender attitudes are concretized and consolidated, which influence the ideas about the content and performance of gender roles.

Analyzing the results of the study of gender attitudes, it should be noted that the most common attitude in both samples was "independence". Such an attitude cannot be regarded as positive or negative, but it may indicate some self-doubt and inability to harmoniously build relationships with the opposite sex. A fairly large percentage of girls and boys demonstrated the attitude of "indifference", 18% and 22%, respectively. Such a situation may reflect the presence of weak gender-role differentiation in the subjects, a low level of comprehension of typical female and male traits. Of particular concern is the presence, albeit small, of a number of girls and boys with an aggressive attitude towards the opposite sex. Only a small percentage of young people have pronounced egalitarian attitudes regarding the distribution of roles in the family, and almost half of the respondents have vague gender attitudes.

The problem of ideas about gender roles and their implementation, in our opinion, is directly related to the crisis of the family in modern Russian society, manifested in the lack of proper attention to the issues of sex education of the younger generation and the problem of gender identity formation, which in turn leads to difficulties for young people in forming the foundations of their own family, unpreparedness for family life and problems in self-realization as a male or female representative.

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Conclusion

The data obtained in the study indicate the relevance of the problem of gender identity formation within the framework of modern education and upbringing, contributing to the successful socialization and adaptation of adolescents in the socio-cultural space. In this context, one of the most important tasks of the school and the psychological service is the work aimed at the formation of a healthy and integral personality of a woman or man who is able to adequately realize and experience their physiological and

psychological characteristics, in accordance with the social and moral norms existing in society, which in the future will not only create a full-fledged family, but also support its integrity.

The introduction of the category "gender" into the pedagogical process is of fundamental importance, since school is one of the most important agents of socialization, including gender. The development of gender education at school will allow us to form the idea that gender is not a basis for discrimination based on any criterion or indicator, that it enables a woman and a man to enjoy human rights in the entirety of this concept, provides freedom to choose ways and forms of self-realization at the level of their unique individuality.

The traditional gender-role socialization of girls and boys, in which the school actively participates, continues to reproduce patriarchal stereotypes of gender interaction in public and private spheres. These stereotypes are increasingly in conflict with the real transformations of gender relations in modern Russian society, becoming an obstacle to the formation of flexible life strategies, the realization of personal potential, the disclosure of individuality and self-actualization.

The school should give students the opportunity to develop individual abilities and interests, regardless of belonging to one or another gender, to resist traditional standards regarding the sexes. The main efforts should be aimed at developing a healthy and moral attitude to the problems of gender and gender in the younger generation, and its main result is the ability to correctly solve real problems arising in life related to this sphere of life. To do this, it is necessary to develop and implement various correctional and developmental programs and programs to support the formation of gender identity and sex education in the pedagogical process. Such programs should adjust the motives and attitudes of adolescents rather than teach them, which will allow them to make conscious decisions and learn communication skills that allow them to develop more responsible behavior and relationships. The implementation of this approach ensures the formation of a healthy motivational and semantic sphere regarding biological and psychological gender.

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A. A. Smyk

PROFESSIONAL SELF-AWARENESS OF THE INDIVIDUAL FROM THE POSITION OF THE ACMEOLOGICAL APPROACH

In this article, the idea of self-consciousness is explored in psychology. Various approaches of domestic and foreign scientists to this problem are considered in more depth. The article highlights and describes typical features of the concept and structure of self-consciousness of a professional personality.

The problem of self-consciousness in modern psychology is revealed in such categories as "I", "self-image", "self-esteem", "attitude to oneself", "self", "I-concept", "self-image". The authors of some approaches consider self-consciousness as part of the "I-concept", while others identify these concepts. In this regard, today there is no single view on the essence of the concept of self-consciousness.

In the process of expanding the social experience of a specialist, his desire to maintain competitiveness allows him to be at the center of professional changes that increase the importance of developing professionalism. Professional self-awareness in the system of self-realization of the personality of a psychologist becomes particularly relevant in connection with the role of this specialist in modern society. This determined the choice of the research topic: "Professional self-awareness in the system of self-realization of the personality of a psychologist."

Analyzing various theories and approaches on the subject of the phenomenology of self-consciousness, it should be noted that foreign and domestic authors consider this concept from different sides. In foreign psychology, self-consciousness is revealed within the framework of psychophysiological and associative approaches (J. S. Mill, K. Perls, V. Wundt); in the context of studying the structure of personality (U. James, Z. Freud, E. Erickson, K. Rogers, K. Horney, G. Allport, A. Maslow, R. May, K. Cooley, G. Mead, B. Burns); in the mechanisms of formation and content of various self-images (K. Rogers, S. Cooley, R. Burns, J. Mead, H. Kohut, E. Ziegler, M. Rosenberg).

W. James considers self-awareness with social aspects in mind. Self-consciousness is dual - partially cognizable and partially cognizant, partially object and partially subject; it is necessary to distinguish two sides in it, one of which he calls personality, and the other "I" [1]. It should be noted that in the structure of self-consciousness, James identified two components "I" (the knowing "I") and "I" (the empirical "I"). The author notes that the "I" includes three components: the "material self" – one's own body, clothes, property; the "social self" – how others recognize this person; The "spiritual self" is a set of mental abilities and inclinations [2, p. 297].

From the position of psychoanalysis Z. Freud applies a typological model of personality organization. According to this model, he distinguishes three levels in mental life: consciousness, preconsciousness and the unconscious. The scientist notes that the level of consciousness consists of sensations and experiences that a person is aware of at a certain point in time. Z. Freud insisted that only a small part of mental life (thoughts, perception, feelings, memory) falls into the sphere of consciousness. Whatever is happening in a person's mind at a given time, it should be considered as the result of a selective sorting process, largely regulated by external signals. In addition, certain content is realized only for a short period of time, and then quickly descends to the level of the pre-conscious or unconscious as the person's attention switches to other signals. Consciousness itself covers only a small percentage of all the information stored in the brain [3].

K. Horney, from the position of neo-Freudianism, deepens the understanding of the structure of self-consciousness. It defines three "self-images" in its structure: "empirical self" - a community of spiritual and bodily qualities of a person, realized in a certain behavior; "ideal self" – due to the irrational imagination of the individual about himself; "real self" – internal, initial force, "unique personality center" [4].

Within the framework of humanistic psychology, K. Rogers identifies one of the central systems – the category of the self. He emphasizes the connection of two systems – the self (Self-concept) and the organism. They can be both in opposition to each other and in harmony. In the case of non-congruent relationships, poor adaptability to the environment is formed, manifested in the rigidity of the organization of the self, loss of contact with the actual experiences of the body and a sense of tension [5].

All of the above theories are well-founded and have been repeatedly confirmed. But it is worth remembering the fundamental analysis of human self-consciousness and functioning within the framework of existential psychology. R. May argued that the biggest problem of a person is reconciliation with what he called the "human dilemma". "This dilemma is our ability to self-awareness, something that arises from a person's ability to feel both a subject and an object at the same time" [6, p. 9]. At the same time, R. May argues that becoming a person means going through several stages of self-awareness. The

first is the stage of innocence of the infant until the moment of awareness. The second is the stage of rebellion, when a person tries to become free in order to give rise to his own inner strength. The third is the stage of ordinary self–awareness, when a person can to some extent see his mistakes, as well as correct his prejudices, use feelings of guilt and anxiety as an experience to learn, and make his decisions with some degree of responsibility. And finally, most people experience the fourth stage quite rarely – the stage of creative self-awareness. This stage is clearly manifested when someone suddenly grasps the whole problem – suddenly, seemingly out of nowhere, an answer appears over which in a dream or in dreams, when thoughts are completely different [7].

Representatives of the interactive school Ch. Cooley, J. Mead believe that the human "I" is initially social and is formed during social interaction. The intreactionists point out that the self-awareness and value orientation of the individual, as it were, mirror the reactions to her surrounding people. Under the influence of the mechanism of mutual enrichment, the formation of the "I-concept" of the individual takes place [8].

For C. Cooley, self-consciousness is associated with a kind of "mirror self" that arises in a person's consciousness as a reaction to feedback received from other people. This information contributes to the formation of a person's self-representation and self-esteem and ultimately determines the development of his self-concept [9]. In addition to actual stimulations and reactions and their memorable images, which must include organic sensations and reactions from which "me" is formed, a significant part of our conscious experience – in fact, all of which we call self–consciousness – is accompanied by an internal reaction to everything we do, say or think [10, p. 39].

Thus, the works of foreign researchers show that self-consciousness has a different essence and structure. In ontogenesis, the formation of self-consciousness goes through certain stages that are associated with the age stages of human development. At each stage of the development of self-consciousness there is a certain specific level of self-knowledge, the ability to self-esteem and self-regulation of activity and behavior.

In the psychology of the Soviet period and Russian psychology, there is also no single approach to the definition of self-consciousness. V. S. Mukhina, A. G. Spirkin, I. I. Chesnokova, A. V. Krieger reveal the concept of self-consciousness through its essence and structure. B. G. Ananyev, L. S. Vygotsky, S. L. Rubinstein, L. I. Bozhovich designate the foundations of the development and formation of self-consciousness V. V. Stolin, I. I. Chesnokova, A. B. Orlov, I. S. Kohn define the level structure of self-consciousness. In addition, special attention is paid to domestic scientists, I. I. Chesnokova, A. V. Zakharova, L. S. Vygotsky, S. R. Pantileev, V. V. Stolin, pay attention to the nature, structure and mechanisms of self-esteem and self-attitude.

Thus, L. S. Vygotsky, along with primary (hereditary) conditions and secondary (environment), identified tertiary (reflection, self-formation) arising on the basis of self-consciousness: "Here a new actor enters the drama of development, a new qualitatively peculiar factor – personality ..." [11, p. 237]. The author considered self-consciousness as a genetically higher form of consciousness, as a stage of consciousness development prepared by the development of speech, voluntary movements and the growth of independence. L. S. Vygotsky distinguished the following components in the structure of self-consciousness: accumulation of self-knowledge by a person; expansion and deepening of this knowledge; awareness of oneself as a whole; further development of one's own individuality; formation and development of moral criteria of self-esteem; development of individual characteristics of self-consciousness [12].

The most promising approach to the study of the phenomenon of self-consciousness is the procedural approach. Thus, I. I. Chesnokova defines self-consciousness as a complex and multilevel process, individual in time, which she conditionally divides into two levels. The first level manifests itself through various forms of self-correlation with other people, and with such self-knowledge, a person, for the most part, relies on external moments, including himself in a comparative context with others. The main internal technique of such self-knowledge is self-perception and self-observation. And at the second level, a person operates with ready-made titles about himself, to some extent formed, received at different

times and in different situations. The main internal techniques of this level of self-knowledge are introspection and self-reflection, which rely on self-perception and self-observation [13].

Thus, analyzing the peculiarities of the development of the phenomenon of self-consciousness among Russian authors, we note that their scientific positions are similar to the consideration of the "self-image" in the framework of the study of self-consciousness; the description of the "self-image" through the levels and stages of its formation. At the same time, the analysis of the approaches we have identified in the study of self-consciousness allows us to determine the complexity of this problem, its diversity.

For professional self-awareness, the concept of self-awareness of the individual is generic, therefore, as a rule, researchers in the study of professional self-consciousness is based on the studied features, properties, structure and functions of self-consciousness of the individual and is looking for a special specificity of its content and manifestation in representatives of certain professions [14]. A psychological neoplasm can serve as an indicator of the manifestation of professional self-consciousness, integrating the content-instrumental components of professional self-consciousness and a set of socio-psychological characteristics of the individual that determine stable models of professional behavior of specialists and their achievement of a certain level of success [15]. Thus, professional self-consciousness as a part of personal self-consciousness is considered by such domestic authors as A. K. Markova, L. M. Mitina, A. A. Derkach, O. V. Moskalenko, I. V. Vachkov, B. G. Parygin, V. G. Maralov, P. A. Shavir, V. G. Katashev and others.

In the broadest sense, the essence of professional self-awareness is considered in the works of A. K. Markova. She considers professional self-awareness as a complex of structural components, which include: a person's awareness of norms, rules, models of his profession as standards for realizing his qualities; awareness of these qualities in other people, comparing himself with some fictional or specific colleague; taking into account the assessment of himself as a professional by colleagues; evaluation of his individual sides – self-understanding, as well as emotional attitude and self-assessment. Professional self-awareness is based on professional self-esteem [16].

In her works, S.V. Kosheleva comes to the conclusion that professional self–awareness is the awareness and holistic assessment by a specialist of himself, the process and the result of his professional activity [17]. The author suggests the following components for the analysis of professional self-awareness: self-image, content image, activity conditions image, goals and means of activity [18].

It should be noted the structure and content of professional self-awareness developed by A. A. Derkach and O. V. Moskalenko. In the structure of professional self-awareness, they identified and described the following components: cognitive, realized in self-knowledge; motivational, realized in self-knowledge; emotional, realized in self-understanding; operational, realized in self-regulation [19].

In the study of T. L. Mironova, professional self-consciousness as a kind of socially specific self-consciousness is a complex personal education that is formed under the influence of the professional environment and the active participation of the subject in professional activity. Professional self-awareness through the motives of a professional's personality is connected with real professional activity and signals the meaning of the "I" of a professional [20].

It should be noted the views of V. S. Merlin, who identified the following components in the structure of professional self-consciousness: consciousness of his identity; consciousness of his own "I" as an active, active principle; awareness of his mental properties and qualities; a certain system of socio-moral self-assessments [21]. The author emphasizes that all these elements are functionally and genetically related to each other, but they are not formed simultaneously [22].

Thus, most foreign and domestic psychologists agree that professional self–awareness is an attitude towards oneself in the professional and labor sphere. Like any attitude, self-awareness has a cognitive, affective and behavioral substructure (I am understanding, I am attitude, I am behavior). Consequently, the key components of the structure of professional self-awareness are components that characterize the cognitive, affective, behavioral levels and processes of professional identification as key mechanisms of integration of the "professional self".

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X. Sun

THE INFLUENCE OF WESTERN MUSIC EDUCATION
ON THE TEACHING OF NATIONAL MUSIC IN CHINA

The article examines the influence of Western musical trends in music teaching in the context of teaching national music at universities in China. The author comes to the logical conclusion that the Western system of music theory has contributed to the development of traditional music in China and laid the conceptual and methodological foundations of music education in Chinese universities.

The importance of music for human development has long been recognized in the field of education. The influence of music is especially strong on the development of cognitive and social abilities of children. Therefore, music education is usually included in school curricula around the world. In recent years, in connection with the development of information and communication technologies (ICT), the methods of teaching music in general education schools in China have undergone noticeable changes. The Ministry of Education of China is beginning to gradually introduce information and communication technologies into the educational process, hoping that this will have a positive impact on music education in the country.

This article explores the influence of Western music systems on traditional Chinese music education. The relevance of the research topic is due to the need for a comprehensive study of the use of Western music theory in the system of modern higher education in China in order to preserve the traditional musical culture. In the 20th century, when the Western European music system was integrated into the teaching of music disciplines in China, the national system for the professional training of teachers of traditional music underwent some changes. The Western system of music theory formed the basis for the teaching of most disciplines related to the study of music in Chinese universities, which led to a weakening of students' study of national musical culture. An attempt was made to study the development of the system of training future music teachers in higher educational institutions in China, to identify the main problems that exist in teaching traditional music in modern universities.

The author argues that improving the methods of teaching traditional Chinese music based on Western systems of music theory and improving the ability of university teachers to teach traditional music culture are necessary factors for the further development of traditional Chinese music culture and improving the quality of training of future music teachers.

Traditional Chinese music refers to musical and cultural categories that have been created in China over the centuries and have largely survived to the present day, as well as those that have been preserved and developed as a result of the arrival of ethnic minorities and foreign peoples in the country. The uniqueness of the tradition is recognized all over the world. According to UNESCO, there are 56 ethnic groups and 55 minorities in China that have preserved their local ethnic musical traditions.

In the 20th century, China adopted the experience of the Western music system and introduced the Western model of music education, which became widespread in schools and preschools. In the socio-historical conditions of that time, this integration played an important role in the development of Chinese music education. However, gradually the introduction of Western models of music education, originally intended for the development of Chinese music education, began to turn into a copy of Western models. In this regard, Chinese scholar Professor Guan Jianhua asks: "What is the justification for using Western basic music theory and four pieces of music as the basis for teaching music in Chinese schools for more than a century, and also as the basis for studying traditional Chinese music? Is it because it is scientific, or because it has universal grammatical characteristics inherent in all the national music of the world? When we take the study of the basic musical theory

of the musical system as the basis for the study of traditional Chinese music, the "grammatical sovereign identity" of the indigenous traditional music is erased, and the basis of thinking and musical behavior of the musical subject is replaced".

As of 2021, there were about 245,000 primary and secondary schools in China and about 45,000,000 students. With the rapid social, economic and cultural development over the past four decades, music education in China has made great progress. Currently, elementary and middle school students are required to attend 1-2 music classes per week. These classes should include learning to play traditional musical instruments, traditional singing and musical notation. However, in practice, most classes focus on traditional singing.

Moreover, the content and form of music education in public schools in China largely depend on the competence of music teachers, parental support, and the economic development of the region. For example, in wealthy urban areas, many schools have their own choirs, ensembles, or dance groups because these schools can hire well-trained music teachers, and parents can afford to send their children to private lessons after school to learn how to play traditional music. tools.
In rural areas, by contrast, the high cost of music education and the lack of qualified music teachers combine to make it difficult to provide weekly music lessons, let alone regular instrument lessons. Thus, the desire for music education prevails, but contextual constraints cause significant differences between schools, as well as between urban and rural areas, which makes it difficult to achieve the learning goals of music education in practice. In China, music teachers are usually trained in four types of educational institutions: conservatories of music, music schools at ordinary universities and general education universities, teachers' colleges and specialized educational institutions. As a rule, music teachers in primary or secondary schools are mainly trained in type 2 or type 3 institutions, with type 1 training music professionals and type 4 serving the preschool level. The traditional way of teaching folk music is gradually changing. The modern use of multimedia and computer technologies in music education enhances the effect and removes some of the limitations in traditional music education. This allows students to learn folk music more effectively and appreciate its charm through modern teaching methods.

As an important base for traditional music education, teacher training colleges and universities should not only improve their students' musical knowledge, but also develop their personal interest in broadcasting Chinese traditional music. However, at present, the Chinese music education system is biased towards the Western music system, which is not conducive to the development of traditional music in China. It is necessary to outline ways for the further evolution of Chinese traditional music, which will be based on Western systems of music theory.

The inextricable link between Western music systems and the development of traditional Chinese music education. The Western system of music education began to take root in the Chinese education system with the active use of modern Western songs in the practice of teaching music at school. Subsequently, the Western conceptual approach to music education was also borrowed. Professor Guan Jianhua, in his article "Reflections on How Traditional Chinese Music Exists in Higher Education," notes: "The Western system of musical concepts and notation of basic music theory has become a solid cornerstone or musical grammar for introduction to music education. With such a modern grammatical basis for writing planned music, there is also a universal scientific or disciplinary basis for perceiving and understanding traditional Chinese music. Because of this, the teaching and performance of traditional Chinese music can hardly break through the shackles of modernizing musical writing".

In the real educational process, the scientific and systemic nature of the Western approach to teaching music theory is easier for students to assimilate. However, there are objective factors that limit the possibility of studying traditional Chinese music in its entirety. Such factors are: a short period of student training, a small number of classroom hours for music courses and an imperfect system of education. Students do not have enough classroom time to fully study the course on traditional Chinese music after systematically studying the basics of Western music theory, and as a result, most students finish their studies with only a partial understanding of the basics of traditional Chinese music.

Western music theory as a practical discipline presents the methods and concepts that are used in the creation and performance of music. So, the main elements in the system of music education are: rationality, emotions and artistry. It can be concluded that initially the emphasis is on objective facts as the basis for analyzing the internal connection between things and their tendency to possible changes (rationality), then the awakening and free expression of individuality (emotions), and, finally, its sublimation into "artistry" with creative force.

Since ancient times, China has been under the influence of Confucianism, the essence of which is the need for a person to have generous love within himself, consciously follow social order and strive for a harmonious life. The history of the development of traditional Chinese music takes into account the many peoples inhabiting China, the diversity of musical forms, and the existing number of genre modifications of the same musical form. The important point is that traditional Chinese music is written intentionally and is mostly transmitted orally from teacher to student, so the notation is only approximate, and as a result, the student cannot read the score and understand the whole musical intent. This is the reason for the introduction and rapid spread of Western notation in China. The notation used in traditional Chinese music is mainly in the form of pitch, time, rhythm, measure, and tempo. This notation can express the features of traditional Chinese music and has many special technical notations in instrumental and vocal performance notation, which had a positive impact on the development of traditional Chinese music and provided a more convenient and scientific approach to music teaching.

Improving the teaching of traditional music in colleges and universities in China. Musical education means not only the professional mastery of performing skills and the assimilation of musical theory, but also the use of musical education as a means of training and education. The three main Western methods of mass musical education, namely: the method of E. Jacques-Dalcroze, the method of Z. Kodaly and the method of K. Orff, are based on emotions, experience, feeling and improvisation, thus emphasizing that Western musical education attaches great importance to the development aesthetic aspect in education. In traditional Chinese music education, there are some problems with the separation of teaching and upbringing, for example, during the lessons, the teacher mainly demonstrates, and the students act as listeners and rarely express their will. The assimilation of program knowledge is the goal of learning, while ignoring the sensory musical experience and the free creativity of students. For this reason, music education in higher education institutions should be optimized by changing the components of the learning process: the teacher's activity should allow the involvement of musicians as assistants, and the student's learning activity itself should become the center of the learning system.

Because traditional Chinese music culture operates far outside of schools, it is difficult for students to access it during their studies. Therefore, it is advisable to invite folk music groups to schools and universities so that students can get acquainted with the living folklore tradition and feel the unique charm of Chinese traditional music.

Educational materials are an important learning tool, but in most colleges and universities they are not accompanied by audiovisual content, without which traditional music education loses its special flavor. There are many ways to solve this problem: teachers can replace teaching materials with more complete ones or supplement them with audiovisual materials on their own. In addition, they can use the resources available in the classroom to organize flexible learning, such as impromptu piano playing in the classroom or dramatizations for students to actively involve them in the learning process.

The Western system of music theory has contributed to the development of traditional music in China and laid the conceptual and methodological foundations of music education in Chinese universities. However, in the development of modern Chinese traditional music, there are problems such as the marginalization of traditional music culture and the neglect of the teaching of traditional music in favor of Western methods in university music education. It is to be hoped that in the future, the process of teaching music disciplines in higher education institutions in China will optimize the concepts and teaching methods to spread and perpetuate the traditional musical culture.

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UDC 52(079)

G. Yu. Tyumenkov

ON THE BASIC SOURCE OF VIDEO INFORMATION
FOR THE PREPARATION OF PARTICIPANTS IN OLYMPIADS
IN ASTRONOMY AND ASTROPHYSICS

The article is devoted to the problem of high-quality training of participants in the international and republican Olympiads in astronomy. The importance of using video materials in this process is shown. Recommendations for the best sources are made.

The method of training of participants in Olympiads in astronomy and astrophysics, and these are, as a rule, students of the graduating classes of lyceums, gymnasiums and schools, students of secondary specialized educational institutions, requires the active use of video information at all stages of the process. It is clear that this is due to both the specifics of the discipline being studied and the age of the audience.

The use of video materials in preparing students for the Olympiad and in the educational process as a whole is the most intensive form of education. This helps to increase the attention of students, arouses interest in the discipline being studied, makes the process of transmitting educational information more diverse, activates the thinking process of students, makes it possible to visualize those phenomena and processes that cannot be demonstrated in other ways, especially when studying astronomy. In addition, learning using video materials becomes lively and interesting, increases students' motivation, develops imaginative and logical thinking, involving several channels of perception at the same time, contributes to the rational distribution of time in the classroom and contributes to the growth of students' progress in the subject and the level of training of participants in Olympiads.

Educational videos are a selection of educational videos filled with relevant theoretical material, showing the directions of its practical application. They allow you to organize various forms of educational work in an interactive format. The video must be introduced into the learning process, explaining to students what the purpose of the show is, what they should understand in the process of watching. Videos need to be analyzed. This is the task of the teacher - to teach students how to work analytically with video material. Video tutorials help to automate all the main stages of learning – from

the presentation of educational material to the control of knowledge. At the same time, the educational material is translated into a bright, exciting multimedia form with extensive use of graphics, animation, interactive, sound effects and voice accompaniment. Face-to-face learning using video tutorials is gradually becoming a mandatory component of the educational process. And, of course, this technique is extremely effective for self-preparation at various levels of subject Olympiads.

After a thorough study of all kinds of sources, my colleagues, members of the jury of various levels of the Olympiad in astronomy and methodologists, and I came to the unanimous opinion that one of the courses in The Great Courses series, namely, the textbook *"Understanding the Universe: An Introduction to Astronomy"* [1]. Its author is a professor at *the University of California at Berkeley, Alex Filippenko*, a well-known scientist and popularizer of science.

What *"Understanding the Universe: An Introduction to Astronomy"* is it? This is an educational complex containing 96 video lectures with a total duration of 48 hours, placed on 16 DVD discs. As well as 2275 pages of related textual information collected in 4 volumes of scientific and methodological comments and a one-volume course guide.
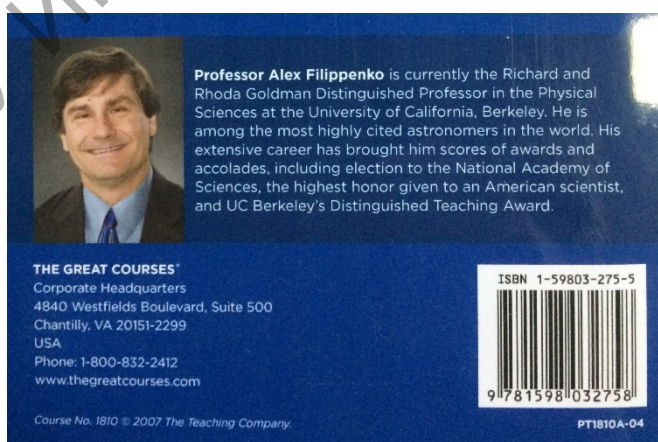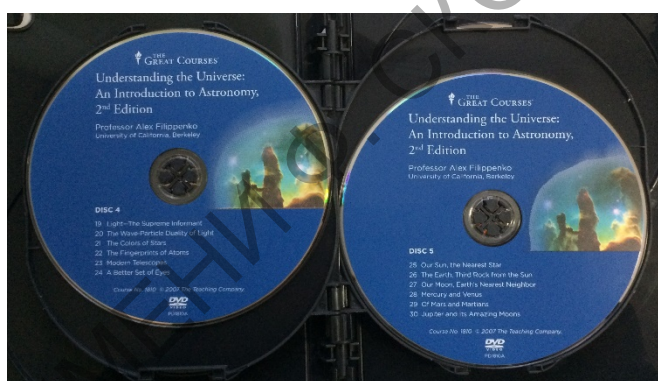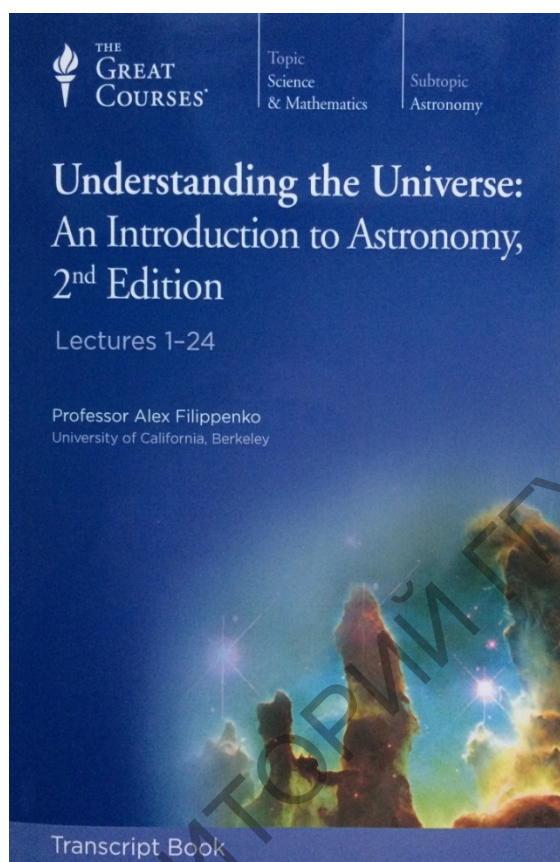
A survey of more than 100 participants in the final stage of the Republican Olympiad in Astronomy and a selective survey of 28 participants from 13 countries of *the International Olympiad in Astronomy and Astrophysics (IOAA)* showed that this manual played a crucial role in their preparation. The quality of the presentation and visualization of the educational material related to the sections "Celestial Mechanics" and "Cosmology and extragalactic astrophysics" was especially noted.

Of course, this series of video tutorials will be extremely useful when studying other disciplines. Therefore, we consider it our duty to give brief information about it. The Great Courses (www.thegreatcourses.com) is a series of audio and video courses on academic disciplines at the undergraduate level of study at the university, which are produced and distributed by The Teaching Company, an American company based in Chantilly, Virginia, USA. The company is the nation's leading developer and marketer of high-quality student courses that can be listened to through fixed audio or video devices, mobile apps, or discs.

The company's media production is unique in that it features materials prepared by eminent professors from various countries. They are written specifically for the convenience of students, and are based on the experience gained by the authors throughout their lives. As of 2018, The Great Courses offers approximately 19,000 lecture courses. You can work with them using applications for *iPhone*, *iPad*, *Android*, *Roku* and *Kindle Fire*, as well as using DVD, CD. Topics cover the natural sciences, mathematics, history, philosophy, literature and other important areas of human activity. Some titles are developed in collaboration with partners such as National Geographic or The Smithsonian.

In addition to sources of video information, I recommend the quality textbooks [2; 3] available in the public domain and the open access.

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Y. Wei, A. V. Sazhyna

RHETORICAL DEVICES IN ARTICLE TITLES OF WECHAT PUBLIC ACCOUNTS FROM THE PERSPECTIVE OF RELEVANCE THEORY

This article is devoted to the rhetorical devices used in the article titles of WeChat public accounts from the perspective of Relevance Theory. In today's China, WeChat public account has played a significant role in posting news updates, publicizing latest ideas and promoting reader-author communication. It is known that titles take an important position in WeChat articles. Titles are vital for WeChat articles, through which readers are interacting with the author while reading them. In this paper, the author analyzes the requirement, formation and functions of rhetoric devices from the perspective of Relevance Theory to prove that rhetoric can improve the expression effect of article titles of WeChat public accounts.

With the popularity of mobile phones, WeChat public accounts have become a crucial way for the development of information dissemination. The public can quickly obtain all kinds of information they are interested in through this convenient way. Due to the limitation of layout, the title and text of WeChat articles do not appear on the same board, and the title can be accompanied by relevant pictures. When the title is extraordinary enough to attract the audience's attention, the audience will click on the link to read the full text. Using rhetoric devices can help to create vivid and attractive titles. In attempt to apply rhetoric devices properly, it is necessary for us to understand the requirement, formation and functions from the Relevance Theory.

In 1986, Dan Sperber and Deirdre Wilson, based on cognitive theory, put forward Relevance Theory to explore the issue of discourse communication. The relevance of discourse depends on two factors: first, cognitive/contextual effects. The second is cognitive/processing effort [1, p. 270]. The relationship between the three can be expressed as: relevance=cognitive effect/processing effort [2]. Cognitive effect refers to the change of the receiver's old mental representation and belief of the world caused by new information. There are three situations of change: first, the new information

strengthens the old cognition of the receiver; Second, new information and old cognition contradict each other, and new cognition negates old cognition; Third, new cognition is generated under the interaction of new information and old cognition. The greater the cognitive change brought by information, the higher its relevance. The greater the cognitive effort required to process information, the lower its relevance. Therefore, inputs with significant impact and easy to process will be considered highly relevant [1, p. 46–49].

Based on Relevance Theory, the current research mainly focuses on news headlines, analyzing their expressive ways of explicit stimulation and interpreting their rhetorical devices. For example, Chen Huiling pointed out that the explicit stimuli in Tencent's social news headlines are usually expressed as numbers, suspense setting, metonymy, etc. [3]. However, it is assumed that more rhetoric devices can be found and analyzed.

The relevance of headline rhetoric is in direct proportion to the context of article titles, and in inverse proportion to the efforts of the audience. The stronger the degree of relevance is, the more direct the author's discourse will be, and the less brain power will be consumed in cognition, and the less cognitive load is brought to the listener; The weaker the relevance is, the more implicit the author's words are, the greater the mental power is consumed, and the greater the cognitive load of is brought to the listener.

(1) Be adapted to the theme. According to Relevance Theory, the rhetorical devices vary in the types of news. Rhetoric devices such as parallelism and rhetorical questions can be applied to the article that needs to express strong emotions; For entertainment news, which are humorous and relaxing, homo-phonic puns is welcomed; As for literary and artistic articles, renovation and parody can be used, which are elegant and unique. It is necessary for us to be adapted to the theme.

(2) Be guarantee about the truth. The core of news is truth, and the general title must also be convincing. Therefore, when using rhetorical devices for headlines, do not overstate or fabricate, or the understanding of the audience will be different from the truth of the news, which will lead to unpredictable consequences.

(3) Be easy to understand. The news title shows the outline of the article, and the public can have a quick understanding of the general content of the news at a quick glance. Therefore, the news title should be close to the people's life and easy to understand, as well as attaching importance to the news value, conforming to the main purpose of the news, and adapting to the cultural ideology of today's society.

Examples of Relevance Theory used to analyze rhetoric devices in the article titles of WeChat public accounts.

(1) Simile & Metaphor. Simile is a rhetoric device that tenor and vehicle appearing in a sentence simultaneously, with symbols "like", "as if", "as" etc. The rhetorical effect is that it is concise and lively, and it is easy to visualize, concretize and popularize the things described. For instance: Title: Love for heroes is like a tide: A couple of teachers tried their best to save their lives in order to protect their students from 10 gangsters. This case uses the tide as a simile for love, which vividly shows the love and care of social groups for heroes who fight against gangsters and give their lives to save students' lives, and also makes readers understand the power of justice and love; This kind of emotion is like a surging tide, which has a strong resonance in people's hearts. When it comes to metaphor, it creates implicit comparisons without the express use of "like" or "as". Metaphor is a means of asserting that two things are identical in comparison rather than just similar. Its tenor and vehicle are closer than "similarity", which is further than simile. The rhetorical effect of directly describing tenor as a vehicle is more positive than that of simile, and the similarities that are strongly emphasized are more prominent. Take the following title as an example: Charging: a double-edged sword pointing to the market. A double-edged sword is used to compare the two sides of the influence of fees in the market – if reasonable fees are charged, it will be conducive to the stability of the market order. Unreasonable charges will affect the normal operation of the market mechanism. This is an annotated metaphor. Replacing the figurative word "is" with a colon is concise, concise and vivid.

According to Relevance Theory, whether it is a simile or a metaphor, discourse is not directly presented, and readers have to generate reverie and understand a series of hidden meanings beyond the surface. The vehicles "tide" and "double-edged sword" are the core information in the titles. When you read these words, you will subconsciously associate this information with the tenors "Love" and "Charging", arousing a series of self-interpretations, and then draw relevant logical conclusions by yourselves. Most of the audience have seen "tide" and been well aware of "double-edged sword". The emotional understanding of these two words may far exceed that of "Love" and "Charging", which triggers a series of associations in readers' mind. These are what the authors are hoping.

(2) Personification. Personification refers to the personification of inanimate objects with human language, actions, characteristics and thoughts in order to meet the needs of expression. According to Relevance Theory, the contextual effect produced by the use of anthropomorphic rhetoric in the title is the way that new and old information interact with each other to produce a new contextual meaning. Here is an example: "The construction of Chebei Expressway is a 'slowcoach'". The title said that after the Chebei Expressway in Jiujiang was put into use, a sound-proof wall had to be installed, and the installation work was carried out in the daytime, which led to the queuing of vehicles on the expressway, resulting in serious traffic congestion. The 10-minute journey turned into 1 hour's torture. Chebei Expressway has no personal characteristics, but the title personifies it as a slowcoach. According to Relevance Theory, the audience's thinking line when reading this title is as follows: ①Expressway has no character (encyclopedia knowledge); ②But the Expressway may be congested (encyclopedia knowledge); ③Drive slowly on the road (logical information);④There are many reasons for congestion, most of which are man-made (encyclopedia knowledge);⑤Construction will cause congestion (encyclopedic knowledge);⑥Construction and maintenance should be carried out at the wrong time to reduce congestion (logical conclusion).

The content of the title seems to be contrary to the background knowledge context of readers, but because the information of ①and②can produce a new understanding, that is, the content of③, which can gradually deduce the true intention of the title, that is, the logical conclusion of ⑥. This inference is related to the congestion caused by construction of the expressway. In this way, the encyclopedic knowledge and communication context in the audience's mind are constantly changing, expanding and producing, both the old information and the new information deduced from the old one. As for the effect of the title, the readers, attracted by the hilarious title, deduce from the relevant information, and finally draws the conclusion.

(3) Exaggeration. Exaggeration is to obviously expand or narrow a certain aspect of the quality or characteristics of the objects reflected in the article titles with the help of imagination, so as to deepen or expand readers' understanding of these objects, which is unexpected and impressive. For example, "A pupa is killed in winter and ten thousand moths are lost in spring". This is an article that reflects the collective digging of eggs by citizens. When readers see this title, the process of understanding is as follows: ①One pupa will not produce ten thousand moths (encyclopedia information); ②Even if a pupa is destroyed, there will not be less than 10,000 moths next spring (logical information); ③If a pupa is killed in winter, there will not necessarily be fewer moths next year. (logical information); ④This is the news (encyclopedia information) calling for killing eggs; ⑤Killing eggs can greatly reduce moths in the coming year (encyclopedia information); ⑥Everyone should take an active part in this activity, so as not to suffer from insects and moths (logical conclusion).

Based on Relevance Theory, ②is contrary to the content of news headlines, which is obviously not the intention of news writers. However, according to ④ and ⑤, the intention of the title is obvious, and at this point, the audience can deduce the conclusion of⑤. Exaggeration is a rhetorical device that deviates from the facts, but it is this deviation that does not conform to the facts, which will arouse the curiosity of the audience and arouse their interest in continuing seeking answers. This self-active search will leave a deep impression on the readers, and they will be convinced of the effect and purpose of the title, so as to respond positively, which is exactly the intention of the writer.

(4) Irony. It means using derogatory terms to describe things. Through this figure of speech, it carries the sense of humor, thus shortens the distance between the author and the reader. Furthermore,

it makes the title more attractive, thereby gaining his trust. Take the following as an example: "The 'one treasure' in eight-treasure porridge turned out to be sharp glass splinters". This news reflected that a citizen bought a can of eight-treasure porridge but found sharp glass splinters inside when he was eating. The news headline said it was "one treasure"(since glass splinters shines like a treaure), but it was actually "one harm". After reading this title , readers have the following contextual effect analysis reasoning: ①Glass splinters are not food (encyclopedia information); ②Food is beneficial to the body (encyclopedia information); ③There are generally at least 8 kinds of food in eight-treasure porridge that are beneficial to the body (Vocabulary information); ④Misplaced glass splinters in food will cause serious adverse consequences (encyclopedia information); ⑤Glass splinters will do harm to the body (encyclopedia information); ⑥Glass splinters in eight-treasure porridge is a harm (logical conclusion). Based on the common sense of life in ①, ②and ③, it is unbelievable for readers to associate "treasure" with " glass splinters", so that they will be related to ④and ⑤, and finally deduce the conclusion of ⑥, which is called "treasure" but turns out to be "harm". The speaker wrote this ironic news headline to warn food producers to guarantee their product quality, and also to remind consumers to pay attention, achieving good results in an ironic tone.

Relevance Theory holds that any discourse is relevant, and the process of understanding discourse is the process of finding relevance [4]. The degree of relevance depends on two factors: the contextual effect of the discourse and the efforts made in dealing with the discourse. The contextual effect is a relationship between the information provided by the discourse and the context, which is directly proportional to the relevance of the discourse; The effort expended in dealing with discourse – the consumption of time and energy – is inversely proportional to the degree of relevance. Communication is a cognitive process. The reason why both sides of communication can cooperate with each other is that there is an optimal cognitive model – Relevance [5]. The whole process of language communication should be the process of establishing the premise and deriving the conclusion from it. This is also the general principle that people follow when recognizing things.

The author believes that the article title of WeChat official account is closer to daily life. Since the title is the "window" and "eye" for readers to understand the content, the title producers usually think more when reading the title. The proper use of rhetoric devices will make the title vivid, humorous, specific and relevant, thus increasing the pragmatic effect of the article, bringing readers unique feelings, and attracting readers to click their phone and continue reading. By using rhetorical devices in the title, in the same context, the maximum relevance that the reader seeks and the best relevance that the title editor presupposes can be well understood and transcended. Therefore, many authors have adopted various means in the titles to attract readers to read the full content. While attracting readers to read, they also provide substantive information, which has also won a large number of fans for the official account and promoted the spread of information. It can be seen that the application of rhetoric devices is an indispensable finishing touch for the whole article.

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H. S. Yaroshevich

**THE DEVELOPMENT OF PSYCHOLOGICAL RESILIENCE
OF STUDENTS AS AN ACTUAL PROBLEM OF PEDAGOGY**

The development of psychological resilience, as a person's ability to overcome difficult life situations, is one of the tasks of modern upbringing work. This is due to the fact that every year the emotional and psychological burden increases: epidemics begin, terrorist acts and natural disasters occur, armed clashes affect the nearest countries. This is compounded by the lightning-fast dissemination of information, often presented too emotionally.

Resilience is a person's ability to overcome difficulties and continue full-fledged development. Resilience implies not only resistance to negative influences, but also the ability to rebuild life, and sometimes even transform misfortunes into something positive [1, p. 272].

There is currently no single approach to the description of this phenomenon in modern Russian psychology. You can even find different spellings of this phenomenon, for example, resilience, resistance etc.

In pedagogical science, resilience is considered as a dynamic interaction of risk factors and viability factors in all contexts of personality development, starting with family relationships. Therefore, the activities of teachers and educators are aimed at finding the optimal set of interventions and social services that reduce the level of risk and develop the protective mechanisms of the child [2, p. 8].

A. G. Sabirov and L. A. Sabirova as a result of the analysis of various approaches, interpret the psychological resilience of students as follows: it is the ability of students to realize difficult life situations that appear in different periods of study at the university and take actions to overcome them later or successfully adapt to them [3, p. 165].

Resilience develops throughout life in interaction with the human environment: friends, family, professionals [1, p. 272]. S. V. Zabegalina also believes that the factors of resilience are not only psychological, but also environmental and social, as well as genetic and neurobiological [2, p. 357–362].

O.A. Selivanova and co-authors emphasize that since psychological resilience is an innate dynamic property of a person, expressed in the ability to overcome adverse life circumstances with the ability to recover and develop using internal and external resources, it can and should be developed [4].

M. Price-Mitchell also agrees that resilience is not a genetic trait. The path to psychological resilience lies, first of all, through the supportive relationships of children with parents, teachers and other caring adults. These relationships become sources of strength when human cope with stressful situations and painful emotions. When we help young people develop an approach to life that sees obstacles as an essential part of success, we help them develop resilience [5].

According to A. A. Muravyeva and O. N. Oleinikova, the formation of psychological resilience occurs in the process of accumulation of life experience and within the framework of various interactions of an individual with the outside world and is based on the following principles:
– all people are able to change;
– educational organizations are able to change the lives of students;
– educational technologies and teachers' confidence in the inner ability of students to change in a positive way are important.

According to the authors, resilience is the most important meta-competence for a lifelong learning strategy. The authors emphasize the central role of teachers in the transformation of risks into resilience through their demonstration of positive behaviors. In this regard, appropriate competencies should be formed in future teachers, which should be integrated into educational programs for teacher training [6].

As noted by O. V. Zakirova and E. L. Pupysheva, we can talk about two fundamental trends in the direction of vocational training:

– resilience as an integral characteristic of the internal and external potential of human resources;

– resilience as a phenomenon of educational activity in the triad: teacher – student – educational institution [7, p. 72].

A. A. Muravyeva and O. N. Oleinikova note that the formation of psychological resilience is associated with the formation of emotional intellect, as the ability to recognize and control the emotions of other people and their own. In addition, the development of resilience is facilitated by a factor called "mindfulness" (introspection, immersion in understanding a specific situation). People who are capable of self-contemplation demonstrate better resilience, as they are able to observe their own state of mind, cope better with unpleasant thoughts and emotions [6].

V. I. Morosanova also argues that the development of conscious self-regulation leads to the development of self-awareness. A high level of conscious self-regulation is accompanied by the development of positive characteristics of self-consciousness (high self-esteem, confidence in one's life perspective, high need for knowledge, perseverance in achieving goals, striving for leadership and self-actualization), as well as the general integration of self-consciousness [8, p. 44].

This is confirmed in a research by O. D. Pugovkina and Z. N. Shilnikova, which revealed that the development of mindfulness skills in the student population contributes to the growth of coping with academic stress and success in learning [9, p. 21].

O. V. Lebedeva and co-authors note that the ways of developing the psychological resilience of the American Psychological Association begin with the need to develop and maintain good relations with family, friends and, in general, the social environment. Then follows: the development of the ability to consider situations of extreme difficulties as solvable problems; the tendency to accept life circumstances if they cannot be changed; the willingness to act decisively when in a difficult situation; the search for internal opportunities for positive development after loss; preserving the prospects of one's own life; optimism and visualization of the desired; regular physical activity [10].

A. G. Sabirov and L. A. Sabirova, within the framework of their research, identified the main directions of the formation and development of students' psychological resilience. Firstly, it is the introduction of students to the modern theory of resilience, within which it is interpreted as the most important property of a person, manifested in the ability to overcome difficult life situations and successfully adapt to them. It should be emphasized that resilience is expressed in the presence of such abilities as understanding the objectivity and regularity of the occurrence of difficult situations in life, the development of skills and abilities of successful adaptation to stressful circumstances. This can be done within the framework of such disciplines as "Fundamentals of Psychology and Pedagogy", "Philosophy", "Sociology", "Theory of social work", "Rehabilitation", etc.

Secondly, the determination of the level of psychological resilience formation of students using psychodiagnostic methods. This can be done both within the framework of practical classes of the psychological and pedagogical cycle, and within the framework of the implementation of the diagnostic direction of the work of the socio-pedagogical and psychological service of the university.

In addition, one of the directions is to identify the system of objective and subjective causes, circumstances and conditions of the emergence and existence of difficult life situations of students. Within this direction, the work of curators of study groups and social educators of the university is of great importance.

And finally, the consideration of possible types of difficult life situations of students and the development of skills to overcome them, teaching methods and forms of psychological resilience development of students. Within the framework of this direction, training sessions and individual consultations can be conducted, contributing to the deepening of knowledge about modern methods and forms of resistance formation; mastering the main methods and mechanisms of its development; priority orientation to an active type of attitude to stressful circumstances; ensuring adequate behavior in stressful situations, etc. [3, p. 165–167].

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M. Price-Mitchell also offers several ways to develop psychological resilience. Firstly, it is the development of self-reflection (for example, through literary essay, where students describe and analyze the experience of overcoming difficult life situations by a famous person or the hero of a work or discussions in small groups) and reflection (for example, by writing personal essays). Writing exercises that focus on sources of personal strength can help students realize their strengths and master resilience strategies that best suit them.

There should be discussions about human resilience. There are many ways to link psychological resilience to personal success, achievements, and positive social change. It is necessary to expand the discussion of political leaders, scientists, literary figures, innovators and inventors beyond what they achieved, to the personal strengths they possessed and the difficulties they endured and overcame to achieve their goals. It is necessary to help students learn to see themselves and their strengths through these success stories.

In addition, it is necessary to assist students in learning from their own failures, in this regard, the learning culture should include failures, mistakes and disappointment. The task of the teacher is to create an atmosphere in which failures and disappointments are an expected part of learning. It is necessary to create and strengthen an atmosphere in which students are counted for their hard work, perseverance and endurance, and not just for grades and easy successes. It is necessary to hold students accountable for creating their own work, efforts from which they feel belonging and internal reward.

And finally, a necessary condition is the formation of support in relation to students. To do this, it is necessary that teachers be attuned to students, notice their needs for academic and emotional support [5].

A. A. Muravyeva and O. N. Oleinikova also emphasize the importance of the teacher's attitude to the success and strengths of the student and the use of appropriate pedagogical technologies and methods. In particular, the authors suggest using student-centered technologies, in which students are given responsibility for their learning, which contributes to the formation of the ability to critical thinking and creative self-expression. It is important for a teacher to interact trusting with students, to be able to listen to them, to let them understand how important they are to him [6].

D. V. Egorenkov suggests using fire-applied sports to form a person's psychological readiness and experience of overcoming various situations, since its nature is inherent in the extreme nature of actions in unexpected and complex critical situations [11].

A. A. Muravyeva and O. N. Oleinikova believe that in order to integrate the formation of psychological resilience into educational activities, internal protective factors and protective factors of the external environment should be taken into account. Internal factors include the relationship factor (the ability to form positive relationships, be a friend); the ability to help, serve others; skills for life (decision-making, positive attitude, emotion control); sense of humor, inner core and value system; receptivity (understanding people and situations), independence / autonomy; positive vision of one's own future, self-motivation; sense of self-worth; creativity.

The protective factors of the external environment include the atmosphere in the educational organization and teachers, because it is the teacher who is able to activate the internal protective factors of students. External factors include a sense of security; support; recognition of the value of students in an educational organization; clear rules and boundaries that are recognized by everyone; high expectations of students' achievements and behavior; trust and respect [6].

According to D.V. Egorenkov, psychological preparation is a complex of measures for the formation of psychological stability, emotional and volitional qualities necessary to fulfill the tasks set, allowing to strengthen the psyche, temper the will, learn to fight fear, endure physical and psychological stress, acquire the ability to act selflessly, actively, proactively, skillfully using the skills of resisting extreme conditions the modern world. In his opinion, in order to form a long-term psychological readiness to successfully confront stressful situations, it is necessary to model the educational process in such a way that students are trained through a specially created system of educational situations that activate resistance to negative psychological loads, promote the development of endurance, self-control, a steady increase in the desire to complete tasks, the development of mutual assistance and interaction [11].

N.B. Parfenova points out the need to develop and implement a special program of psychological support for students, aimed at finding resources in the hidden potential of a cognitive-evaluative attitude to the world as a whole and to a specific life situation, in the ability of the subject to a meaningful perception of social threats and self-regulation of overly expressed experiences; in positive reorientation of the subjective way of life. the situation, a more constructive perception of social reality, understanding the threats emanating from it [12, p. 29].

O. V. Zakirova and E. L. Pupysheva, referring to an earlier study by O. V. Zakirova, believe that the formation of interpretative competence (the ability to comprehend professional problems in the broad context of the development of modern society and the life of a particular person, to weigh the advantages of a particular way of resolving them and on this basis choose options for correcting your own actions, the ability to find effective ways to resolve situations) contributes to the production and development of resistance of the teacher's personality.

At the same time, it can be assumed that interpretative competence and psychological resilience are interrelated, since in both cases we can talk about the formed ability to successfully overcome difficult situations, solve non-standard tasks. Thus, interpretive competence allows the teacher to understand, interpret various information phenomena, events, objects under study, scientific theories, etc., as well as find a way to explicate this understanding for himself and for others, which allows the teacher to be psychologically and intellectually stable.

The skills and abilities of interpretative competence that affect the development of psychological resilience should be brought to automatism so that in a difficult situation an individual can react instantly. To form the designated skills and abilities, it is proposed to use an algorithm for searching and processing information, similar to the algorithm for teaching intertextual analysis. This training algorithm is based on the interpretation of information products in order to overcome the difficulties that arise when identifying intertextual inclusions in a work of art.

Also, for the development of psychological resilience of pedagogical students, the authors pay attention to the importance in the field of subject training, since good knowledge and formed skills will allow the future teacher to avoid many crisis situations, solve non-standard tasks with minimal costs or perform a large amount of work [7, p. 72].

A. A. Muravyeva and O. N. Oleinikova note that a positive change in even several elements in the climate of an educational organization leads to an increase in academic performance, a decrease in dropout rates, and an increase in self-esteem, which contributes to the development of resistance of students [6].

Thus, the development of psychological resilience of students is one of the urgent tasks of modern pedagogical science. It is psychological resilience that allows a person to cope not only with daily stresses and emerging personal and professional tasks, but also to use the experience gained in the future.

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M. Yao

RESEARCH ON THE CHINESE TEACHING MODE BASED ON 3D VIRTUAL SITUATION

The use of virtual environments for foreign language teaching is becoming more and more common as a result of the quick advancement of information technology and the fervent support of education departments at all levels. This tendency is followed by the innovation in the Chinese language education paradigm. This invention is supported by thorough theoretical investigation and industry-wide data analysis. In this context, we examine the issues with the current teaching model, including the underutilization of 3D virtual concepts, the poor management of technology, the dearth of teaching materials, and the slow updating of the evaluation system, and we suggest specific initiatives of teaching model reform strategies with the goal of offering some guidance for Chinese language instruction to improve teaching quality.

Chinese higher education institutions have the important task of cultivating international Chinese language talents. Therefore, Chinese language teaching should cultivate talents with a global perspective, Chinese culture, and cross-cultural communication skills that are built on a solid foundation of professional knowledge [1–3].

Due to the increasing demand for talents in economic and cultural development, the trend and degree of integration between Chinese language teaching and intelligent technology are strengthening, and the advantages of emerging technologies to support Chinese language teaching are visible to the naked eye and glow with unlimited potential. 3D virtual technology is naturally applied to Chinese language teaching reform in this context to solve the problem of lack of language environment for Chinese language teaching.

Virtual Reality (referred to as VR) technology, as the name suggests, is the simulation and virtualization of reality, which has the characteristics of subverting tradition. The technology combines computer graphics, visual imaging technology, and physical sensation, and can use computer simulation to simulate three-dimensional virtual situations to provide participants in different teaching scenarios with an immersive real learning experience, especially to create interactive situations to improve participants' Chinese proficiency. In short, the 3D virtual situation enables Chinese teaching to realize the learning scenarios in which learners from different countries participate in common interaction through the basic form of human-computer interaction, which can provide new models and ideas for Chinese teaching while bringing challenges.

The application of 3D virtual context to Chinese language teaching reform and teaching model innovation is based on the maturity of research on virtual technology, the reconstruction of Chinese language ecology in Chinese universities and the progress of data analysis technology at home and abroad.

Theoretical research foundation: the research on virtual technology at home and abroad is more and more extensive.

China's education informatization is developing faster and faster, and the teaching of various disciplines is emphasizing more and more the in-depth use of information technology to help the construction of new teaching models. Since this century, virtual reality technology, as a research hotspot at home and abroad, has driven the field of science and technology to actively introduce and develop virtual reality technology. The teaching of subjects in higher education actively introduces virtual reality technology, especially for 3D virtual and other three-dimensional virtual technology to create the situation favored, 3D virtual belongs to a kind of augmented reality technology, can become an indispensable content in the field of virtual reality research, augmented reality technology derived from reality, the computer, intelligent technology generated information and a number of scenes fusion, so that the user is in a virtual situation, perception of contact with the real world, to achieve different from the world The real world, to achieve interaction with different users of the world, or directly interact with the information, through the experience of technology to achieve the effect of augmented reality.

Environmental foundation: implementation of the strategy of reconstructing Chinese ecosystem in colleges and universities

The 3D virtual context was born in the era of information globalization, and as an important driving force for the development of the times, it has driven radical changes in various industries and fields. Teacher domination is transformed into a cooperative relationship, which can be mutually restrained and symbiotic, and the Chinese education ecology is more balanced. In this ecosystem environment, the interference of external factors to the classroom is becoming weaker and weaker, and this ecosystem is especially able to adopt richer forms of sound education, images and videos. This ecosystem, especially through richer forms of sound education, images, videos, etc., makes the interference of external factors to students weaker and weaker, so that students can concentrate on learning in this environment and effectively improve the pattern of Chinese language teaching. In this way, the ecological factors among teachers, students and other educational elements become more active and can actively build interactive bridges in the new ecosystem. The ecosystem gives vitality to teacher-student interactions, and teacher-student interactions jointly pull the ecological direction of Chinese teaching and learning, and jointly promote the exchange of information among teachers, students and other church elements.

The role of 3D virtual context in the reform of Chinese teaching mode is self-evident, but the teaching subjects do not have a deep understanding of the concept and lack positive guiding force for mathematical ideas, technology management, content and evaluation standards.

Lack of concept makes the mode reform deviate from the direction

The reform of teaching mode in 3D virtual context is the direction of reform of most disciplines in colleges and universities. However, in the reform of Chinese teaching mode, the concept related to 3D virtual context, and the concept contained in the concept, has not been able to deepen into the teaching practice, from the root, the higher management of colleges and universities has not promulgated the concept of 3D virtual context in the form of policy documents separately, but only mentioned it briefly in the teaching guides of different disciplines, failing to, fundamentally, attract the attention of colleges and universities, teachers and other subjects at the ideological level, so that some The reform of mathematics in higher education adopts the direct application or introduction of 3D virtual context, ignoring the popularization of the concept, which leads to the inability of the teaching reform to go deeper, and the cognition of Chinese teachers to 3D virtual context is limited by the background of liberal arts education, and the influence of the deep-rooted idea of "scientific research first", so their independent investigation of the concept of 3D virtual context is not driven enough. In addition, they are not sufficiently motivated to explore the concept of 3D virtual contexts, and their practice of guiding teaching and learning is superficial. For a long time, the teaching concept stays in the traditional teaching stage, the reform practice of teaching mode lacks scientific concept guidance, 3D virtual context and Chinese teaching are separated for a long time, the tone of teaching mode reform lacks the latest ideological connotation guidance, and the reform direction is prone to deviation.

Backward management makes the pace of technical reform slow.

The reform of Chinese teaching mode in 3D virtual context needs technical support, and the current Chinese teaching in colleges and universities faces problems such as the lack of technical hardware and the imperfect management of 3D virtual scene system, etc. The lack of hardware fundamentally limits the improvement of the technical level of Chinese teaching mode. Because of the limited technical funds of colleges and universities, they cannot support the technical system and hardware equipment that are not tailor-made for themselves. Moreover, some colleges and universities are facing the problem of lacking institutions and personnel specialized in managing technology, and no one is available to solve problems when the equipment cannot be used normally, which leads to the idle state of the equipment, resulting in the waste of resources. At the same time, the teaching resources built into the technology platform system are slow to be updated and fail to be combined with the general environment and the specific situation of colleges and universities in time, so some functions cannot be used properly.

Lack of vitality makes students' main interest low.

The 3D virtual context requires more diversified teaching modes and higher requirements for students' intrinsic motivation, both of which are missing in college Chinese teaching. The reason is that Chinese teachers, as the direct users of the 3D virtual context, have not explored the virtual context sufficiently, have not understood the online resources and the more diversified teaching contents thoroughly enough, and have not been able to categorize the contents before the class. The initial goal of combining the teaching content with the virtual context, which is not effective in guiding the teaching design, makes such teachers design the teaching design in a step-by-step manner, basically in accordance with the traditional textbook sequence of design and teaching, the concept of 3D virtual context is not put into practice, failing to drive the stimulation and play of students' interests in teaching, and the Chinese teaching mode is not energetic enough as it should be.

The reform of Chinese teaching mode based on 3D virtual context needs to be carried out from various aspects, specifically from the concept-driven scenario mode, technology-driven mode, task-driven mode and evaluation-driven mode.

Concept-driven: ensure the unity of teaching theory and practice.

The effect of information technology to promote the reform of some engineering courses in colleges and universities has been very obvious. The learning system based on virtual reality

technology provides teachers and students with specific scenes with real immersion characteristics, and this three-dimensional interface of virtual reality environment is exactly what is most needed for the reform of Chinese teaching mode. However, many liberal arts majors, including Chinese language majors, do not have a deep enough understanding of the use of 3D virtual context, because the concept of 3D virtual context has not yet been deeply integrated into the teaching reform. The authorities should introduce the use of 3D virtual context according to the reform of universities, so that universities can realize the importance of the use of 3D virtual context and pay attention to it from the ideological point of view. The teaching management department of universities should choose the connotation of the concept according to the school's situation, and select the concept that can be applied to the teaching of Chinese in our school, and highlight the optimization of the concept more clearly. Teachers should take the 3D virtual context teaching experienced during learning as a case and a breakthrough in their own educational background, and take it as an important reference for their own initiative to explore the concept deeply and become the practitioners of the new concept; they should put themselves in the position of the innovator of the teaching concept, in the position of the carrier of the unification of theory and practice, and become the perceiver and experiencer of the virtual context. In this way, teachers will be able to convey their own sense of experience to students in a more authentic and heartfelt way, integrate the concept of communication and teaching practice, naturally stimulate students' interest in 3D virtual situations, and contribute to the further popularization of the concept."

Technology-driven: ensure the stability of intelligent teaching platform.

The 3D virtual context is built on the basis of virtual reality technology, which is a great challenge to the reform of Chinese teaching mode in colleges and universities.

Universities should seize the opportunity to send Chinese language teachers to master the technology application methods in advance, so as to facilitate the development of the process of using 3D virtual teaching equipment and prevent students' long-term wear of 3D glasses and other equipment from visual fatigue, cross-infection and other real problems. Chinese teachers, as the direct operators of the equipment, should focus on the application of 3D virtual scenes, pay attention to the use and extension of scene functions, give feedback upward when necessary, propose specific teaching demand functions to enterprises, and jointly promote the use of 3D virtual technology in Chinese virtual scene teaching. After entering the virtual scene system, the teacher should guide the students to choose the scene independently according to their interests, or they can visit all the scenes first before they start learning. When students enter the virtual scene system, they should be guided to choose the scene according to their interests, or they can visit all the scenes before they start learning. Considering this, the virtual scenes should have learning and practice modes. In the learning mode, teachers can interact with students in a scene together: in the practice mode, students actively explore learning as the main form, so that the technology-driven mode drives different subjects to participate in it and build different scenes together, making the development of Chinese intelligent teaching platform more and more stable.

Task-driven: ensuring the ecological integrity of teaching design.

The task-driven mode can give more inspiration, creative thinking and comprehensive content to the teaching design, which is difficult to be reached by the traditional multimedia teaching mode, and the immersiveness, conceptualization and interactivity of the 3D virtual context are highlighted under the task-driven mode. Of course, this requires college Chinese teachers to give full play to their information technology literacy and to teach resources both online and offline before class. Research is conducted to discover the specific contents of Chinese teaching resources that are suitable for using role-playing or purely task-based, and categorize them to redesign the teaching program with the teacher's book as a reference. The role-playing type of teaching design is suitable for teaching spoken Chinese and literature, and teachers can position the VR context under the background of the times in which spoken dialogues and literary stories take place, and use the advantages of conceptualization and immersion to allow students or In the process, students can choose different roles to play according to their own interests, and use Chinese to communicate in dialogue. The pure task-based

teaching design is applicable to the teaching of Chinese reading and writing courses, which requires Chinese teachers to focus on exploring the interactivity of the 3D virtual context and innovating the traditional infusion-based teaching model by placing different reading and writing tasks in the dry virtual world and dividing students into groups to retrieve the required information. The teacher can act as the ending guide in this process, giving timely help to students, guiding them to cooperate and work closely with each other, improving their self-confidence, and achieving the effect of "co-evolution" as much as possible to ensure that students can complete different thematic reading and writing tasks independently after the tasks are finished, transforming the improvement of subjective initiative into a learning norm. The students will be able to complete different thematic reading and writing tasks independently at the end of the assignment, transforming the improvement of their subjective initiative into a regular learning process.

The reform of Chinese language teaching mode based on 3D virtual context in higher education is facing different degrees of problems in concept, management and technology in the new era, which requires innovative development of theoretical research content, upgrading of management methods, deep industry technology application and strong evaluation guarantee to provide new experience for the reform of Chinese language teaching education.

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E. A. Atrokhova, O. V. Tozik

METHODS OF KINESIOTAPING IN THE PREVENTION
OF FLAT FEET IN CHILDREN

The article deals with the topical issues of the use of kinesiotaping in children with a foot arch deformity. The mechanisms of the therapeutic and prophylactic effects of kinesiotaping are characterized as well as various techniques and types of taping are presented. A comparative analysis of some methods of kinesio taping in case of the foot arch disorder in children has been carried out. The most effective technique of taping, contributing to the correction of deformity of the foot arch in children is identified.

Flatfoot is extremely common today. Changes in the shape of the foot, characterized by the omission of its longitudinal and transverse arches, is one of the most common problems in childhood. Abnormalities in the structure of the foot lead to the development of flat feet. Flatfoot is characterized by flattening of the arch of the foot, thereby impairing its function, as well as changes in the hip and knee joints, which ultimately leads to impaired gait, fatigue when walking and changes in the shape of the foot [1].

Today, due to changes in socio-economic and environmental conditions, accelerated pace of life, modification of educational programs, reduction of motor activity there is an increase in musculoskeletal system diseases, among which postural disorders and flat feet are common in preschool and school-age children. More than 50% of children have a flattened foot arch and flat feet. Deformity of the foot reduces its functional capabilities, contributes to changes in the position of the ankle, knee, hip joints and spine. All this has a negative impact on the function of the musculoskeletal system and the overall condition of the child [2].

Flatfoot is a disease that has a progressive nature, so the earlier you start comprehensive treatment, the better results it will bring.

According to the origin of flat feet there are congenital flat feet, traumatic, paralytic, rickety and static.

Congenital flatfoot at the age of 5-6 years is quite difficult to detect, since all the components of the flat foot are determined at an early age, however about 3% of all cases of flat feet are congenital. Traumatic flatfoot develops due to fractures of the ankles, heel bone, and tarsal bones. Paralytic flat foot is the result of paralysis of the plantar muscles of the foot and the muscles starting at the shin (can be a consequence of polio). Rachitic flatfoot can be caused by the body's load on the weakened bones of the foot. Static flatfoot, which occurs most frequently (82.1%), is due to weakness of the shin and foot muscles, ligamentous apparatus, and bones [4].

Internal causes contributing to the development of foot arch abnormalities include hereditary and constitutional factors, and external causes include a heavy load on the feet, wearing irrational shoes (especially with a soft back, narrow toe, thick soles, as they prevent the natural flexibility of the foot). The main reason for the development of flat feet is the weakness of the muscles and ligamentous apparatus that take part in the support of the foot arch [5].

Comprehensive application of physical rehabilitation means, preferably active, their most favorable combination, as well as the selection and justification of the duration of their use in order to prevent and correct changes in the foot in childhood is one of the priority areas of today's realities.

Therapeutic physical education for children with impaired musculoskeletal system includes the use of a variety of means and methods, where an important role played by gymnastic and sports-

applied exercises that strengthen the muscles of the foot, lower leg and trunk muscles. To enhance the corrective effect of physical exercises, special devices are used - ribbed boards, beveled surfaces, etc. All special exercises are performed in combination with exercises, aimed at formation of the skill of correct posture, general developmental exercises in accordance with the age features of the participants. Regular performance of physical exercises on the muscles of the lower limbs is one of the most important means of treatment and prevention of flat feet [1; 3].

Treatment of flat feet should be carried out comprehensively (therapeutic exercises, massage, physical therapy procedures, the use of orthopedic insoles and shoes). It is important that the correction process is regular and continues until full recovery.

Massage is an integral part of the complex treatment of flat feet. It helps to normalize the tone of the muscles of the foot and lower leg: strengthening weak, stretched muscles and relaxing the tense ones, in this particular case it is important to restore their coordinated work. In addition, by improving blood circulation and innervation, certain massage techniques improve nutrition of muscles, ligaments and bones of the foot, relieve pain in the calf muscles and feet [4].

Recently, one of the modern functional methods of preventing injuries and disorders of the musculoskeletal system is kinesiotaping. This method is the application of special elastic tapes that help improve blood supply, facilitate the passage of lymph, also tapes help maintain joints from overloading, relieve pain during sprains and dislocations, do not restrict freedom of movement and have water-resistant material.

The basis of the preventive action of kinesiotaping is the effect of activation of microcirculation in the skin and subcutaneous tissue, reduction of pain syndrome, restoration of the functional activity of muscles and normalization of joint functions. The effect of normalization of microcirculation is associated with the direct mechanical effect of the application of tapes. Applied on the surface of the skin kinesiotape, slightly lifts the upper layers of the skin, increasing the space, thereby creating favorable conditions for the activation of microcirculation in the connective tissue and intercellular substance, which helps to remove products of tissue metabolism and improve lymph flow [5].

A kinesiological tape is a tape with an elastic cotton base with the addition of nylon threads. On one side of the tape there is a hypoallergenic acrylic adhesive. The tape is characterized by high adhesive properties, which allows it to stay on the human skin for an average of 3 to 5 days and not to come off even after contact with water.

The method of preventing and treating flat feet with kinesio tapes has a number of advantages:
– the joint is fixed in the correct position;
– triggers the regeneration process;
– the load on the foot is much easier to bear;
– pain and swelling are reduced;
– the effect of gymnastic exercises significantly increases;
– no need to wear orthopedic shoes and insoles.

It should be added that the pain syndrome is reduced due to the fact that the tape, located on the surface of the skin irritates tactile receptors and baroreceptors, from which the afferent signal goes to the posterior horns of the spinal cord, thereby blocking impulses of nociceptors. Moreover, application of the k-teip mechanically increases the space in the connective tissue, which promotes better microcirculation and removal of inflammatory mediators from the pathological focus. Activation of cutaneous receptors promotes activation of proprioreceptors of muscles, tendons and joints. When the optimal motor stereotype and muscle imbalance are disturbed, various techniques of kinesiotape application are used to regulate the afferent flow of proprioceptive impulses.

Kinesiotherapy in combination with other means of rehabilitation contributes not only to the elimination of disease symptoms, but also creates conditions for consolidation of positive results for a long period [4].

The aim of this study was the theoretical and experimental justification of the application of kinesiotaping techniques of the lower limbs in children with foot arch disorders.

The study was conducted during the year 2022 on the basis of the Fitness Center "Panda". Sixteen 8- to 10-year-old children with various foot arch disorders participated in the study.

The organization of the study included three stages.

At the first stage of the study scientific and methodological literature was analyzed, medical records of children were studied, and individual conversations with their parents were conducted.

At the second stage, the most effective means of physical rehabilitation were identified and complexes of physical exercises aimed at strengthening the most vulnerable parts of the OA were compiled. A correction program was developed for children with foot arch disorders.

At the third stage, the main pedagogical experiment was conducted to substantiate the effectiveness of kinesio teiping in combination with traditional methods of correction.

Kinesiotaping was used in 16 children with foot arch disorders in a complex of rehabilitation measures, in some cases as an independent monotherapeutic technique. The tape of the company "Tmax", South Korea (standard width – 5 cm) was used.

Taping for deformities of the foot arch was carried out by a course, which implied a long correction with kinesio tapes with breaks. The treatment regimen was selected individually and took into account the age and degree of deformation, as well as other individual characteristics of the subjects. The standard course of taping implied a 3-day application and then rest. Thus, the correction was carried out for 3 months.

The following techniques were used in the pedagogical experiment to apply kinesio teips to the deformed foot:

1. Method of lymphatic taping.

One I strip of 15–20 cm cut crosswise into 4 strips. Fix it solidly, with an anchor in the area of the heel tubercle, and the separated ends at the base of the toes. The second I strip of 10–15 cm, glue in the middle of the foot and fix it on the inner part of the shin. This technique involves relaxation of the plantar part of the foot and its fixation on one and the other side.

2. The technique of rigid fixation of the tape.

Place two 10–15 cm Y-strips along the sole, anchoring from the heel cusp, with the end at the base of the toes. The third I strip of 15–20 cm is glued perpendicular to the first strips, in the heel area. The presented application has a lining material tightening the arch of the foot and the initial fixation realizing the basic function of support.

3. Transverse taping technique.

A 20 cm strip I is anchored 5 cm above the medial ankle, the therapeutic area is glued to the sole of the foot and the end is in the area of the lateral ankle. In this method of application, the tape prevents the joint from shifting and deviating to the side, but it does not limit the basic stereotype of movement.

In the course of the conducted research, the effectiveness of all three techniques of kinesio taping used was revealed, in an individual selection for each trainee. In the complex application of kinesio tapes with therapeutic physical training, massage and physiotherapy, a positive effect of all means of correction of violations, regardless of the type of flatfoot, was established. These methods of taping allow to support the unformed arch of the foot, preventing its excessive flattening.

As a result of applying taping techniques for 3 months, 28% of the children showed increased adaptation to physical activity and thus reduced fatigue in gymnastics classes, 19% of the children had less ankle pain, 14% of the subjects had positive changes in mobility of the foot arch and ankle joint and 10% stopped complaining of headaches.

Thus, as a result of the pedagogical experiment it was found that kinesiotherapy in combination with other means of correction contributes not only to eliminating the symptoms of the disease, but also creates conditions for consolidation of positive results for a long period, allows increasing the effectiveness of the measures, reducing the rehabilitation period, and is appropriate along with traditional methods of rehabilitation.

It should be added that to train the muscles of the foot and lower leg, correction of the right positioning of the feet, a set of measures must be developed individually, depending on the type of

deformation and degree of flat feet. Later, when the position of the feet is restored, special exercises are performed at least 3 times a week. The important thing is the conscientious attitude of the students to the practical recommendations of the instructor and the performance of self-exercise physical exercises.

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К. К. Bondarenko

BIOMECHANICS OF MARTIAL ARTISTS INTERACTION DURING THE EXECUTION OF TECHNICAL ELEMENTS

The article is devoted to actual problems of determination of biomechanical parameters of movement during a competitive match. It examines the characteristics of movements and positions when a pair of athletes interact. The issues of the development of traction and pushing efforts of judoists in the performance of basic motor actions are considered. There are characteristics of the movement, which are fundamental to the achievement of sports results in most types of martial arts. This predetermines the evaluation of sports actions taking into account the biomechanical components of motor actions.

The study of the interaction in martal art can be approached by means of biomechanical characteristics of motion under static conditions [7]. This can be determined with the help of classical motion analysis systems allowing to combine results of structural elements [9].

There is a differential analysis method used in the study of throw technique. As a rule, motion is divided into three distinct phases: imbalance, positioning, projection, (Kuzushi, Tsukuri, Kake) [2]. At the same time, in all types of martial arts, there are two main stages of training technical actions, namely, the study of technical interactions in the pairing system of athletes and the movement system of the pair of competing athletes [3].

In the phases of the destruction of balance – Kuzushi and creating the precondition for the throw – Tsukuri, identifying the structure of the movements, are invariants of general action. The specific invariants of action are the throwing techniques that do not require imbalance. In addition,

common should include the identification of techniques requiring a certain time condition, using only general options for simple movements with lower energy consumption [8].

Identification of methods requiring large coordination abilities, using both general invariants and specific invariants, implying complex movements with high energy consumption.

For the throw phase (Kake), it is necessary to apply two biomechanical principles underlying all methods, namely, the determination of the basic movements applied to each group of throw techniques, determination of static and dynamic parameters of force use for the execution of the throw, identification of mechanisms that play an essential role in the creation of forces, identification of the main trajectories of movement of the body, which are structural components of partial symmetries, which means they represent the lowest-energy trajectories for the attacking athlete [11].

All possible projection methods can be classified only according to two main biomechanical criteria, namely, the use of force pair and the application of the lever [6].

The next components of the throw projections (in particular in judo) belonging to these groups are the torque force and the arm of force [4].

In order to assess the nature of the fight, methods of control and immobilization according to the action are classified. At the same time, it is necessary to determine the active and passive role of kinetic chains in the fixed assets. To this end, the main mechanisms of technical actions shall be determined and the physical and biomechanical bases of the methods of the resulting forces of the lever [1] shall be analysed.

The physical characteristics of competitive activity reveal the forces acting on athletes. Such forces shall include the force of gravity, the force of impact or thrust caused by the opponent, and the friction force arising between the athlete and the support [5].

From a biomechanical point of view, an athlete can be described as a solid with variable geometry and cylindrical symmetry, which through the joints can perform only certain types of rotational actions. In the analysis of competitive activity in martial arts, the action system of a pair of athletes can be defined as the aggregate of a system with cylindrical symmetry formed by the semi-rigid union of two bodies. Such a system may have varying degrees of freedom. It would therefore be useful to analyse movements using methods specific to kinematics. This allows the determination of values that can be tested and evaluated [10].

The following action is based on the theory of closed biokinematic chains, through which the interaction of a pair of athletes is analyzed. This predetermines the fact that mass, speed, energy and other values should always be understood as the properties of the whole pair, not the individual athlete.

Considering the pair of athletes moving on the judo mats, it can be concluded that it makes «random» movements caused by increasing or decreasing speed. The nature of the pair's movement or the rapid change of direction caused by the resulting forces generated by the two athletes to create the appropriate situation is related to the previously mastered technical actions of one of the two athletes. At the same time, the term «random» implies a condition that with a large number of fights there should not be a pattern of movement.

Athletes' performance is generally assessed by means of an axial-coordinate projection. At the same time, a comparison of kinematic parameters of motion of the knee joint and the nature of the angle of rotation of the shoulder joints in the horizontal plane was evaluated. In each of the nodes the common center of mass of the attacking athlete – Tori ($COM_{(t)}$), defending athlete – Uke ($COM_{(u)}$), and the system of body interaction ($COM_{(C)}$) was determined. The instability angle of the body system ($\varphi_{(c)}$) is defined as the angle between the support point and ($COM_{(C)}$) relative to its height (h-$COM_{(C)}$). The distance from the support point to the projection point ($COM_{(C)}$) shows the relation to the stability limit of the body (d_{lim}). In order to determine some of the factors that determine the variation of the stability angle, the torso angle of Tori is calculated relative to the horizontal line ($\varphi(h)$). For this, the torso is defined as a position vector, the proximal point of which is the coordinates of the (x, y, z) pubic point, and the distal coordinates of the (x, y, z) supraspinous point (Figure 1).
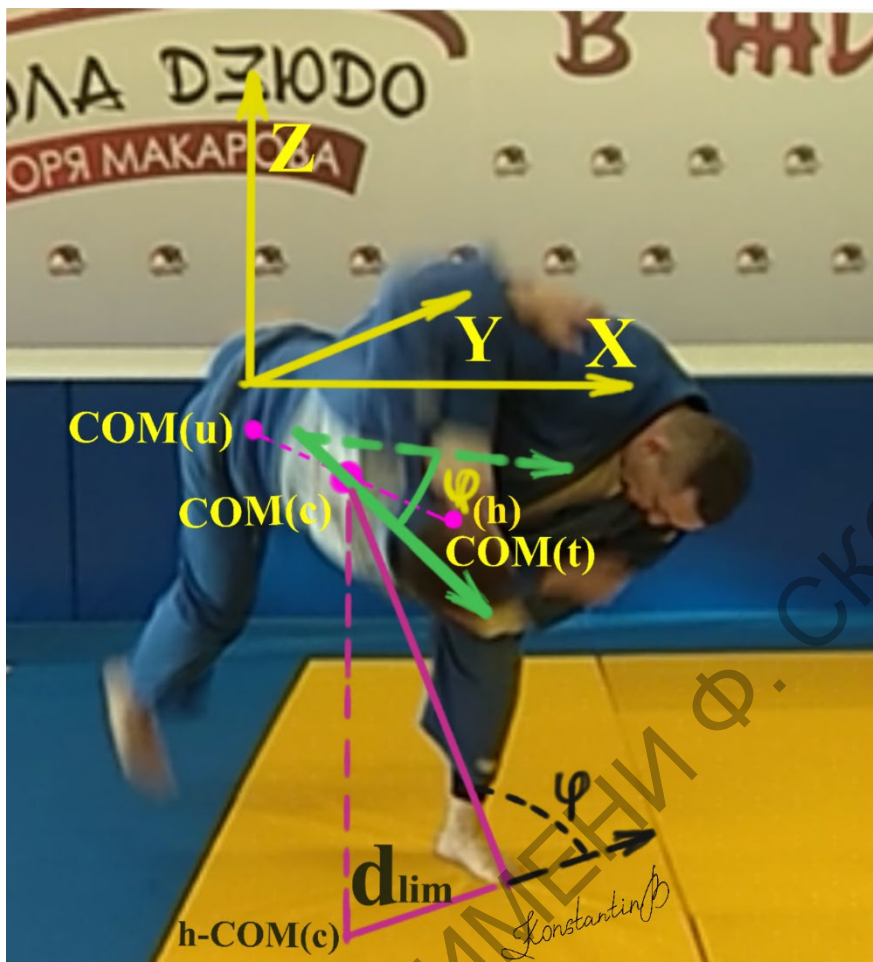
Figure 1 – Diagram of determination of stability angle of position
of bodies of athletes at the moment of execution of roll

In a closed system of biokinematic chains in a couple of athletes when stabilizing the position, «random» movements can contribute to the creation of a situation that allows the use of previously automated actions. This happens in many ways when the nature of chaining with support changes under Newton's third law. The general equation describing this dynamic situation is Newton's second law, which defines the force of action as the product of mass at acceleration. In this case, the force created may depend on both the nature of the body's grip with the support, and the nature of the traction and push forces. The component of interaction with the support (friction) is proportional to the speed. Changes in speed and direction determined by the respective traction and push forces depend on the resulting forces created by the pair of athletes. They are impulses that operate for very short periods of time. Thus, variability of action can be expressed by standard deviation (δ) and elementary force (u). Где u – фактически представляет собой изменение импульса $m * \Delta v$: $\varphi_{(t)} = u * \sum_j \delta * (t - t_j)$.

The result of the action is determined by the algebraic sum of traction and push forces, which also must take into account random changes in direction (described by changing the sign (1) j of elementary force).

Общую силу можно представить как: $\varphi_{(t)} = u * \sum_j \delta * (t - t_j) (\pm 1)_j = F'$. Следовательно, суммарная сила равна $F = F_a + F'$, и общее уравнение движения можно представить как $\dot{u} = -\frac{u}{m}v + \frac{u}{m}\sum_j (\pm 1)_j * \delta * (t - t_j) = F_a + F'$.

As a result of traction and push forces of «random» type, it is impossible to predict the trajectory of movement in a single match. At the same time, the analysis of actions in fights in various competitions, allows you to obtain important information about the behavior of the system.

Since the changes of direction are uniform, that is. e. with a large number of fights held there is no preferred direction, then the average value of the total force in time F' in a random sequence of directions is zero F' = 0. If the product of traction and thrust forces is considered and averaged in time and directions, information about the change of force over time can be obtained. Testing these conditions suggests that the movement of athletes can be described in kinematic parameters as a movement related to the structure of Brownian movements on an infinite surface. In this case, the moment of movement can be represented as f(x,t)*dx, which characterizes the probability of finding the common center of the pair of athletes in the position x of the interval dx at time t. This probability satisfies the Fokker-Planck equation describing the change in the continuous distribution of the probability of being present during the fight.

Analyzed a special class of events, formed by unique situations, occurring in «random» with a certain probability of frequency on a large number of events, allows us to state that, the results of research of trajectories of movement of the system «Pair of athletes» during the match, confirmed by an experimental test.

From a biomechanical point of view, judo competitions are a complex, non-linear system with «chaotic» movements. The competition is actually a test stand, where both the professionalism of the coach and the skills of the athlete are evaluated.

Competition is an indicator of the effectiveness of time spent by an athlete on physical and technical training, as well as the culmination of performance in terms of training. It is also the most important source of technical information. Therefore, the analysis of competitive activity is necessary for coaches to obtain useful information on the effectiveness of their training methods.

Competition analysis should be seen as the cornerstone of understanding situational sports such as judo or karate. This is an important auxiliary tool in the difficult task of the coach to prepare the athlete to achieve the highest sports result.

Analysis of competitive fights is a valuable source of information on the physical and functional state of the athlete's systems, the perfect mastery of the necessary technical elements and tactical skills.

Biomechanical analysis of competitive activity should be applied to the system of «pair of athletes». This allows you to identify features that are constant in the competition. They can be classified in terms of the biomechanical principles associated with enemy capture.

Martial arts refer to difficult coordination sports with a frequently changing situation. Situational sports are those sports in which the achievement of sports results cannot be identified as a simple system of movements, which are performed when there are one or more opponents.

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N. A. But-Husaim

NEW APPROACHES TO THE PRIMARY SELECTION
OF YOUNG ATHLETES IN THE INITIAL TRAINING GROUPS IN ATHLETICS

The article reveals the features of the primary selection of children in 2-4 grades of Belarusian schools by means of the republican sports and mass project "300 talents for the queen". Participation in the project allows you to increase the level of children's motivation for athletics and is one of the stages of selection in initial training groups.

Today, more and more people are involved in sports activities. Athletics is one of the most massive and popular sports, which has a number of advantages over other sports - accessibility and popularity, low level of injuries, a dense schedule of different ranks of competitions and others.

However, there are a number of problems among which can be distinguished:
– lack of coaching staff of high qualifications;
– weak material base;
– increasing competition (especially game sports);
– the late age of the start of classes in comparison with other types;
– not a particularly attractive competitive system (especially for children).

The modern level of competitive result, demonstrated by elite athletes in the international athletic arena, makes high demands on the quality of the resource that is subjected to purposeful pedagogical impact during the training process for a long period of preparation [1; 2]. The use of the most advanced sports training technologies allows you to achieve the target level of competitiveness exclusively provided that the object of pedagogical influence is carriers of really outstanding motor capabilities. According to a number of authors [3; 4; 5] selection and sports orientation are not only the most important, but also one of the key elements of the athlete training system.

The intake to training groups in athletics is currently carried out from 7 years. However, in practice, a situation is formed when competition from other types of sports activities in which the set in groups occurs at an earlier age, significantly reduces the number of motor-dedicated children potentially in terms of sports preparation prospects.

Specialists working with young athletes, among the main problems, highlight the low motivation of children to athletics. To minimize the losses of the potential resource base and ensure the influx of the contingent when intake in the initial training groups, experts have to violate the requirements of regulatory documentation, shifting the terms of starting classes in groups, or finding forms with children outside the existing regulations.

The selection in athletics has ceased to be competitive. Correct comprehensive physical development, health, active life position, willpower, discipline, determination, patriotism – these values have faded to the background, and individual self-realization, fees [4] came to the fore. At the moment, the situation is being straightened, the number of sports schools is increasing, but there is a shortage of children in sports sections. People ceased to perceive sport and physical activity as the need for healing and physical improvement of man [3]. These and many other problems put the coach in difficult conditions, many coaches lose interest in work, many change their occupation, which in the future can lead to a lack of qualified specialists.

In turn, the trends of the modern world make their own adjustments to preferences when choosing a sport. More and more parents make a choice in favor of hockey, football, tennis, etc. There is an increasing need to find new forms and methods of attracting children to athletics.

In 2015, the Belarus Athletic Federation, together with the Ministry of Education of the Republic of Belarus and the Ministry of Sports and Tourism of the Republic of Belarus, initiated a project to identify promising children for further athletics "300 talents for the queen". The main goal of the project is to select and attract children to athletics.

The project is carried out in the format of a republican sports event and takes place in 4 stages.

At the first stage, the project participants (children of 2-4 grades of elementary schools, due to health reasons, related to the main health group) at the beginning of the first quarter in their schools, pass testing on the subject "Physical Culture and Health" within the framework of the school curriculum: running 30 m , jump from a place, shuttle run 4 x 9 m, throwing the ball, running 800 m (500 m). The results are processed using a specially developed program, where the corresponding points are assigned to each result. According to the results of the first stage, about 450 people (boys and girls) are selected from each region and Minsk for the second stage for the best amount of points.

At the second stage, the winners of the first stage are again handing over the same testing, but already centrally and under the leadership of athletics coaches. According to the results of the second stage, the winners of the project are determined, which fall into the team of their area. The quantitative composition of the team is as follows: 7 boys and 7 girls of the 2nd grade, 7 boys and 7 girls of the 3rd grade, 8 boys and 7 girls of the 4th grade. Based on the results of testing of the second stage, the team includes 3 (4) people with the most scored points in the sum of all disciplines, 1 person with the best result in running 30m, 1 person with the best result in a long jump from a place with the best result, 1 in throwing the ball and 1 person with the best result in running at 500m (800m).

The third stage takes place during the spring holidays. 7 teams, together with 5 coaches, go to the training camp for 6 days, in which they actively train and prepare for the final stage – stage 4.

The fourth stage takes place in late April. All teams come to the city of Minsk, where they take part in the athletics competition. All finalists of the project compete in a 30m hurdles running, throwing a stuffed ball from the knees, long jumping from a place. The teams also compete in the 8x50m relay race.

As a result of the competition, the winners and prize-winners of each age category are awarded in individual events and by the sum of the all-around, as well as the winners in the team competition are determined.

The format of the final stage takes place in a bright, colorful atmosphere, with the involvement of a large amount of animation, fairy-tale characters and positive emotions that allow you to show the competition participants that athletics is fun and dynamic, no less attractive than other sports.

Throughout the existence of the project "300 talents for the queen", many of its participants have come to the athletics schools, a number of which, at the moment, have become winners and prize-winners of not only republican, but also international athletics competitions.

Thus, the development and implementation of new sports educational projects such as "300 talents for the queen" helps to increase children`s motivation for athletics, thereby being one of the stages of the initial selection of children to further exercises, which is undoubtedly an important indicator in the current time.

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D. A. Khikhluha, К. К. Bondarenko, A. S. Malinouski

EFFECT OF PACE AND POWER ON BOAT SPEED IN KAYAKING

The effect of the kayaking components on each other can lead either to the improvement in the sporting result, or to its deterioration. The definitions of this effect will help to reduce the negative interaction of stroke parameters on each other and to strengthen the positive actions to achieve the goal. Moreover, this will enable to select the most appropriate means and methods of training to improve the kayaking performance.

Price of the victory in kayaking is determined sometimes by tenths, and other times even by hundredths of a second. The search for additional reserves, which contribute to increasing the level of athlete's training and achieving the maximum competition form, is the most important task in

organizing the training process. One of the components of solving this task is biomechanical parameters of kayaking [1; 2]. Over recent years, the most relevant is the alignment of model characteristics of the driving influences of movement [3; 4; 5]. Previous researches have allowed for revealing the dependence of rational techniques of movements on the functional state of skeletal muscles [6; 7]. Over recent years in various sports a significant number of experimental researches have been devoted to the development and identification of the effectiveness of applying the model characteristics of the technique of movements [8; 9; 10]. At the same time, the proposed model characteristics are often determined by a level of fitness and take little account of the biomechanical component of the result.

The training process quality depends to a large extent on the range of the information obtained of a different nature. The data of pedagogical parameters of the load, medical and biological component, kinematic and biodynamic features of movement have impact on a level of fitness and the sporting result as the ultimate goal of this process. The most interesting are the performance indicators of athletes (speed, pace, power, etc.) when passing both the entire distance and its sectors. Change in these indicators throughout a distance is a consequence of the load the body receives.

It was assumed that the determination of the kayaking model characteristics would help optimizing the means and methods of training rational techniques. Identification of a nature of the change in techniques of movement against the fatigue will promote selecting the means for correcting the training process.

The research areas were biomechanical features of the kayaking stroke movement.

As a result of testing paddlers, the following parameters were determined:

Speed – speed of covering a distance (m/s).

Power – power of each stroke developed by a paddler (Watt).

Pace – number of strokes per one minute (str./min).

The explorations were conducted at the Physical Culture and Sport Laboratory of Francisk Skorina Gomel State University. The explorations were carried out within the framework of the State Scientific Research Program of the Republic of Belarus "Convergence – 2020".

The speed of a kayak throughout a distance is the key parameter. One can evaluate activity of a paddler and a level of his/her fitness by the speed of a boat running and its variation in each cycle of stroke movements. When a high average speed is reached and in the course of a distance it hardly changes, it is considered the best running of a boat. In this case, the average speed approaches the maximum one. Figure 1 shows that the maximum speed is achieved in the first half of a distance, especially at the first two hundred meters. In the second half of the distance, due to the arrived fatigue, there is a significant decrease in speed, which at a sector of 600 meters is 96.7% of the average speed. And only at the very end of the distance, thanks to the final acceleration, the speed of the kayak is approaching the average speed throughout the distance.
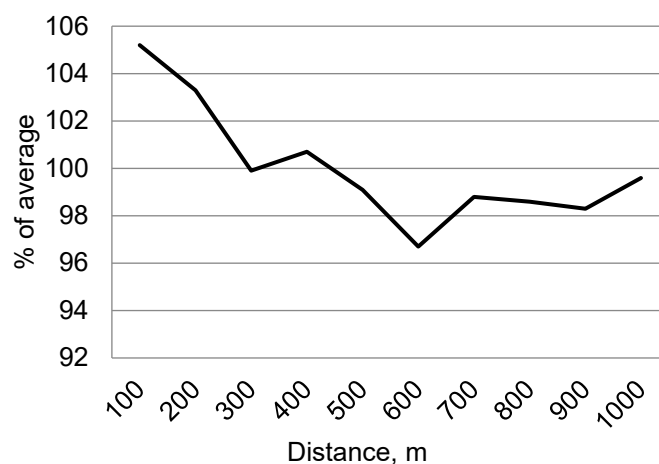

Figure 1 – Change of speed at a distance of 1,000 m

Considerable attention in cyclic kind of sports is given to the pace of activity movements. The kayaking pace can be an indicator of both technical competence and functional fitness of athletes.

The earlier researches resulted in determination of the relation of movement pace along with qualification of athletes and a level of their technical skills with the ability to alternate tension and relaxation of muscles [10]. Also, the inverse dependence of the pace on the kayaking technique indicators was revealed.

The pace magnitude and dynamics throughout a distance is determined by individual qualities of paddlers and their tactics. In general, paddlers who take high places in various competitions, pass the second half of a race at a slower pace than the first one. Figure 2 shows that the first half of the distance is covered with a significant excess of the average pace, while in the second half at a sector of 600 meters there is a sharp drop to 94.7%. Then there is a gradual increase to an average pace at 800 meters and again a drop to 96.6% at a sector of 900 meters. As a result of the final acceleration, the pace again rises. But as a result of this increase (the pace in the last 100 meters exceeds the average by 1.3%) the average speed of the boat is not achieved. In our opinion, this is due to the fact that at the end of the distance there is fatigue and at the same time the pace increases. This leads to violation of the most optimal structure of stroke movements and deterioration of other parameters of the stroke.
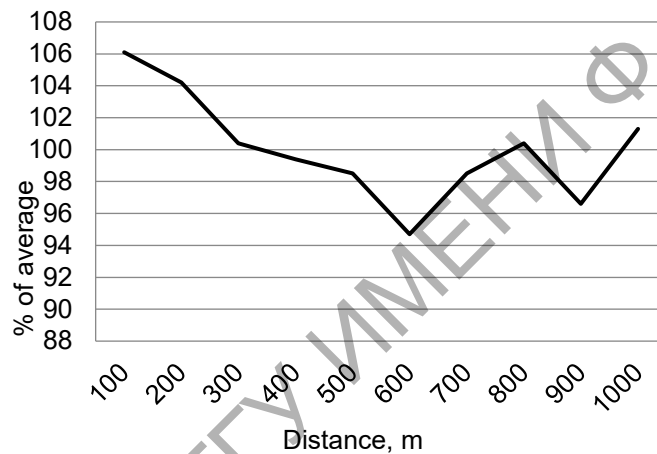
Figure 2 – Change of pace at a distance of 1,000 m

Figure 3 shows the simultaneous change of pace and speed at a distance of 1,000 meters. The most illustrative is sector of 700-800 meters, where the speed decreased from 98.8% to 98.6%, while the pace increased from 98.5% to 100.4% of the average one. On that basis, it can be concluded that with increasing the pace at this sector other parameters suffered significantly, that led to the decrease in speed.

Figure 3 – Change of pace and speed at a distance of 1,000 m

The power developed by paddlers throughout a distance is also one of the basic stroke parameters. This parameter characterizes the strength endurance which is one of the leading qualities of a paddler. Figure 4 shows the change in power at a distance of 1,000 m. Its maximum value is observed at the first 100 meters of the distance and exceeds the average one by 12.7% (this is the biggest change from all parameters and is explained by the high starting power). A gradual decrease of power occurs up to a sector of 700 meters. From 800 meters there is an increase to 100.8%, and then the maximum drop to 93.2% at a sector of 900 meters. It can be assumed that the sharp drop in power was due to the final acceleration which is performed from 700 meters to the finish line, as a result of which there is often not enough strength and at a sector of 900 meters there is a drop in power, pace and speed.
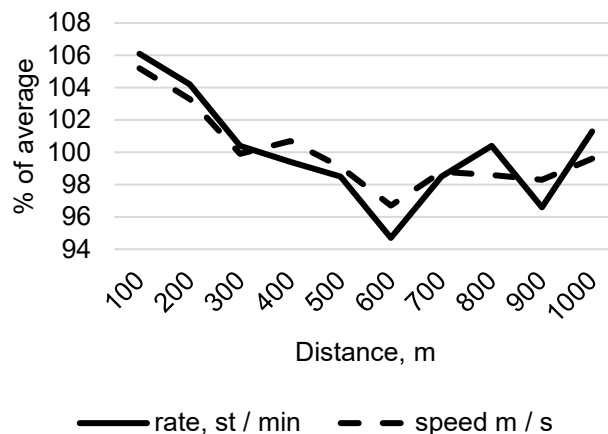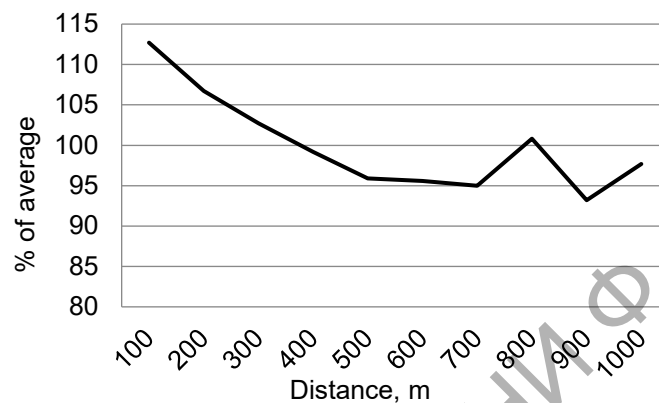

Figure 4 – Change of power (Watt) at a distance of 1,000 m

Figure 5 illustrates the change in power and speed at a distance of 1,000 meters. As it was already said, at a sector of 700-900 meters there are sharp fluctuations in the power 95% – 100.8% – 93.2%, while the speed here varies slightly with gradual drop 98.8% – 98.6% – 98, 3%.
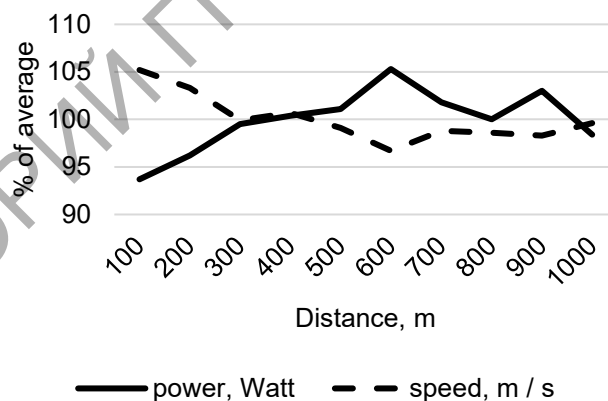
Figure 5 – Change of power and speed at a distance of 1,000 m

Figure 6 shows the change in pace, speed and power at a sector of 700-800 meters. As can be seen from the figure, the increase in pace and power at a sector of 700-800 meters not only does not lead to the increase in speed, but it even falls, albeit insignificantly. Therefore, one can say with confidence that there are other parameters that determine the speed at this sector.

Figure 6 – Change of pace, speed and power at a sector of 700-800 meters
at a distance of 1,000 m

As a result of the study, an analysis of the main parameters of the stroke was made and positive and negative relationships were identified for each parameter, which makes it possible to find shortcomings in the physical or technical fitness of the athlete and make timely corrections to the training program.

It has also been found that an increase in pace and power does not always lead to a commensurate increase in boat speed. For a deeper analysis of the reasons that cause a d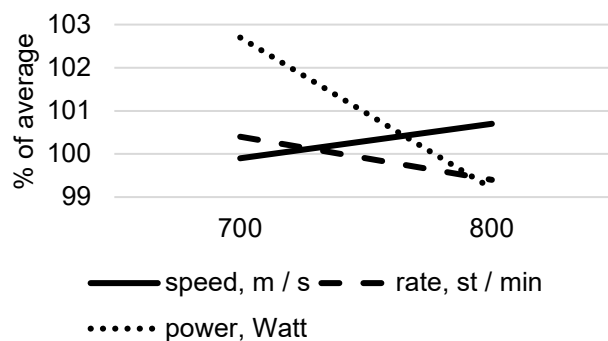ecrease in the efficiency of the rowing movement, it is necessary to study the nature of the interaction of body links in biokinematic pairs and the degree of force transfer developed by the sequence of inclusion of muscle groups.

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D. A. Khikhluha, К. К. Bondarenko, A. S. Malinouski

INFLUENCE OF THE SUPPORT AND UNSUPPORTED STROKE PHASE ON THE SPEED OF THE BOAT IN KAYAKING

In this article, various characteristics of the stroke in rowing in kayaks are studied. The main parameters that have a positive and negative effect on the speed of the boat are identified. Information about the training activity and its influence on the internal processes of the athlete's body contributes to the creation of the widest model of rowers' preparedness, which makes it possible to more accurately monitor the current sports form and predict the achievement of the maximum sports result.

The current stage in the development of rowing is characterized by a high level of sports results, the emergence of new equipment, a change in Olympic distances and increased competition in the international arena. The most important condition for improving the skills of athletes is the development and application of new technologies in the system of their training, based on modern scientific approaches. In this regard, a thorough study of all parts of the training process is coming to the fore in the training system in order to find hidden reserves that can improve sports results.

In this regard, one of the important components of training is the determination of model indicators of all areas of activity of athletes, which serves as the basis for predicting the development and formation of sports form, as well as sports results [4].

The most informative and accessible indicators of competitive activity in kayaking are stroke power, rowing pace, total stroke time, distance traveled, boat speed and distance travel time. The change in these parameters at a distance is a consequence of the load received by the body, and they appear due to changes in both the indicators of the cardiovascular system [3; 6] and the activity of the muscular system [1; 7].

The speed of the kayak on the course is the main parameter. By the speed of the boat and its change in each cycle of rowing movements, it is possible to assess the activity of the rower and the level of his preparedness. For its analysis, a number of parameters are used: power, stroke rate, time of the support, non-support phase, etc. [2; 5].

The purpose of the study was to study the features of the relationship between various stroke parameters.

Methodology and organization of the study. The study was conducted during a yearly cycle in the research laboratory of physical culture and sports of the educational institution "Gomel State University named after Francysk Skaryna" within the framework of the state research program "Convergence – 2020".

The study involved athletes aged 15 to 17 years who have the sports qualification "Candidate for Master of Sports". On the rowing ergometer, a dosed load was set depending on the weight and the passage of a distance of 1000 meters was modeled. The frequency of testing was determined by the tasks of the stages, testing was carried out on average once every three weeks.

As a result of this study, it became possible to track the dynamics of changes throughout the entire distance of the following parameters:

Speed – speed of covering a distance (m/s).

Total time of stroke – duration of one stroke (s).

Time of stroke support phase – duration of a paddle presence in water given one stroke (s).

Time of stroke airborne phase – duration of a paddle presence in the air given one stroke (s).

Length of boat run in one stroke – distance covered by a boat in one stroke (m).

Figure 1 shows the change in the total time of a stroke throughout a distance of 1,000 meters. As you know, a stroke from one side consists of support and airborne phases. This parameter characterizes the duration of one stroke, i.e. support and airborne phases together.

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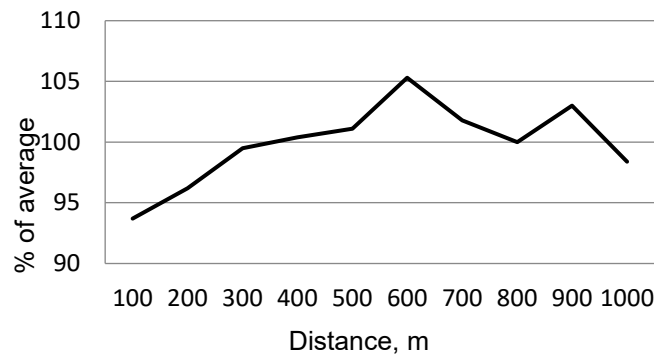
Figure 1 – Change of total time of stroke at a distance of 1,000 m

Total time of a stroke and pace are two interdependent parameters, since the pace characterizes the number of strokes over time, while the total time of the stroke is the time of these very strokes. This is clearly seen in Figure 2.
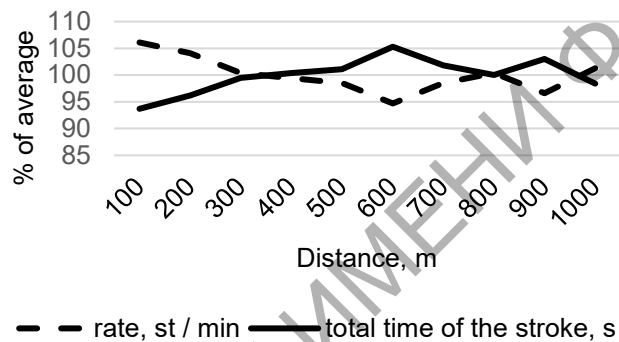
Figure 2 – Change of pace and total time of stroke at a distance of 1,000 m

Parameters of the support and airborne phases were studied for a more detailed presentation of the total time of a stroke.

Time of stroke support phase (Figure 3) is non-constant throughout a distance and varies considerably. The largest changes occur at sectors of 200–300 meters, where the increase in the time of stroke support phase reaches more than 6%, and at 600–700 meters, where its decrease reaches 8.6% of the average value at the distance.
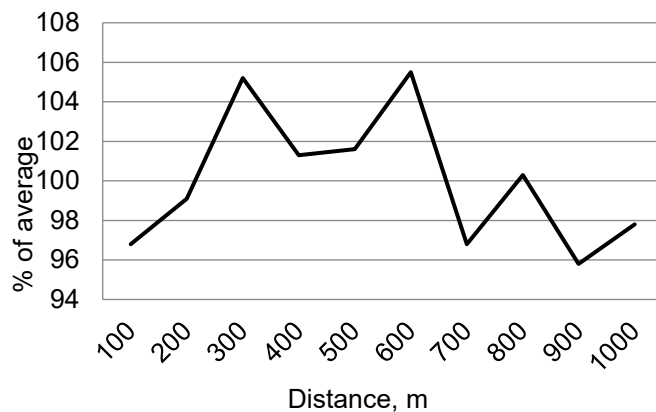
Figure 3 – Change of stroke support phase time at a distance of 1,000 m

Time of stroke airborne phase (Figure 4) is without significant fluctuations from the very start and gradually increases to a sector of 700 meters. This characterizes the dynamics of the change in power throughout the distance.
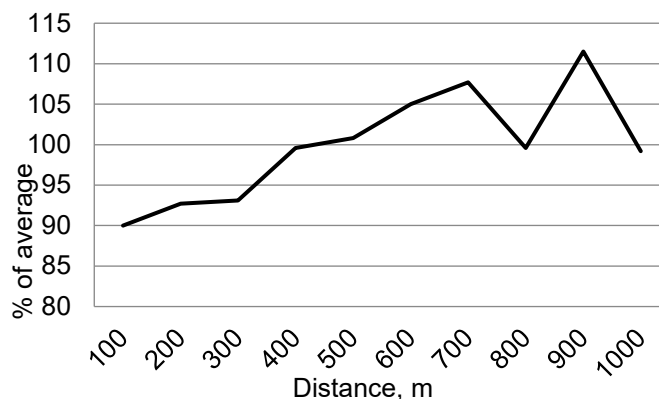
Figure 4 – Change of stroke airborne phase time at a distance of 1,000 m

The revealed kinematic characteristics of kayaking stroke allowed determining the model characteristics of the movement.

Based on the analysis, the most informative are sectors of 300 - 400 and 700 - 800 meters of a distance.

The drop in pace causes the increase in the total time of stroke, and because of the reduction in power, the time of the support phase decreases. These two factors result in the significant increase of the airborne phase time.

Along with the total time of stroke, the total length of run in one stroke increases too, and the length of run during the support phase decreases, which leads to a considerable increase in the length of the boat run during the airborne phase.

Throughout a distance the accumulated fatigue affects the trajectory of the movement of the body units and the relationship between the kayaking kinematic parameters against each other.

The carried our researches have allowed determining several recommendations:

To improve the training process management, it is necessary to identify the model characteristics of kayaking techniques at different distances.

Using the interrelation of different kinematic indicators of a stroke will help to find a rational structure of movements during a competitive race.

Ability of a paddler in each stroke cycle to alternate the tension of muscles during the support phase with their relaxation in the airborne phase is very important for the preservation of his/her performance throughout a distance. The increase of rest time in the stroke airborne phase leads to later fatigue.

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A. S. Malinouski, D. A. Khikhluha

**CHANGING THE BOAT RENTAL LENGTH AND ITS EFFECT
ON SPEED IN KAYAKING**

The article is devoted to the study of various stroke parameters in kayaking. The distance covered by the kayak in the supporting and unsupported stroke phases is analyzed. The length of the rental of the boat and its influence on the speed in kayaking are investigated.

The training process in kayaking should be of a highly specialized nature and strictly combined with competitive activities. The main competitive distances in kayaking are 200, 500, and 1000 m, and the time for passing these distances is from 30 seconds to 4 minutes. In this time range, there are various factors that limit the achievement of a high sports result [5]. The knowledge of these factors, which mainly determines the quality of the training process, depends on the breadth of the information received of a different nature: pedagogical, biomedical, kinematic, biodynamic.

Thus, the effectiveness of the training process is determined by the quantitative and qualitative parameters of the athletes' loading activity. Information about the training activity and its influence on the internal processes of the athlete's body contributes to the creation of the widest model of young rowers' preparedness, which makes it possible to more accurately monitor the current sports form and predict the achievement of the maximum sports result. The most interesting are the performance indicators of athletes (speed, pace, power, etc.) when passing both the entire distance and its sectors. Change in these indicators throughout a distance is a consequence of the load the body receives. Parameters of the cardiovascular system [4; 7] and muscle activity [1; 8] can serve as the basis for these changes. The state of various body systems of athletes is determined by different types of preparedness of the rower: technical, functional, psychological, physical, tactical. The level of development of various types of readiness is characterized by the parameters of competitive activity: the speed of the boat, the pace of rowing, the power of the stroke [6].

The aim of the study was to study the influence of the length of the rental of the boat on its speed in kayaking.

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Methodology and organization of the study. The study was conducted during a yearly cycle in the research laboratory of physical culture and sports of the educational institution "Gomel State University named after Francysk Skaryna" within the framework of the state research program "Convergence – 2020".

The study involved athletes aged 15 to 17 years who have the sports qualification "Candidate for Master of Sports". On the rowing ergometer, a dosed load was set depending on the weight and the passage of a distance of 1000 meters was modeled. The frequency of testing was determined by the tasks of the stages, testing was carried out on average once every three weeks.

As a result of testing paddlers, the following parameters were determined:

Speed – speed of covering a distance (m/s).

Power – power of each stroke developed by a paddler (Watt).

Pace – number of strokes per one minute (str./min).

Total time of stroke – duration of one stroke (s).

Time of stroke support phase – duration of a paddle presence in water given one stroke (s).

Time of stroke airborne phase – duration of a paddle presence in the air given one stroke (s).

Length of boat run in one stroke – distance covered by a boat in one stroke (m).

Length of stroke support phase run – distance covered by a boat during a stroke support phase (m).

Length of stroke airborne phase run – distance covered by a boat during a stroke airborne phase (m).

Achieving optimal performance when passing a competitive distance depends on a high level of development of special endurance, technical or tactical readiness. The speed of the kayak on the course is the main parameter. By the speed of the boat and its change in each cycle of rowing movements, it is possible to assess the activity of the rower and the level of his preparedness. For its analysis, a number of parameters are used: the power and pace of the stroke, the time of the supporting and unsupported phases, the length of the boat rental, etc. [3].

Length of run is one of the key parameters characterizing the distance covered by a boat in one stroke. It can be seen from Figure 1 that this parameter varies insignificantly throughout the entire distance and the range of its variation is 3.3% of the average value throughout the distance. This indicates a certain stability of this indicator.
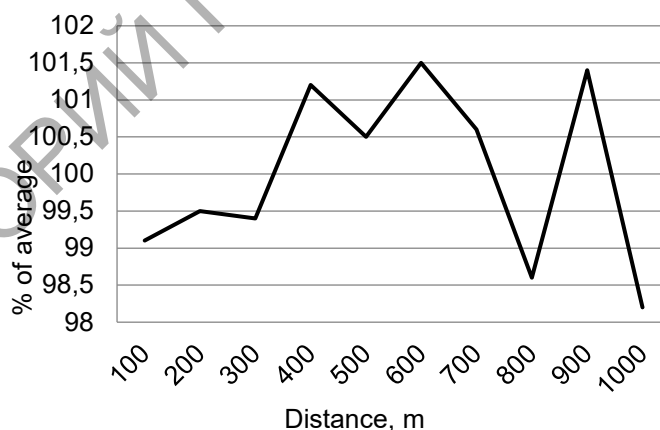
Figure 1 – Change of boat run length in one stroke at a distance of 1,000 m

In our opinion, this stability is achieved owing to the fact that the length of boat run depends on the kayaking power and pace, i.e., the increase in power should also cause the increase in the length of run owing to the increase in the boat speed. But the increase in power also causes the increase in the pace, which leads to the reduction of the stroke time; as a result, the length of run changes insignificantly. When the power decreases, the pace decreases too, the stroke time increases, the speed decreases; as a result, there are no significant changes in the boat run length.

From the above it may be concluded that generally the increase in power leads to the decrease in the boat run length (Figure 2), while the decrease in the pace leads to the increase in the stroke time and the boat run length in one stroke, and vice versa (Figure 3).
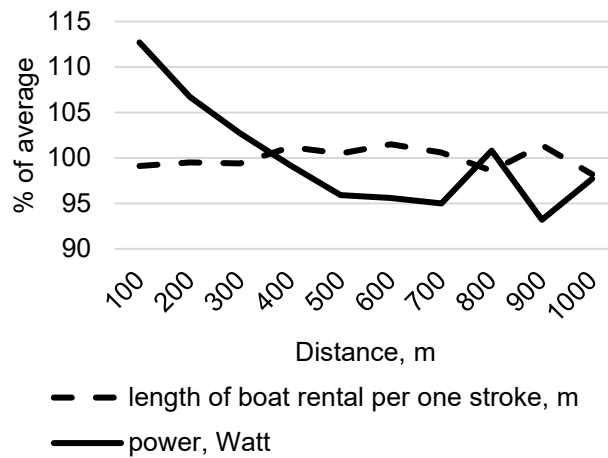
Figure 2 – Change of boat run length in one stroke and power at a distance of 1,000 m
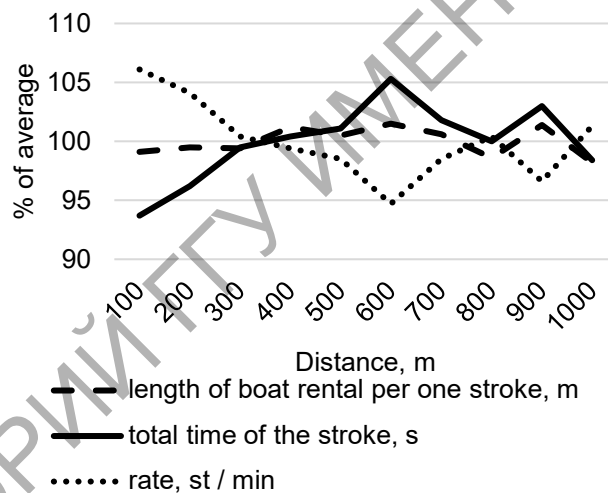
Figure 3 – Change of boat run length in one stroke,
total time of stroke and pace at a distance of 1,000 m

Length of boat run during the support phase characterizes, first of all, the efficient performance of the stroke itself, which depends on the efforts expended and the speed developed in doing so. As we can see from Figure 4, the boat run length during the support phase varies more significantly than the boat run length in one stroke, and its range is 10.4% of the average value throughout the distance. These fluctuations depend on both the change in power and pace throughout the distance and the change in the contribution of the support or airborne phases to the total length of the run.

The largest values of the boat run length during the support phase are observed in the first half of the distance, where its values exceed the average ones. In our opinion, this is due to the fact that these sectors have high values of power. But the first half of the distance is also passed owing to more efficient performance of the stroke itself, and in the second half of the distance owing to the fatigue

developed the efficiency of this stroke is reduced, which proves the decrease in the average values of the boat run length during the support phase in the second half of the distance.
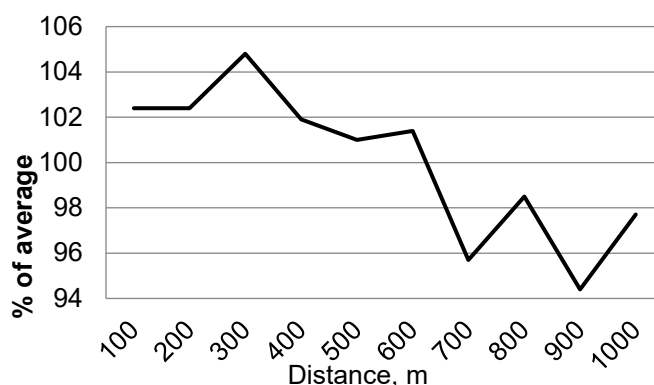
Figure 4 – Change of boat run length during stroke support phase at a distance of 1,000 m

Length of boat run during the airborne phase (Figure 5) is also of great importance, since it is characterized by airborne position of a paddle, where the amount of energy expended by a paddler is much less than in the support phase. Hence, the larger the distance the boat will cover in this period of time, the less efforts the paddler will spend in subsequent work. The boat run length during the airborne phase depends, first of all, on the stroke performance in the support phase, where the necessary speed is given to the boat, which is lost in the airborne position. The run length during the airborne phase also depends on time given to this phase: the longer time and speed, the larger distance covered. But increasing the airborne phase time will certainly lead to the decrease in speed, since during this period only its decrease occurs. So, on the one hand, the increase of the boat run length during the airborne phase leads to a more economical expenditure of forces, while, on the other hand, leads to the decrease in speed. Consequently, it is necessary to find the best combination of the support and airborne phases of a stroke over time, which will reduce the amount of energy expended and will not lead to a significant drop in speed.
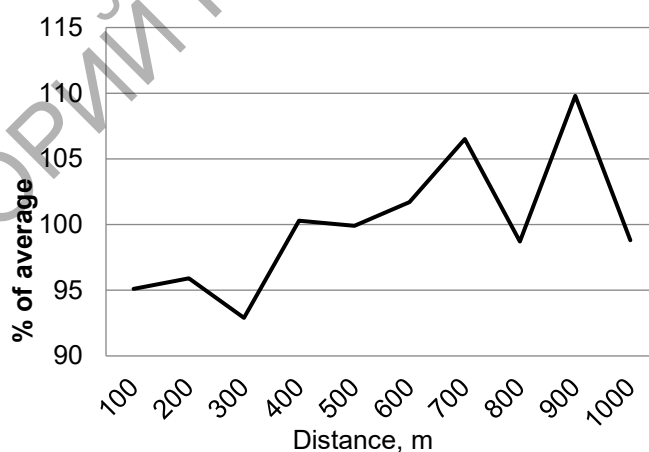
Figure 5 – Change of boat run length during stroke airborne phase at a distance of 1,000 m

For the optimal length of the boat rental for the unsupported phase, it is necessary to use the support phase as best as possible, where the boat is given the necessary speed for the unsupported phase. It is also necessary to find the best combination of the support and unsupported phase of the stroke in time, which will reduce the amount of effort expended and will not lead to a significant drop in speed. It is worth noting the need to develop the most optimal rowing pace, which, on the one hand,

will allow finding the best combination of the supportless and supporting phases of the stroke, and on the other hand, will create conditions for the most efficient stroke structure.

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S. V. Melnikov, A. G. Narskin

FUNCTIONAL AND PHYSICAL FITNESS OF HIGHLY QUALIFIED SWIMMERS IN TERMS OF THE ANNUAL VOLUME OF TRAINING LOADS

The article presents the results of the research, on the basis of which there has been revealed a correlation between the main indicators reflecting the functional and physical fitness of highly qualified swimmers with the amount of training work performed in different intensity zones. The obtained data can contribute to the timely correction of the volume and intensity of training loads and, as a result, to the rational management of the process of sports training of highly qualified swimmers.

Currently, the study of improving the level of physical and functional fitness of athletes as well as the search for effective ratios of the volume and intensity of training loads do not lose their relevance. At the same time, further rationalization and improvement of the sports training system is required, with the help of which it is possible to ensure the growth of sports results.

Experts note that effective management of the process of sports training can be carried out only if there is feedback from the controlled object, due to the study of various aspects of the athlete's fitness (physical, functional, technical and others), which will make it possible to make timely corrections in the training plan [1].

The level of athletic performance in many sports can be determined by the capacity of aerobic and anaerobic sources of energy supply for muscle activity, which characterize the energy capabilities of a person. When performing physical exercises, three main energy systems are involved: oxidative, glycolytic, and alactate, while the contribution of the above sources in performing various cyclic exercises is not the same [2; 3].

For dosing training work throughout the entire macrocycle, specialists [4; 5] have divided the training loads of swimmers into 5 intensity zones that have certain physiological boundaries and pedagogical criteria and affect a particular energy system of the body. The practical experience of our activity shows that often, a number of factors can lead to disruption of adaptive mechanisms, deterioration of the functional state and, as a result, a decrease in athletic performance, including the lack of control and consideration of training work in different intensity zones, as well as the desire to increase the volume and intensity of training loads that do not correspond to the current the state of the athlete's body [6].

It should be noted that improving the effectiveness of managing the process of sports training can be due to taking into account those indicators that are most susceptible to changes as a result of performing training work of various directions. Based on this, an important role in the rational management of the sports training process will be assigned to the search and determination of relationships between the volume of work performed in various energy supply zones, functional indicators and results of pedagogical testing, the dynamics of which may reflect the success of the athlete's body's adaptation to the training loads presented [7].

The purpose of the study was to determine the relationship between the volume of training work of swimmers performed in various intensity zones with physical fitness and the main indicators reflecting the functional state of the external respiration system and gas exchange of athletes.

Research methods and organization.

15 highly qualified swimmers (8 men and 7 women) with the titles of "Master of Sports" and "Master of Sports of international class" took part in an experiment conducted on the basis of the research laboratory of Olympic Sports of the Faculty of Physical Culture of the Higher Educational Institution "Francisk Skorina Gomel State University".

To assess functional fitness, we used a test with a stepwise increasing load on an ergometer with registration of the main parameters of gas exchange and external respiration using a portable ergospirometer "Cortex MetaMax 3B". We recorded the following parameters: heart rate at the anaerobic metabolic threshold (HR (AT), bpm), oxygen consumption at the anaerobic metabolic threshold (VO_2 (AT), ml/kg/min), maximum oxygen consumption (VO_2 max, ml/kg/min), maximum carbon dioxide release (VCO_2 max, ml/kg/min), maximum lactate concentration (La max, mmol/l) and maximum heart rate (HR max, bpm).

The amount of training work performed by athletes in different intensity zones was determined based on the analysis of training plans and diaries of athletes.

To study the special physical fitness of swimmers we used a number of pedagogical tests that allow us to assess the fitness of athletes in different intensity zones: 2000 m, 10x100 m, 4x50 m, 25 m.

The relationship between the volume and intensity of training loads and the functional and physical fitness of highly qualified swimmers was determined based on the calculation of the Bravais-Pearson correlation coefficient. In order to identify the tightness of the relationship between the studied indicators, we used the following generally accepted ranges of values: strong statistical relationship (r=0,7–0,99), average statistical relationship (r=0,5–0,69), weak statistical relationship (r=0,2–0,49), very weak statistical relationship (r=0,19–0,09). At the same time, the "+" or "–" sign reflects the direction of the relationship, when, respectively, there is a direct (positive) relationship

(when an increase in one indicator causes an improvement in another) or an inverse (negative) relationship (when an increase in one indicator is associated with a decrease in another) [8].

Research results and discussion.

Our study made it possible to establish the close relationship of indicators reflecting the functional and physical fitness of swimmers with the amount of load performed in different intensity zones (table 1).

Table 1 – Correlation of the volume and intensity of training loads with indicators reflecting the functional and physical fitness of highly qualified swimmers

	1 zone	**2 zone**	**3 zone**	**4 zone**	**5 zone**
HR (AT)	0,507	0,875	0,489	0,257	0,158
VO_2 (AT)	0,209	0,429	0,633	0,163	0,118
VO_2 max	-0,092	0,285	0,612	0,416	0,251
VCO_2 max	-0,166	0,103	0,377	0,817	0,463
La max	-0,199	-0,176	0,186	0,797	0,654
HR max	0,242	0,563	0,346	0,765	0,649
2000 m	-0,355	-0,758	-0,417	-0,396	-0,151
10x100 m	-0,197	-0,366	-0,625	-0,324	-0,254
4x50 m	-0,142	-0,379	-0,363	-0,688	-0,423
25 m	-0,112	-0,426	-0,411	-0,427	-0,513

Intensity zone 1 (aerobic recovery zone or aerobic threshold) is characterized by a low speed and longtime of work due to the complete utilization of lactate by slow muscle fibers (blood concentration of 2 mmol/l). Loads in this intensity zone are applied to a large extent during the preparation period, while at other stages of preparation their volume decreases, and they are used mainly as a means of recovery.

Our correlation analysis of the studied indicators with the amount of work performed in 1 intensity zone showed that there was no reliable statistical relationship between all the studied indicators, with the exception of the HR (AT) indicator, where an average relationship was noted (r=0,507). This may indicate that working in this zone can be used to increase the threshold of anaerobic metabolism mainly in athletes with a low level of aerobic capabilities and low qualifications, which is confirmed by the results of studies by other authors [9].

A weak positive statistical relationship of swimming volume in zone 1 was recorded with the indicators VO_2 (AT) and HR max (r=0,209 and r=0,242, respectively), while a very weak negative relationship was noted with the rest of the studied indicators: VO_2 max (r=-0,092), VCO_2 max (r=-0,166), La max (r=-0,199).

At the same time, the correlation analysis of the results of pedagogical testing with the volume of work performed in 1 intensity zone showed a weak negative relationship in the 2000 m test (r=-0,355), as well as a very weak negative relationship in the 10x100 m (r=-0,197), 4x50 m (r=-0,142) and 25 m (r=-0,112).

Based on the obtained data, it can be stated that the performance of training tasks in this intensity zone in the practical aspect should be regarded more as recovery work, during which the lactate concentration will not exceed 2 mmol/l, while significant changes in the indicators reflecting the functional state of the athletes' body will not be observed.

The aerobic development zone, or anaerobic threshold zone (zone 2), which is widely used to increase the aerobic performance of the cardiovascular system of the athlete's body, is mainly used for the development of general endurance (lactate concentration up to 4 mmol/l).

As can be seen from the data presented in the table, the volume of aerobic-developmental loads performed has a strong correlation with the HR (AT) indicator (r=0,875), as well as an average

relationship with the HR max indicator (r=0,563). The revealed closeness of the relationship between the volume of work in the 2 intensity zone and the index of the maximum heart rate can be explained by the fact that, as a rule, with a decrease in HR (AT), a decrease in HR max can occur, and vice versa, which is confirmed by the high statistical relationship of the indicators under consideration with each other (r=0,747) [10].

At the same time, we noted a weak and very weak correlation between the volume of work in zone 2 with the indicators VO_2 (AT) (r=0,429), VO_2 max (r=0,285) and VCO_2 max (r=0,103); in addition, a very weak negative relationship was noted with the indicator La max (r=-0,176).

Analysis of the results of pedagogical testing and the amount of work performed in the 2nd intensity zone showed a strong negative correlation in the 2000 m test (r=-0,758), as well as a weak negative relationship with the rest of the tests: 10x100 m (r=-0,366), 4x50 m (r=-0,379), 25 m (r=-0,426). The revealed strong correlation between the time to cover the distance of 2000 m and the amount of work of the aerobic-developmental orientation may indicate the possibility of using this test to assess endurance at the level of the threshold of anaerobic metabolism, reflecting the development of aerobic capacity of athletes.

Working in the zone of mixed aerobic-anaerobic exposure (3 zone of intensity) causes an increase in the concentration of lactate in the blood from 4 to 8 mmol/l as a result of activation of anaerobic glycolysis.

Our correlation analysis showed that the VO_2 (AT) and VO_2 max indicators have an average close relationship with the amount of work performed in the zone of mixed aerobic-anaerobic exposure (r=0,633 and r=0,612, respectively). A weak correlation was found with HR (AT) (r=0,489), VCO_2 max (r=0,377), and HR max (r=0,346), while a very weak correlation was found with La max (r=0,186).

Analysis of the results of pedagogical testing with the volume of work in the 3rd intensity zone showed a weak negative correlation in the tests of 2000 m (r=-0,417), 4x50 m (r=-0,363) and 25 m (r=-0,417). At the same time, we found an average negative statistical relationship between the result of performing the 10x100 m test and the amount of work in the 3rd intensity zone (r=-0,625), which may indicate the possibility of using this test to assess aerobic power or endurance in a mixed aerobic-anaerobic energy supply zone.

It is worth noting that the revealed average statistical relationship between the volume of work performed in the 3rd intensity zone and the indicators of oxygen consumption at the level of the threshold of anaerobic metabolism and maximum oxygen consumption is confirmed in other studies, and it is proposed to divide this zone into separate zones [4]. At the same time, the practical experience of our work indicates that the development of the VO_2 (AT) indicator is carried out to a greater extent when performing work from 4 to 6 mmol/l, while the increase in VO_2 max is more due to training work in the intensity zone from 6 to 8 mmol/l.

In the anaerobic-glycolytic or 4 intensity zone, when performing exercise, there is a significant increase in the concentration of lactate in the blood (up to 8-12 mmol/l and above). In the process of performing training tasks in this zone, the development of special and strength endurance, as well as anaerobic glycolytic capabilities is stimulated.

The volume of work performed in the anaerobic-glycolytic energy supply zone has a strong correlation with the indicators VCO_2 max (r=0,817), La max (r=0,797) and HR max (r=0,765), which confirms the orientation of the intensity zone under consideration to increase the glycolytic capacity and body power of athletes.

At the same time, a weak correlation was found with the VO_2 max (r=0,416) and HR (AT) (r=0,257) indicators, and a very weak correlation was found with the VO_2 (AT) indicator (r=0,163). The obtained data confirm our previous studies, where it was found that with an increase in the number of anaerobic-lactate and alactate exercises during a one-year macrocycle, there may be a decrease in indicators reflecting aerobic capacity and power [11].

At the same time, the analysis of the results of the pedagogical testing conducted with the volume of work in the 4 intensity zone showed an average negative statistical relationship only with the 4x50 m test (r=-0,688) (on the basis of which it is possible to assess the anaerobic glycolytic

capabilities of the swimmers ' body using this test). We observed a weak negative correlation with the results in other tests: 2000 m (r=-0,396), 10x100 m (r=-0,324), 25 m (r=-0,427).

When working with anaerobic alactate orientation (5 intensity zone), the lactate concentration does not have time to reach high values due to the short duration of exercise. Therefore, it is considered that the upper limit of this zone is the maximum speed (power) of movement, and the main task of its application is to develop or maintain high-speed and speed-power abilities.

In the course of the correlation analysis, the average statistical relationship between the volume of training work in the 5th intensity zone and the La max (r=0,654) and HR max (r=0,649) indicators was revealed, which confirms the possibility of using training tasks performed in this energy supply zone for the development of speed and speed-strength capabilities of swimmers.

At the same time, a weak tightness in the relationship between the volume of work performed in the intensity zone under consideration was recorded with the indicators VO_2 max (r=0,251) and VCO_2 max (r=0,463). A very weak correlation was also found with HR (AT) (r=0,158) and VO_2 (AT) (r=0,118).

A study of the relationship between the results of pedagogical testing and the volume of work in the 5 intensity zone established an average negative statistical relationship in the 25 m test (r=-0,513), a weak negative relationship in the 4x50 m (r=-0,423) and 10x100 m (r=-0,254) tests, and a very weak negative relationship in the 2000 m test (r=-0,151). Based on the obtained data, we can conclude that it is possible to use the test with swimming the control distance of 25 m to control the development of speed capabilities of swimmers, including training in the 5th intensity zone.

Conclusion. In the course of the study, we identified a statistically significant relationship between the volume and intensity of training loads used by highly qualified swimmers and indicators that characterize the functional and physical fitness of athletes.

It is established that the volume of work performed in the 1st intensity zone has practically no significant relationships with most of the considered indicators, with the exception of HR (AT) (r=0,507). The load volume in the 2nd intensity zone has a strong correlation with the HR (AT) indicator (r=0,875), as well as the results of the 2000 m test (r=-0,758). The volume of work in the 3rd intensity zone has an average correlation with the VO_2 (AT) and VO_2 max indicators (r=0,633 and r=0,612, respectively) and the results in the 10x100 m test (r=-0,625). A strong correlation between VCO_2 (r=0.817), La max (r=0.797) and HR max (r=0.765), as well as the average correlation between the results of the 4x50 m test (r=-0,688) was found with the amount of work performed in the 4 intensity zone. At the same time, the volume of work in the intensity zone 5 had an average tightness of correlation with the La max (r=0,654) and HR max (r=0,649) indicators, as well as the results of the 25 m test (r=-0,513).

It can be stated that the analysis of the dynamics of functional indicators and physical fitness, reflecting the effectiveness of the training work performed in a particular intensity zone will contribute to a more rational management of the sports training process. At the same time, the coach will have the opportunity to make operational adjustments to the training program, as well as select the optimal amounts of loads, the implementation of which will contribute to improving the functional and physical fitness of athletes, and, as a result, to the growth of their sports skills.

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Mingjunke Shang

THE CURRENT STATE OF THE DEVELOPMENT OF ICE HOCKEY IN CHINA

The article is devoted to the current situation with the development of ice hockey in China, after the successful holding of the 2022 Winter Olympic Games in Beijing. The subsequent period became a matter of concern in terms of popularization and improvement of winter sports, as well as the formation of their sustainable development. The problems that exist in the country in the development of ice hockey are reflected.

Introduction It is widely known that the successful bid for the 2022 Beijing Winter Olympics has propelled the development of ice and snow sports in China to an unprecedented new height. The goal of "Driving 300 million people to participate in ice and snow sports", which is directed at youth education, is a Chinese contribution that has changed the world map of ice and snow sports and opened up new horizons for the Olympics. The subsequent post-Winter Olympics period has become an issue of concern for the popularity and improvement of snow and ice sports, and the formation of a state of sustainable development.

Therefore, in this paper, we reviewed all the literature in the past ten years by using "ice hockey" as a keyword. After sorting and summarizing, we found that there were 133 studies on ice hockey from 2013 to 2023. Among them, 90% were from the northeastern region of China. Among these literatures, there are 62 articles on the topic of the current status of hockey development; only 11 articles on the topic of improving hockey training methods. And in these articles that studied the current status of hockey development, no practical improvement measures were proposed, so the goal of this paper is to pave the way for subsequent writings on training tools and methods to promote women's hockey, and to provide actionable training methods for the Chinese hockey training system.

Research results and their discussion. "Winter Olympic dream carries ice and snow dream, intersects with Chinese dream", the new era of socialist education is concerned about the healthy growth of young people, especially the popularization of youth ice and snow sports, to promote the development of school ice and snow sports and a series of requirements for "driving 300 million people to ice and snow" and "millions of young people on ice and snow activities" put forward the national development strategy goals [6].

Although the success of the Winter Olympics has a landmark and far-reaching impact on the development of ice and snow sports in China, on objective reflection, there is still a big gap between us and the world's ice and snow sports powerhouses in terms of relevant research, professional education, training of youth, and training of high-level athletes in the field of ice and snow sports [5].

Just from the women's hockey program, according to the statistics of foreign language journal postings, it was found that "research on women's hockey focuses on educational research on students' knowledge related to concussion and knowledge of safe play; hockey development focuses on the physical characteristics of elite female players, as well as comparative studies of women's hockey game performance, and male and female hockey players. In addition to this women's hockey research has focused on the management and prevention of injuries (mainly on the lower limbs and brain). The domestic academic journals on women's ice hockey have only paid attention to the research on technical and tactical analysis, special physical training and future development direction.

Obviously, the research at home and abroad in comparison, there is a distance and development space in the width and depth of the research issues of concern. As far as the ice hockey project events are concerned, from the 2006 Turin Winter Olympics to the 2022 Beijing Winter Olympics, Canada, the United States, Finland, Switzerland, the Russian Olympic delegation, and Sweden have always maintained the top 5 positions, and the best result for the Chinese team was seventh in the 2010 Vancouver Winter Olympics and ninth in the 2022 Beijing Winter Olympics. There are also only a handful of youngsters in the country who are training for this event. It is a visible fact that we need to understand and learn good experiences in women's hockey reserve training, professional coaching staffing, women's hockey education and the theory of hockey sports.

Results of domestic and international research. The development of snow and ice sports in China has made great progress in recent years, and the number of annual publications on snow and ice sports research has been increasing year by year in recent years, especially in recent years, the number of skiing enthusiasts in China has increased significantly, and it also promotes the rapid growth of winter sports industry and snow and ice events [7].

At present, many local governments and enterprises in China attach great importance to investment and construction of outdoor projects. For example, the Beijing Olympic Games during the "Oasis on Ice", Harbin Snow Expo, etc.; By the end of 2015, the world's first China International Ski Festival was officially launched nationwide and attracted widespread attention; Harbin International Ski Resort, for example, received visitors from all over the world and won a number of honors;

At the same time, the development of snow and ice sports in China has also been recognized by more and more countries and regions in the international community, such as the "Winter World Ski Capital of China" held in Harbin, and a series of activities carried out during the 2015 Beijing Olympic Games. These are the domestic research and development of snow and ice projects [2].

Due to the influence of climate and temperature, the institutions and authors of ice and snow sports research are mostly located in sports colleges and universities in the northeast of China, and the cooperation between them presents geographical and concentrated characteristics. With the promulgation of documents such as the National Ice and Snow Field Facilities Construction Plan (2016-2022) and the Mass Winter Sports Promotion and Popularization Plan (2016-2020) [7], With the implementation of the "North to South" program, ice and snow sports will gradually develop nationwide, and cooperation among researchers will also break through the regional dimension and gradually strengthen.

In addition, by reviewing the literature, we can know that the current hot spots of research on ice and snow sports in China mainly focus on the development and dissemination of competitive ice

and snow performance, competitive ice and snow sports, mass ice and snow sports and college ice and snow sports, as well as the development and development of ice and snow resources, ice and snow tourism industry, and ice and snow venues, which are all issues of great concern and urgent need to be solved.

In comparison, overseas research on outdoor projects started earlier and has been conducted in a more systematic and detailed manner and has achieved certain results.

A. On the conceptual definition of ice and snow sports;

B. On aspects of the value orientation of sports.

C. On the aspect of social significance of snow and ice sports.

D. On the analysis of the development prospects of outdoor programs from the perspective of participants.

In countries such as Russia, Canada and Finland, ice hockey is relatively popularly played and has a wide mass base and cultural atmosphere. Especially in school sports also offer ice hockey classes, which are popular among young people.

The current state of hockey development in China. After the success of the Winter Olympics, it not only stimulated the participation of the nation in winter sports, but also vigorously promoted the development of winter sports programs. Ice hockey, as a winter same field confrontation class project, is also the only ball collective project in the Winter Olympics, which has strong ornamental value. It is a sport that combines the versatile skating skills and the memory of field hockey. Hockey is one of the more confrontational sports. With the promotion of favorable policies in China, the participation of the public in ice hockey has been greatly increased. More and more researchers are focusing on ice hockey, so the advantages and disadvantages of ice hockey in China are gradually revealed.

Advantages of the development of ice hockey in China. Ice hockey is a sport that combines players' physical ability and skills together, which is important for the cultivation of good qualities such as human will and teamwork. Because it is an ice and snow sport, influenced by external factors, many children in northeast China receive professional training from a young age as a way to improve their physical and mental qualities, which also lays a good foundation for the development of ice hockey in China. Chinese women's ice hockey has once achieved many excellent results, which is inseparable from the professional training our players receive from an early age.

Disadvantages of hockey development in China. Snow sports cannot be developed without people's knowledge of winter environment and climate and other conditions, and our people have insufficient knowledge of winter environment and temperature aspects. In most areas of the country there is little snow, cold weather and unattended or no roads often traffic accidents. These are caused by the lack of proper knowledge of people's time outdoors; there is also the lack of timely detection of snow and ice disaster accidents resulting in a high number of deaths is also an important reason.

Since ice hockey is a winter sport and subject to geographical and seasonal influences, it cannot achieve universal participation and fewer regions can carry out the sport, therefore, ice hockey cannot be carried out comprehensively like other ball sports, leading to a shortage of talents. The lack of reserves has directly led to the stagnation of the development of ice hockey in China [3]. Some studies have shown that our hockey sports teams, with an imbalance between male and female athletes, and fewer and fewer professional young athletes, and with a further lack of professional skills training, we are unable to effectively carry out related activities even without the influence of geography and seasonality.

It has also been shown that in the provinces in the northeast of China, cities with geographical advantages, participation in ice hockey is mainly among youths, and the participation of boys is significantly greater than that of girls. The physiological and psychological characteristics of girls are less advantageous in choosing the sport of ice hockey [2].

At present, the number of professional ice hockey sports teams and athletes in China is very small [5], the imbalance in the development of the north and south regions and the incomplete ice and snow sports system all reflect the low level of market-oriented operation of ice and snow sports in China.

There is also a lack of funding. The game of hockey has high requirements for fields and equipment. Many teams have also been forced to disband their teams due to lack of sponsors, resulting

in insufficient funding. Also, there are very few indoor hockey courts in China, and it is often the case that they train outdoors in winter, or multiple teams use one indoor court. This leads to insufficient training time, which directly affects performance and eventually forms a vicious circle.

Conclusions. Ice hockey is highly spectator-friendly as an intense, same-game sport. However, at the same time, there are many factors that hinder the development. For example, the long-term constraints of natural conditions lead to the inability to popularize the masses, forming a small participating population, insufficient funds for venue facilities and equipment indirectly lead to the scarcity of reserve talents. China's ice hockey is in the early stage of development, we should learn from the strategies and methods used by developed European countries to develop ice hockey. To maximize the problem, we should make efforts to promote the development of ice and snow in China and increase the population of ice and snow in China.

Based on the research limitations of this study, the researcher's experience in the research process, and the current research trends in the field, the following recommendations are made for future research.

First, actively implement the national policy guidelines and comprehensively popularize people's awareness of safety precautions in the general environment. Appropriate activities for all people will be carried out to increase people's awareness of snow and ice sports, guide people to understand the significance of snow and ice activities, and increase their autonomy to participate in snow and ice sports.

Second, the integration of ice and snow sports into the practice of physical education in primary and secondary schools can enrich the current physical education content on the one hand, and build up reserve talents for the professional ice hockey player team on the other. At the same time, the government has increased its efforts to support ice and snow sports into school.

Third, to improve the researcher's own research ability, improve the research design, rigorous research process, strict control of data collection and data analysis process, and multi-level presentation of research results.

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THE APPLICATION OF SPECIAL PHYSICAL EXERCISES TO IMPROVE THE TEMPO-RHYTHMIC STRUCTURE OF THE RUN UP IN JAVELIN THROWING

The article considers a set of special physical exercises, which is aimed at using them in the training process of javelin throwers at various stages of improvement. In all technical sports, not excluding javelin throwing, special technical training of athletes prevails. The most typical mistakes of the tempo-rhythmic structure in the run up phase during javelin throwing are given, which are allowed to athletes.

Javelin throw is a cyclical discipline of athletics. In order for the effectiveness in javelin throwing to reach the maximum for each athlete, it is necessary to carefully study all aspects of preparedness [2; 3]. This is especially so with regard to technical and physical training in the javelin thrower's training process, which are aimed at developing and further improving the necessary physical qualities of the javelin thrower in accordance with his individual abilities. At the same time, we should not forget about the recovery of the athlete's body after training [1].

The purpose of the study is to identify special physical exercises necessary to improve the tempo-rhythmic structure of the run up in javelin throwing.

Organization and methods of research: analysis of scientific and methodological literature, analysis of sports diaries, video analysis of training processes.

The results of the study and their discussion. Technical training in javelin throwing begins with training in the first phase – the run up. At first sight, it is quite simple, but there are nuances of the following character in it:

1) tempo training;

2) rhythm training;

3) determination of the rational number of steps, in accordance with the level of preparedness, age, qualifications, anthropometric parameters.

The entire period of a sports career, the length of the run up, the number of running steps and their biomechanical parameters are changing due to the growth of the sportsmanship of javelin throwers [4]. At the stage of initial specialization, learning the tempo-rhythm structure begins with setting a run up in accordance with his individual abilities. In the future, as the state of athletic form is acquired, the development of the necessary physical qualities for the javelin thrower is corrected by the rhythm and pace in the run up.

For training, as well as further improvement of the tempo-rhythmic structure of the run-up phase at all stages of the athlete's specialization, the following physical exercises are used in the training process:

1) short multi-jumps;

2) running up the stairs;

3) running accelerations up to 20 m. without a javelin (with an imitation of holding it), as well as with a sport inventory;

4) "running into the mark" of the run up with the withdrawal of the javelin into the phase of crossing steps;

5) running in the opposite direction without a javelin, with lightweight one and standard weight of the javelin;

6) running up to 20 m. downhill without and with a javelin;

7) running on the run with weights on the belt (rubber).

In addition to the above-described motor actions of a high-speed type, speed-force exercises are used to cultivate a feel of rhythm and pace in javelin throwing. Let's look at some of them:

1) the walking lunges with a barbell on your shoulders;

2) jumping out with a kettlebell, a barbell on the shoulders;

3) running on the run with a kettlebell;

4) torso turns with a barbell on the shoulders;

5) running on a run-up holding weights up to 5 kg in bent arms at the elbow joints;

6) fast half-squat with a barbell on the shoulders.

The above physical exercises can be modified, supplemented, and also replaced by any other motor actions. They are quite simple in their structure, complexity can arise only in determining the method of physical exercise in the training process, which depends on the stage of preparation, specialization, preparedness of the athlete

Despite the fact that the above complexes are aimed not only at training, but also at improving the run up phase. There are also the most typical mistakes that athletes make. Let's look at some of them:

1) running in too slowly in the preliminary part of the run up;

2) lack of movement in «high-foot» running steps;

3) exceeding the rational run up speed;

4) in the preliminary part of the run up, the speed is too high with its further loss in the main part of run up;

5) the absence of active pushing of the foot from the surface.

These are just some of the most important technical mistakes in the run up phase. In the process of training, the coach together with the pupil, through video analysis of training, competitive javelin throws, can identify others that are characteristic of this athlete.

Conclusion. Currently, a large amount of research is being conducted in the direction of tempo-rhythmic training of javelin throwers of various qualifications, starting from the stage of initial specialization and ending with the stage of sports improvement. For the correct construction of the training process, trainers need to take into account all functional, physical, biomechanical parameters [2, 3, 4].

The application of the above-described special physical exercises contributes to the strengthening and development of the articular-ligamentous apparatus, develop the speed-strength abilities necessary for javelin throwers [5]. The application of its components can be adjusted, and can also be supplemented with various inventory, equipment, which will contribute to a positive impact for training and improving the tempo-rhythmic structure of the run up.

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G. I. Narskin, A. G. Narskin, S. V. Melnikov

STAGE CONTROL AS AN EFFECTIVE MEANS OF MANAGING THE TRAINING OF HIGHLY QUALIFIED ATHLETES

The article is devoted to the relevant problem of managing the training of highly qualified athletes in various sports based on the data of stage control. The complex of techniques used in the research laboratory of Olympic sports allows to obtain the necessary data and analyze the dynamics of changes in the leading functional systems of the body, ensuring the effectiveness of competitive activity of the athlete in the chosen sport, providing the possibility of rational correction of training loads and management of the process of sports training.

Nowadays, no one doubts the fact that the sport of the highest achievements is becoming an integral part of the world's culture: interest in various sports competitions is constantly increasing, the number of athletes and countries participating in the Olympic Games, World Championships and other international competitions is also growing. Because of this, sport has become a powerful means of political propaganda and demonstration of the social and economic well-being of any country, therefore, in almost any state, considerable financial, logistical and intellectual resources are invested in the development of sports.

It should be understood that today, the further progress of sports results and the conquest of priority positions on the world sports arena is largely associated with achievements in various fields of sports science, involving the solution of a whole complex of interrelated both highly professional and interdisciplinary tasks. And if earlier, in the 60s–80s of the last century, sports science was engaged, as a rule, in substantiating the record results already achieved by outstanding athletes, now it becomes obvious that effective training of elite athletes and the nearest sports reserve is virtually impossible without adequate scientific and methodological support.

Analysis of the results of the performance of Belarusian athletes at international competitions shows that sometimes the low results of our representatives are largely determined by insufficiently systematic and qualified control over their physical, functional and mental state, the level of technical and tactical skill, as well as the lack of constant scientific and methodological support of the training process. This is often the main reason for all the mistakes that coaches make when planning and managing training and competitive activities.

According to the modern scientific concepts [1], management can be defined as the ordering of the system, i.e. bringing it into line with the objective regularity operating in this area. At the same time, it should be borne in mind that an important aspect of the management processes of complex dynamic systems is the feedback principle, according to which successful management can be carried out only if the control object receives information about the effect achieved by one or another of its actions on the controlled object. It is the discrepancy between the actual state of the system and the planned one that is the corrective signal that causes the restructuring of the system so that it functions in a given direction [2].

Based on the stated above, the purpose of sports training management is to optimize the athlete's condition and the appropriate development of various components of his fitness, ensuring the achievement of the highest sports results in his chosen sport. The object of management in sports training is the activity of the athlete and his condition (operational, current, stage), which is a consequence of both the applied training and competitive loads, and the whole complex of influences in the training system.

The training process is managed by the coach with the active participation of the athlete and involves three groups of operations:

– collecting information about the condition of athletes, including indicators of physical, functional, technical, tactical, mental fitness, parameters of competitive activity, etc.;

– analyzing the information received based on a comparison of actual and planned parameters, developing ways to correct and optimize characteristics training or competitive activity in the direction that ensures the achievement of the desired effect;

– making and implementing decisions through the development and practical use of tools and methods that ensure the achievement of the necessary effect of training and competitive activities [3].

In the theory and practice of sports, it is customary to distinguish several types of control, each of which is conditioned by a certain condition of the athlete.

Stage control allows to assess the stage condition of an athlete, which is a consequence of a long-term training effect as a result of a long period of preparation - during a stage (or period, mesocycle), macrocycle (year), for a number of years (the Olympic cycle).

The current control is aimed at assessing the current conditions that result from the impact of training loads in a series of classes, training or competitive microcycles.

The task of operational control is to assess the operational conditions of the athlete, i.e. urgent reactions of the body to loads directly during individual training sessions or competitions.

At the same time, as V. N. Platonov notes [1], depending on the number of particular tasks and the volume of indicators included in the survey program, in-depth, selective and local control can be distinguished.

Based on the experience of our work, we can state the following. In-depth control is associated with the use of a wide range of indicators that allow a comprehensive assessment of the athlete's fitness, the effectiveness of competitive activity or the quality of the training process at the last stage. In the practice of training national teams of the Republic of Belarus, this form of control finds its expression in in-depth comprehensive surveys (UCO) conducted 2 times a year by the Republican Scientific and Practical Sports Center. The methods used in the UCO program provide for the study and evaluation of a significant number of indicators that characterize almost all aspects of an athlete's fitness. Biochemical, hematological and immunological control, psychological, functional, morphological and ergometric control are carried out. The main task is to determine the changes in the condition of athletes under the influence of a relatively long period of training and to help the coach in developing a strategy for the next training cycle. Due to the large number of indicators obtained during the UCO, and the significant amount of time required for their processing and analysis, coaches do not always have the opportunity to promptly obtain data on the current state of the athlete and timely correct the training process.

Selective control is carried out with the help of a group of indicators that allow assessing any of the aspects of preparedness or performance, competitive activity or the educational and training process, and is usually used in the practice of current control, periodically conducted by specialists of the regional sports and wellness dispensary. The evaluation criteria can be biochemical indicators (urea, glucose, triglycerides, AST, ALT), diagnostics of aerobic and anaerobic support systems (assessment of the athlete's condition using the D-test or Omega method), the study of the body component composition by bioimpedance (carried out on Tanita, Omron, ABC-01 Medass devices). At the same time, it can be stated that the separately conducted methods, due to their specificity, do not allow a comprehensive assessment of the athlete's condition and conduct its analysis in integrity.

Local control is based on the use of one or more indicators that allow assessing the relatively narrow sides of motor function, the capabilities of individual functional systems, etc. For this purpose, in most National Teams of the Republic of Belarus, lactate or heart rate indicators are used as evaluation criteria during a training session. The main task of this form of control is the current optimization of the program of training tasks and exercise complexes, identification of optimal intervals of work and rest, determination of the intensity of exercises, the magnitude of weights, etc. This form of control makes it possible to correct individual elements of a training session, without, however, generally assessing cumulative shifts caused by a series of training sessions (microcycles or mesocycles).

For about twenty years on the basis of the Faculty of Physical Culture of the educational establishment "F. Skorina Gomel State University " there has successfully been operating a research laboratory of Olympic sports. During this short period of time, the laboratory staff has established themselves as highly qualified specialists with extensive practical experience in scientific and methodological support in high-performance sports.

As the practical experience of our work shows, it is stage control that is the basis for effective management of sports training, allowing for adequate correction of the content and orientation of the training process, improving the preparedness of athletes and increasing the effectiveness of their competitive activities.

The program of stage control conducted in the laboratory of Olympic sports provides the functional diagnostic examination and testing of the leading physiological systems and body functions that ensure effective motor activity of athletes: cardiovascular and respiratory systems, central nervous system and neuromuscular apparatus, as well as parameters of physical development and psychophysiological condition. Together, the use of the entire arsenal of stage-by-stage control methods makes it possible to assess the current state of the athlete's body systems and determine his functional fitness. In addition, it is possible to determine the features of adaptation to physical exertion and at an early stage to prevent the occurrence of processes of maladaptation of the athlete's body.

The study of functional fitness is carried out using ergospirometric measurements. To dose the load, tests with a stepwise increasing power of operation on the ergometer are used. During this testing, the parameters of gas exchange and external respiration are recorded in real time, which makes it possible to determine the functional features of the respiratory system, blood circulation and metabolism. During the study, there were noted such indicators as the minute volume of respiration (VE, l/min), the threshold of anaerobic metabolism (PANO, bpm), the absolute and relative maximum oxygen consumption (VO2, l/min), the maximum release of carbon dioxide (VCO2, l/min), oxygen pulse (O2-pulse, beats/min) and a number of others. Evaluation of the obtained indicators and analysis of their dynamics during long-term training allow monitoring changes in the functional state and general and special fitness of athletes.

A complex of biomedical control methods is used to diagnose the state of the cardiovascular system. It includes the study of heart rate variability indicators on the software and hardware complex "Karmin" (according to the method of R. M. Bayevsky) [4], the study of hemodynamic parameters using the hardware and software complex of noninvasive hemodynamic study of the CAP TSG-osm "Globus" (according to the method of N. N. Savitsky) [5] and a number of other methods. These methods allow to objectively assess the features of vegetative support and the functional state of the body as a whole, timely identify fatigue and overtraining, as well as determine the most rational mode of training sessions and recovery after physical exertion. The use of these techniques within the framework of stage control also allows objective forecasting and correction of functional readiness for competitions.

The study of the component composition of the body by the method of bioimpedance measurement, carried out in the research laboratory of Olympic sports using the bioimpedance analyzer ABC-01 "Medass" (Russia), has become widespread within the framework of stage control. This analyzer is by far the most widely used and accurate means of studying the composition of the human body, based on the contact method of measuring the electrical conductivity of biological tissues, which makes it possible to evaluate various morphological and physiological parameters of the body. During the study, such indicators as fat, lean, active cellular and musculoskeletal mass, total and extracellular fluid, specific basal metabolism, phase angle and a number of others were measured. Based on the data obtained, it is possible to solve the problems of optimizing the parameters of the body composition of athletes depending on the stage of long-term training and sports qualifications, monitor the state of fitness both in training sessions and during the competition period, evaluate the effectiveness of recovery measures, as well as prevent violations associated with irrational diet and dosing of training loads.

With the help of the computer diagnostic complex NS-Psychotest, a psychophysiological study of sensorimotor reactions and the study of personality traits is carried out. Among the most common psychomotor indicators are the time of a simple and complex motor reaction, the reaction time to a moving object, the results of a tapping test and a number of others. These techniques allow to obtain the necessary information about the functional state of the central nervous system.

The laboratory staff has extensive practical experience in scientific and methodological support of training and competitive activities of athletes of the national teams of the Republic of Belarus in rowing, rowing and canoeing, swimming, cycling, boxing, freestyle and Greco-Roman wrestling, athletics, modern pentathlon, biathlon. In addition, cooperation has been established with the gaming teams of the republic: football clubs "Shakhtar", "BATE", "Dynamo-Minsk", "Energetik-BSU", "Isloch", "Gomel", "Dynamo-Brest", "Torpedo-Belaz", hockey clubs "Dynamo-Minsk" and "Gomel", handball club "Meshkov-Brest". Systematic examination in the laboratory today is one of the conditions for the rational construction of the training process [6-9].

It is important to emphasize that adaptation to training loads is an integration of various body functions, and the effect of adaptation is provided by regulatory processes that are aimed at the sustainable preservation of physiological constants. Therefore, no single physiological system is decisive, which determines the complex principle of diagnostics of an integral organism, an important condition of which is the availability of modern diagnostic equipment and competent interpretation of the results of the examination. Only a comprehensive assessment of the functional state of an athlete and the level of his special performance can meet the criterion of objectivity of the information received and, therefore, meet the requirements of monitoring observations of athletes at the stages of long-term training.

The information obtained in the course of solving particular tasks of stage control is used by the coach in the course of making managerial decisions to optimize the structure and content of the process of sports training and competitive activity, which makes it possible to effectively manage the process of training highly qualified athletes. Using the data obtained during the stage control a competent and knowledgeable coach is able to significantly differentiate and optimize the training process, achieving the highest results. And the outstanding achievements of Belarusian athletes cooperating with the laboratory are a vivid evidence of the effectiveness of such cooperation.

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G. I. Narskin, S. V. Sevdalev

COMPETITIVE ACTIVITY ANALYSIS OF HIGHLY QUALIFIED FEMALE ATHLETES SPECIALIZING IN MODERN PENTATHLON IN THE AGE ASPECT

The article is devoted to the study of the age dynamics of the competitive activity of the strongest female athletes in the world specializing in modern pentathlon. The analysis of competitive activity made it possible to identify the main trends in the dynamics of its structural elements in the age aspect. The periods of increase in the result were determined. The most significant of them can be considered age periods 19–20, 25–26 years. The stability of age dynamics is observed both in the result and in the contribution to the total point amount of pentathlon in fencing and the combined relay. In swimming and show jumping, with the instability of the result, a decrease in the contribution of these types of sport to the overall result is observed. The results obtained can serve as a guide for specialists in improving the "road map" of the long-term training of female athletes specializing in modern pentathlon.

The essence of the functioning of the system of high-class athletes training lies in the need for the manifestation of motor abilities in their optimal combination in extreme conditions, which are the main competitions. In this regard, a special role is given to a clear definition of the goal and management of the process of sports training.

In recent years, the interest of specialists in the analysis of the specifics of the competitive activity of athletes has increased, the study of which in individual and team sports has received quite a lot of attention in the special literature [1; 2]. However, information related to competitive activity in complex types of competitions – all-around events, which are distinguished by an extreme variety and complexity of requirements for the manifestation of special physical, tactical, technical, and psychological preparedness by athletes is clearly insufficient. All-around athletes must have a whole complex of seemingly incompatible motor abilities, which are typical for athletes performing in events dedicated to separate types of sport [1; 3; 4].

Many specialists have been studying the structure of competitive activity in the types of sports all-around. In particular, they determined the competitive models of athletes of various qualifications, analyzed the relationship between the sum of points in the track-and-field heptathlon and the results of certain types of the all-around, compared the features of the contribution to the competitive result of the heptathlon of the results in individual types and groups of types included in it, their features and its interrelationships among the strongest female athletes of the world [1; 3; 5].

A group of authors devoted their work to determining the features of the structure of the competitive activity of qualified pentathletes [6; 7; 8].

Despite the variety of approaches to the study of competitive activity in sports all-around, there are practically no studies devoted to the study of the dynamics of competitive activity of qualified female athletes in the age aspect.

The purpose of the study: to study the dynamics of the competitive activity of the world's strongest female athletes specializing in modern pentathlon in the age aspect.

To achieve our goal, we analyzed the results shown by highly qualified athletes in major competitions (World Championships, World Cup finals, the Olympic Games 2016, 2020) over a ten-year period.

Figure 1 shows the competitive performance of the strongest female pentathletes in the world. It can be seen from the graph that the growth of the average indicator occurs almost linearly. However, several age periods can be distinguished, where spasmodic changes in the result are noted. At the age of 18-19 years, the most significant, reliable increase in the average indicator of competitive activity by 33.67 points is observed, which is 2.74%.

The second significant increase in the total sum of all-around points is observed at the age of 19 to 20 years – 13.32 points. According to the authors, at this age athletes stabilize their technical skills, which allows them to show results in certain events that are close to personal records [3]. It is worth noting that a number of female athletes of the above age, who showed the highest sports result at the level of 1330 points, did not even come close to this number of points in the future, which suggests that the training process was forced, which further negatively affects the continuation of their sports career.
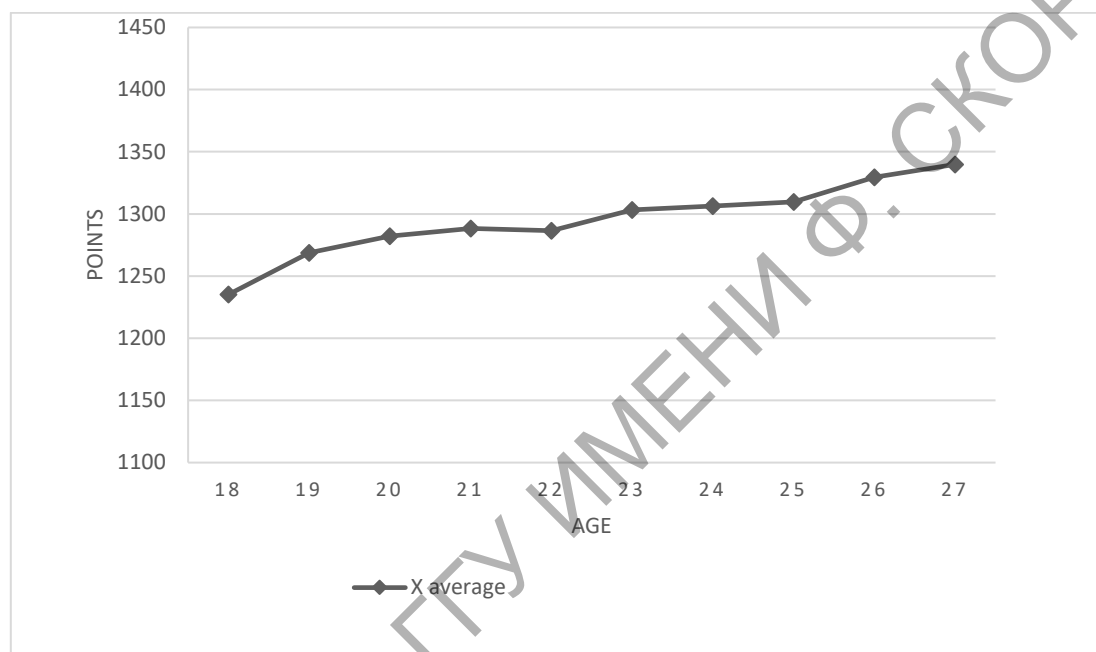
Figure 1 – Age dynamics of sports results of highly qualified female athletes specializing in modern pentathlon

The next significant increase in results falls on the period of 22–23 years (16.7 points). In this age period, the highest difference between the minimum (1241.4) and maximum (1359.7) results – 118.3 points was noted.

Further, in the period up to 25 years, there is a slight increase in the result (less than 1%), except for the period of 21–22 years, where there is a slight decrease in the result (-1.95 points).

At the age of 26, there is the next significant increase in the competitive performance of all-around events by 19.65 points – 1329.45 points in total.

Then, at the age of 27 years, there is a further improvement in the result by 10.41 points (1339.86±26.40).

According to the authors of [3], in the preparation of all-round events, attention should be paid not so much to the total amount of points, but how this amount is gained, that is, the contribution of individual types. We have studied the relationship between the results in the types of pentathlon and the total amount of points.

Tables 1 and 2 show that the difference between the largest contribution of points to the total amount of the combined relay (40.57%) and the smallest contribution – fencing (15.54%) was more than 25%. This is the maximum difference between individual types of sport for the entire period under consideration.

Table 1 – The structure of competitive activity of the strongest female athletes specializing in modern pentathlon

Age	Fencing		Swimming		Show jumping	
	Result, points	Contribution, %	Result, points	Contribution, %	Result, points	Contribution, %
18	193,67± 17,04	15,54	273,00± 8,92	22,10	270,00± 25,81	21,79
19	201,55± 23,18	15,90	272,64± 14,68	21,51	288,00± 12,17	22,72
20	206,56± 23,04	16,15	277,44± 13,03	21,69	286,87± 9,27	22,39
21	209,53± 23,29	16,47	277,13± 12,62	21,62	283,33± 20,08	22,21
22	214,38± 16,11	16,56	272,69± 13,18	21,10	281,13± 21,28	21,86
23	214,00± 22,91	16,49	277,67± 11,51	21,31	289,83± 6,58	22,25
24	216,59± 22,59	16,59	276,55± 14,68	21,18	286,30± 11,09	21,92
25	218,36± 25,26	16,78	279,36± 9,74	21,33	280,80± 10,33	21,54
26	224,82± 19,00	16,89	275,36± 9,90	20,71	289,91± 3,62	21,79
27	226,29± 17,10	16,90	283,71± 9,29	20,78	286,67± 9,1	21,30

Table 2 – The structure of competitive activity of the strongest female athletes specializing in modern pentathlon

Age	Combined relay		Final result	
	Result, points	Contribution, %	Result, points	V%
18	501,83± 19,88	40,57	1235,00± 53,78	3,8
19	504,27± 38,07	39,78	1268,88± 24,40	3,14
20	509,44± 39,10	39,78	1282,20± 42,76	3,34
21	507,93± 32,73	39,71	1288,41± 31,51	3,48
22	521,06± 34,17	40,48	1286,47± 52,75	3,91
23	517,50± 31,11	39,95	1303,17± 47,03	3,33
24	522,55± 27,44	40,01	1306,30± 32,08	2,46
25	525,73± 28,84	40,35	1309,80± 23,07	2,6
26	540,18± 26,75	40,61	1329,45± 38,96	2,93
27	549,71± 20,18	41,02	1339,86± 26,40	1,97

In the age aspect, over the entire period of research, the contribution of swimming decreased from 22.10% to 20.78%, the contribution of fencing, on the other hand, increased from 15.54% to 16.90%.

In show jumping, the contribution as a percentage did not change significantly (0.15%). The loss of contribution of swimming is explained by a significant increase in the contribution to the total amount of points of fencing and relay. Overall, there is an increase in the result in all types. The greatest increase in the result is observed in the combined relay – 47.88 points.

In fencing, the result increased by 32.62 points, swimming by 10.71, show jumping by 16.67 points. The difference in the rate of absolute growth can be associated with the peculiarities of the training of female athletes at a given age.

In the process of research, the highest variability (V%) was found in pentathletes aged 18, the lowest – aged 27. However, the degree of dispersion of data in all age groups is insignificant.

The analysis of the competitive activity of the strongest pentathlon female athletes made it possible to identify the main trends in the dynamics of its structural elements in the age aspect. The main periods of a significant increase in the result in the modern pentathlon were determined. The most significant of them can be considered age periods 19–20, 25–26 years. The stability of age dynamics is observed both as a result and in the contribution to the total amount of the pentathlon in

fencing and the combined relay. In swimming and show jumping, with the instability of the result, a decrease in the contribution of these types to the overall result is observed.

Thus, the results obtained can serve as a guide for specialists in improving the "road map" of the long-term training of female athletes specializing in modern pentathlon. In this case, one should take into account the individual characteristics of a particular all-around event and rely more on its leading motor abilities.

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E. A. Osipenko

THE FUNCTIONING OF THE SCIENTIFIC SCHOOL OF G. I. NARSKIN «PHYSICAL EDUCATION AND SPORTS TRAINING» AS A FACTOR IN THE MODERNIZATION OF HIGHER PHYSICAL EDUCATION

In existing practice, the concept of a scientific school is often used broadly: a school approaches a theoretical approach, a successfully operating organizational structure, and a center for research on a particular topic. The key feature of a school in the science of science is the existence of an independent research program and direct communication links, including those between generations. These features make it possible to unambiguously distinguish a scientific school both from a scientific direction and from other types of scientific communities. The emergence and success of the development of a scientific school depend on a complex of objective and subjective conditions, which must be taken into account in the social and legal regulation of the activities of scientific schools.

The article presents the results of the functioning of the scientific school of Doctor of Pedagogical Sciences, Professor Gennady Ivanovich Narskin.

In domestic vocational education, scientific and pedagogical schools have always occupied and continue to occupy a prominent place in improving the training of highly qualified specialists for various branches of the country's economic complex, in solving major scientific problems. The training of personnel for the sphere of physical culture and sports is no exception.

Today, as noted in [1], the main base with the infrastructure for scientific schools are universities, where scientific areas appear, form and develop within the departments under the guidance of leading scientists – doctors of sciences, professors. And finally, one more definition. According to O.Yu. Grezneva [2], in the scientific community, most researchers use the concept of "scientific school" "in relation to a relatively small scientific team, united not only by the organizational framework, not only by specific topics, but also by a common system of views, ideas, interests, traditions – preserved, transmitted and developing with the change of scientific generations", and highlight the following features of the scientific school: the commonality of the scientific interests of the representatives of the school and the scientific significance of the problems under consideration; the level of scientific results of the school and its (school) recognition in the country and abroad; the role of scientific leader; stability and prospects of the school (continuity of scientific generations, work with scientific youth, work of a permanent scientific seminar).

It should be noted that the founder of the creation of the scientific school G.I. Narskin in 1980 is Doctor of Pedagogical Sciences, Professor – Viktor Grigoryevich Nikitushkin.

The main directions of scientific research carried out within the framework of the scientific school of G.I. Narskin are:

– development and implementation of health-forming technologies based on the means of physical education for people of different ages;

– control and management of sports training of athletes of various qualifications in the structure of long-term training.

The scientific school includes more than 50 people: 3 – doctors of pedagogical sciences, 22 – candidates of pedagogical sciences, 5 people – young scientists under 35 years old, 20 – graduate students, 2 – applicant for the degree of doctor of pedagogical sciences.

Over the past decade, the following applicants have submitted their dissertations for the degree of Candidate of Pedagogical Sciences to the Dissertation Defense Council and successfully defended:

– *Volodkovich Stella Leonidovna* – candidate of pedagogical sciences. The topic of the dissertation is "Structure and content of health-improving and developing classes in physical culture of students of the preparatory medical group of pedagogical specialties" (Place of defense: RGUFKST, Moscow), year of defense – 2011;

– *Tozik Olga Valerievna* – Candidate of Pedagogical Sciences. The topic of the dissertation is "Improving the functional reserves of the organism of high school students by means of physical education" (Place of defense: Moscow State Pedagogical University, Moscow), year of defense – 2011;

– *Osipenko Evgeny Vladislavovich* - Candidate of Pedagogical Sciences. The topic of the dissertation is "The content and orientation of physical education and recreation classes with younger schoolchildren in extended day groups" (Place of defense: SGAFKST, Smolensk), year of defense – 2013;

– *Klyuchnikov Alexander Valerievich* – Candidate of Pedagogical Sciences. The topic of the dissertation is "Professional physical training of cadets of engineering institutes of the Ministry of Emergency Situations." (Place of defense: Moscow State Pedagogical University, Moscow). Year of protection – 2014;

– Baranov Dmitry Viktorovich – Candidate of Pedagogical Sciences. The topic of the dissertation is "Efficiency of application of lead-up exercises at the stage of sports improvement of boxers" (Place of defense – Belarusian State University of Physical Culture, Minsk), year of defense – 2018.

The main scientific results obtained by applicants are considered to be the following:

– scientific and methodological foundations of physical education of schoolchildren living in radiation-contaminated territories have been developed;

– a system for the prevention and correction of deviations in the state of the musculoskeletal system of children of preschool and school age by means of physical education was developed;

– an innovative model of individualization of women's training in speed-strength athletics has been developed;

– a system of complex control and management of sports training of qualified athletes in various sports has been developed;

– a program for diagnosing the physical condition of students and students was developed and introduced into the educational process of institutions of general secondary and higher education in the Gomel region, based on the use of author's computer programs for collecting, processing and storing the information received about the indicators of the physical condition of students;

– a program for monitoring the psychophysical state of students and students was developed. (UO "Francisk Skorina Gomel State University", Gomel, Belarus; fitness club "USSR", Moscow, Russia).

The results of dissertation research are introduced into the educational process institutions of preschool education, state educational institutions, institutions of higher education of the Republic of Belarus, in the training process of the national teams of the Republic of Belarus in sports, the Russian national athletics team.

Scientific school of G.I. Narskina is actively collaborating in the scientific and innovation sphere with the following organizations of the Ministry of Education of the Republic of Belarus, the Russian Federation and Ukraine:

1. Educational Institution "Gomel State Medical University" (Gomel).
2. Educational Institution "Sukhoi Gomel State Technical University" (Gomel).
3. Educational Institution "I.P. Shamyakin Mozyr State Pedagogical University" (Mozyr).
4. Educational Institution "Belarusian State University of Physical Culture" (Minsk).
5. Educational Institution " Ya. Kupala Grodno State University" (Grodno).
6. Federal State Budgetary Institution "Federal Scientific Center for Physical Culture and Sports", FGBU FNTs VNIIFK (Moscow, Russia).
7. State Autonomous Educational Institution of Higher Education of the City of Moscow "Moscow City Pedagogical University" (Moscow, Russia).
8. Federal State Budgetary Educational Institution of Higher Professional Education "Russian State University of Physical Culture, Sports, Youth and Tourism" (Moscow, Russia).
9. Institute of Physical Culture of the Tyumen State University (Tyumen, Russia).
10. Federal State Autonomous Educational Institution of Higher Education "National Research Tomsk State University" (Tomsk, Russia).
11. State Institution "K.D. Ushinsky South Ukrainian National Pedagogical University" (Odessa, Ukraine).
12. A.S. Makarenko Sumy State Pedagogical University (Sumy, Ukraine).
13. Zelenogursky University (Zielona Gora, Poland).

Public recognition of the scientific school of G.I. Narskin is confirmed by the following results:

– Winner (2004) and prize-winner (2002) of the international competition held by the European Athletics Association (EAA) for the best scientific work – Vrublevsky E.P.

– Laureates of the competition of the Gomel Regional Executive Committee for talented young scientists and specialists for 2005 Sevdalev S.V., Narskin A.G.

– Laureate of the All-Russian competition for the best scientific book in the nomination "Pedagogy and teaching methods" – Vrublevsky E.P. (2010).

– Winner of the competition of the Gomel Regional Executive Committee based on the results of scientific and innovative activities Osipenko E.V. (2013).

– Scholarship holder of the President of the Republic of Belarus as a young scientist (2014) – Osipenko E.V.

– Scholarship holder of the President of the Republic of Belarus – post-graduate student Kozhedub M.S. (2017), PhD student Misyura A.A. (2020).

– Diploma of the Laureate of the Skorinin Readings – Narskin G.I. (2002), Osipenko E.V. (2013), Vrublevsky E.P., Sevdalev S.V., Skidan A.A. (2016).

    −   Laureate Diploma inAll-Russian competition for the best scientific book – Osipenko E.V. (2017, 2019, Sochi, Russia).

    −   Diploma of the Laureate in the All-Russian competition of scientific works in the field of physical culture, sports and life safety – Narskin G.I., Usovich V.Yu. (2020, Yelets, Russia).

    −   Diploma of the 3rd degree at the VIII All-Russian competition of scientific works of students of universities, colleges and young scientists in the field of physical culture, sports and life safety with international participation (Yelets, Russia, 2021).

    −   Diploma for the best research project implemented in the EE "GSU named after I.I. F. Skaryna" (2014) – research laboratory of Olympic sports.

    −   Diploma for the best research project implemented in the EE "GSU named after I.I. F. Skaryna" (2015) – research laboratory of Olympic sports.

    −   Diploma for the best research laboratory operating in the EE "GSU named after I.I. F. Skaryna" (2019, 2022) – research laboratory of Olympic sports.

    Honorary scientific knowledge received by members of the scientific school:

    −   *Narskin Gennady Ivanovich*- Badge of honor "For the development of physical culture and sports in the Republic of Belarus" (1999); Honored Worker of Physical Culture and Sports of the Republic of Belarus (2000); "Excellence in Education" of the Republic of Belarus (2007); medal "For excellent merits in the development of the Olympic movement in the Republic of Belarus" (2008); Badge of Honor "For Merit" of the All-Russian Research Institute of Physical Culture and Sports (Russia, 2009); Honorary Professor of the EE "F. Skorina GSU" (2019). Prepared 7 candidates of sciences.

    −   *Vrublevsky Evgeny Pavlovich* – Badge of honor "Excellent worker in physical culture and sports" (2000), medal "80 years of the State Committee for Sports of Russia" (2003), Badge of honor "For merits in the development of physical culture and sports" (2005). Prepared 4 candidates of sciences.

    −   *Barkov Vladislav Alekseevich* – Corresponding Member of the Belarusian Academy of Education (2011); "Excellence in Education" of the Republic of Belarus (2008). Prepared 8 candidates of sciences.

    Thus, the scientific school of G.I. Narskin is the main informal structure of science in the field of physical education and sports training in the Gomel region, making a significant contribution to its development.

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E. V. Osipenko, E. D. Mitusova

LIGHT AND ATHLETICS FOR CHILDREN 8–9 YEARS OLD IN LONG DAY GROUPS

The most urgent today is the problem of maintaining health. To be healthy, you need to master the art of preserving and strengthening it. The child is in school during the period of his growth and development, when all his organ systems, the psyche, are being formed. The incidence rate in educational institutions is high: 80% during the year suffer from one or another disease. Influenced by: increased workload, stress, malnutrition, environmental pollution, low physical activity.

This article offers the results of an experimental study that are aimed at resolving the current problem situation. The content of physical culture and health-improving classes with children in extended day groups is given, which contribute to increasing the efficiency of physical education of students of the 1st stage of general secondary education, as well as a significant increase in the level of physical fitness of children.

The younger generation is the reproductive, intellectual, economic, social, political and cultural reserve of society [1–5].

For several decades, the negative dynamics of the indicators of physical health of children and adolescents in the Republic of Belarus has been ascertained. Thus, statistical studies conducted by specialists of healthcare institutions of the Republic of Belarus, and an analysis of the dynamics of the incidence of schoolchildren showed that during the transition from the I (primary) stage of general secondary education to the II (basic) stage, students experience an increase in various kinds of diseases, deterioration in well-being and, as consequently, reduced performance.

Thus, the above data indicate a deterioration in the health status of students with an increase in the level of education: the formation of chronic pathology, a violation of the processes of growth and development, adaptive mechanisms and necessitate the search for cause-and-effect relationships in order to develop and implement preventive measures aimed at strengthening the state health of children and adolescents.

It can be assumed that physical education does not fully solve the tasks assigned to it, especially the group of health-improving tasks, and when organizing it, not all factors and conditions that determine the nature of the physical condition of those involved are taken into account.

It should be added that only the systematic use of physical exercises, taking into account the heterochrony of the development of body systems involved in the correspondence of physical activity to the individual and age capabilities of each child, can expand the functional reserves of life support systems, increase the level of physical fitness and strengthen, in general, the state of health of children.

The foregoing actualizes the need and expediency of a comprehensive study of problematic issues in terms of the content and direction of physical education and health classes for students of the 1st stage of general secondary education, in particular, those involved in extended day groups.

Purpose of the study- to develop and experimentally substantiate a program of additional athletics for children 8-9 years old in extended day groups.

*Research objectives:*1) to study the level of physical fitness of students of the 1st stage of education in the city of Dobrush; 2) to develop a methodology for additional athletics classes for children aged 8-9 attending an extended day group; 3) evaluate the effectiveness and implement inwork practicea methodology for additional athletics for children 8-9 years old attending an extended day group.

The tasks set in the work were solved using the following research methods:
– Analysis of scientific and methodological literature and legal documentation.
– Pedagogical observations.
– Pedagogical experiment.
– Control and pedagogical tests (tests).
– Physiological methods (spirometry).
– Methods of mathematical statistics.

Organization of the study. The research was carried out on the basis of secondary school №1 in Dobrush (Republic of Belarus) and included three stages. The educational process was built on the basis of a five-day school week, 3 lessons per week (the duration of one lesson is 60 minutes).

At the first stage, the analysis of scientific and methodological literature and legal documentation on the problem under study was carried out, which determine the relevance, object and subject of the study; goal formulation, task development; selection of adequate research methods.

Second stage was devoted to identifying the level of physical fitness of students of the 1st stage of education attending an extended day group; development of a methodology for physical culture and health-improving classes during a sports hour, organization and conduct of a pedagogical experiment.

At the third stage, mathematical processing of the obtained digital material was carried out, systematization, generalization and analysis of the results of experimental research; design and writing a thesis, as well as the implementation of research results into practice.

Children 8–9 years old of the State Educational Institution "Secondary School No. 1 of Dobrush" took part in the pedagogical experiment, attending the GPA in the amount of 20 people (10 boys and 10 girls). One experimental (EG - n=10) and one control (CG - n=10) groups were formed, which were relatively similar in terms of functional and motor characteristics and, on average, did not differ significantly from each other.

The purpose of the study was to study the physical fitness of junior schoolchildren from individual schools in the city of Dobrush in order to introduce corrective measures in the process of physical education of junior schoolchildren.

Table 1 presents the results of pedagogical testing, in which 180 students of grades 1-2 of the State Educational Institution "Secondary School No. 1", State Educational Institution "Secondary School No. of Dobrush" took part (table 1).

Table 1 – Indicators of the level of physical fitness of students of the 1st stage of general secondary education of the State Educational Institution "Secondary School No. 1 of Dobrush"

Control exercise	1 classes (n=100)	2 classes (n=100)
	Level	
Tilt forward, cm	short	average
Shuttle run 4 × 9 m, s	average	average
Run 30 m, s	below the average	below the average
Standing long jump, cm	short	short
Ball throw, cm	short	short

From Table 1 it follows that the weakly developed physical qualities among students in grades 1-2 are: speed-strength abilities, speed, coordination and flexibility.

We have developeda method of additional athletics lessons for children aged 8–9 years in extended day groups, which contributes to the effective development of physical qualities in children, increasing the level of physical development of students.

Track and field exercises have a versatile effect on the formation of motor skills among those involved, and also do not require special equipment and are easy to perform. As a result of systematic athletics, the body of those involved adapts and adapts to work more economically, acquires a high ability to quickly mobilize its functional capabilities, and, consequently, this leads to an increase in the overall performance of the body and the achievement of the highest results.

In this regard, athletics exercises formed the basis of additional athletics classes for children aged 8–9 years in extended day groups in the author's methodology.

It should be noted that gymnastic exercises were also included in the method of additional athletics for children aged 8-9 years in extended day groups. They have a significant impact on the formation of a versatile developed personality of the student, they are able to develop the general and strength endurance of the muscles of the body, increase the level of physical performance, and educate the conscious attitude of those involved in the state of their health.

Gymnastic exercises strengthen the musculoskeletal system (the volume and strength indicators of muscles increase; the bones of the skeleton become more resistant to physical stress); oxygen supply to the muscles improves, the nervous system strengthens and develops.

Gymnastics classes contribute to the constant formation of new conditioned reflexes, which are fixed and added up in successive rows. The body gains the ability to adapt to more complex loads and perform exercises in a more efficient and economical way to achieve the desired results. The speed of nervous processes increases: the brain learns to respond faster to stimuli and make the right decisions. Improves the work of the heart and blood vessels. The influence of gymnastics on the student's body makes the heart and blood vessels more resilient. Training makes all organs work in intensive mode. During exercise, muscles need increased blood supply, which forces the vessels and heart to pump a larger volume of oxygenated blood per unit of time.

Immunity increases and blood composition improves: the number of red blood cells increases from 5 million in one cubic mm to 6 million, the level of lymphocytes (white blood cells) increases. This is direct evidence that sport strengthens the protective forces – the ability to withstand adverse environmental conditions. Physically active children get sick less often, and if they are attacked by bacteria or viruses, they cope with it much faster.

It should be noted that a significant part of the additional classes athletics for children 8-9 years old in extended day groups in the author's methodology made up a block of outdoor games that are aimed at strengthening the health of those involved, contribute to their proper physical development; contribute to the mastery of vital motor skills and abilities, improvement of motor response, development of speed, agility, strength, endurance, flexibility.

In addition, outdoor games form coordinated, economical and coordinated movements; develop a sense of tempo and rhythm; develop physical culture thinking and motor memory.

The respiratory function attracts special attention of specialists in the field of physical culture and sports, as it is practically the only vegetative function that can be relatively voluntarily regulated. This gives a wide range of opportunities for a targeted impact on the function itself, as well as on other body systems, because oxygen and carbon dioxide are the main constants of the internal environment that regulate the work of the whole organism, primarily the cardiovascular and nervous systems. In addition, of all the links of the respiratory function, it is the only one that can be significantly developed and improved not only during the age development of the body, but also due to urgent and cumulative adaptations to physical loads, depending on their content, direction, volume and intensity.

It is known that an important place in the rehabilitation program belongs to breathing exercises, the action of which is based on the voluntary control of breathing, which, in combination with purposeful muscular activity, serves as a means of increasing the aerobic and anaerobic capabilities of a growing organism, and against this background, the overall improvement of the body. Therefore, we included breathing exercises by A.N. Strelnikova, who focus on the development of the respiratory muscles during inhalation. They are performed in an active, intense, short breath. Exhalation after an active inhalation occurs as if by itself. The most remarkable thing about them is the combination of breathing cycles with body movements, which creates interest in children in classes and initial learning is easy.

In order to determine the effectiveness of the methodology we developed for additional athletics for children 8-9 years old attending the extended day group, we conducted a pedagogical experiment.

It should be noted that at the beginning of the pedagogical experiment, the indicators of the morpho-functional state of students from the EG and CG did not differ statistically significantly ($p > 0.05$), which indicates the possibility of conducting a pedagogical experiment and the homogeneity of the samples (Table 2).

Table 2 – Indicators of the morpho-functional state of students of the 1st stage of general secondary education, attending the GPA, at the beginning of the pedagogical experiment

Indicators	KG (n=10) $\overline{X} \pm m$	EG (n=10) $\overline{X} \pm m$	t, p
VC, ml	1202.50±53.78	1316.0±50.12	t=1.54; p>0.05
OGK on inspiration, cm	68.70±0.42	70.40±1.27	t=1.27; p>0.05
OGK on exhalation, cm	64.40±1.23	65.40±1.32	t=0.55; p>0.05
OGK pause, see	63.60±1.21	64.80±1.30	t=0.68; p>0.05
Excursion of the chest, cm	5.60±0.45	5.0±0.45	t=0.94; p>0.05

At the end of the pedagogical experiment, we recorded a reliable ($p < 0.05$) change in indicators of lung vital capacity in children from the EG (1448.0±139.59) compared with children from the CG (1310.0±143.22) (Table 3). We assume that these changes occurred due to the purposeful impact of physical activity during sports and recreation activities during the sports hour: breathing exercises, elements of dance aerobics, running exercises, outdoor games.

Table 3 – Indicators of the morpho-functional state of students of the 1st stage of general secondary education attending the GPA at the end of the pedagogical experiment

Indicators	KG (n=10) $\overline{X} \pm m$	EG (n=10) $\overline{X} \pm m$	t, p
VC, ml	1310.0±45.29	1448.0±44.14	t=2.18; p<0.05
OGK on inspiration, cm	69.60±0.37	72.10±1.20	t=2.00; p>0.05
OGK on exhalation, cm	64.90±1.34	66.10±1.43	t=0.61; p>0.05
OGK pause, see	64.10±1.52	65.10±1.37	t=0.49; p>0.05
Excursion of the chest, cm	5.90±0.46	6.10±0.41	t=0.33; p>0.05

Given the above situation, we have developed a methodology for additional athletics for children aged 8-9 who attend the extended day group. The content of this methodology included: general developmental exercises (20%), athletics exercises (40%), gymnastic exercises (15%), dance exercises (15%), breathing exercises (10%). In order to determine the effectiveness of the methodology developed by us for additional athletics for children aged 8-9 attending the extended day group, we conducted an annual pedagogical experiment.

It should be noted that at the beginning of the pedagogical experiment, the indicators of the level of physical fitness of children from the EG and CG attending the GPA did not differ statistically significantly (p>0.05), which indicates the possibility of conducting a pedagogical experiment and the homogeneity of the samples.

At the end of the pedagogical experiment, we recorded a significant (p<0.05) change in most indicators of the level of physical fitness of children from the EG compared with children from the CG (table 4). Thus, statistically significant changes were recorded in children from the EG in the following tests: forward bend (from 2.90±3.53 to 6.44±2.11, respectively; t=2.14, p<0.05); standing long jump (from 119.20±12.55 to 138.70±8.76, respectively; t=2.85; p<0.05); 30 m run (from 6.89±0.42 to 6.2±0.28, respectively; t=2.62; p<0.05); ball throwing (from 7.70±1.42 to 12±2.33, respectively; t=2.14; p<0.05); shuttle run 4×9 m (from 12.45±1.52 to 11.5±0.59, respectively; t=2.63; p<0.05).

Analysis of the data obtained allows us to state the level of physical fitness of students - above average in terms of running 30 m, long jump from a place, leaning forward, shuttle run 4×9 m; the average level of physical fitness in terms of throwing the ball from a place.

At the same time, in children from the CG, we stated a positive dynamic of indicators of the level of physical fitness in the control exercises at the end of the pedagogical experiment, however, no statistically significant differences were found (p>0.05).

Table 4 – The level of physical fitness of students of the 1st stage of general secondary education attending the GPA, at the end of the pedagogical experiment

Control exercises	KG (n=10) $\overline{X} \pm \sigma$	UFP	EG (n=10) $\overline{X} \pm \sigma$	UFP	t, p
Tilt forward, cm	4.12±2.7	Average	6.44±2.11	Above average	t=2.14; p<0.05
Standing long jump, cm	128.00±8.01	Below the average	138.70±8.76	Above average	t=2.85; p<0.05
Run 30 m, s	6.50±0.23	Average	6.2±0.28	Above average	t=2.62; p<0.05
Ball throwing, m	9.69±2.49	Below the average	12±2.33	Average	t=2.14; p<0.05
Shuttle run 4 × 9 m, s	12.2±0.62	Average	11.5±0.59	Above average	t=2.63; p<0.05

Conclusion. When studying the level of physical fitness of students of the 1st stage of education, we stated that the poorly developed physical qualities in children are: speed and speed-strength abilities, as well as explosive qualities and flexibility.

In order to evaluate the effectiveness of the approach proposed by us, a pedagogical experiment was conducted, after which we stated a change in most indicators of the level of physical fitness of children from the EG compared to children from the CG ($p<0.05$). Thus, we recorded statistically significant changes in the tests: 30 m run ($t=2.62$; $p<0.05$), standing long jump ($t=2.85$; $p<0.05$), forward tilt was ($t=2.14$; $p<0.05$), throwing the ball from the spot ($t=2.14$; $p<0.05$), shuttle run 4×9 m ($t=2.63$; $p<0.05$).

Thus, the method of additional athletics lessons developed by us for children aged 8-9 attending the extended day group has shown its effectiveness in increasing the level of physical fitness of students and can be recommended for implementation in educational institutions, youth sports schools and other educational institutions.

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E. V. Osipenko, E. A. Osipenko

METHODS OF PHYSICAL TRAINING OF STUDENTS INVOLVED IN ARMWRESTLING

In the course of the study, a method of physical training of students involved in arm wrestling was developed and experimentally tested. The use of the developed methodology in the educational and training process of students engaged in armwrestling in the conditions of the university allows

you to effectively increase the level of their strength training and, accordingly, successfully train student armwrestlers for competitive activities.

The results of the study can be used in the field of physical culture and sports, in the process of planning the training process with students involved in arm wrestling at the university, as well as in sports sections and gyms.

In the modern theory and practice of sports, among the qualities of a human motor function, muscle strength is of the greatest importance for the successful implementation of sports activities [1–3].

Armsport as one of the means of physical education has received nationwide recognition for its accessibility and entertainment. Success in arm wrestling, as in any kind of martial arts, consists of many components: strength, speed, endurance, technique and tactics. It is especially popular among young people, although its dynamism and versatility allow people of any age to engage. The technical and tactical variety of methods of attacking actions allows everyone who trains hard to prove themselves, practically regardless of weight, height and other anthropometric indicators [5].

Armwrestling, according to the direction of development of motor qualities, belongs to speed-strength sports. It equally combines and is of decisive importance both indicators of explosive strength and indicators of the development of statistical efforts. The main motor task of an armwrestler is to develop the maximum power of sports movement, that is, to develop maximum strength in the shortest possible time. From this it follows that the leading quality of armwrestlers should be the development of high rates of explosive strength.

In our opinion, methods from related sports are applied to the organization of the training process in armwrestling, which do not have sufficient scientific justification and are, first of all, empirical in nature.

Thus, the resolution of the problem situation associated with the fragmentary development of methods and methodological recommendations available in the scientific and methodological literature on the strength training of students involved in armwrestling in a university environment is relevant and timely.

Purpose of the study: theoretically develop and experimentally substantiate the methodology of physical training of students of higher education institutions involved in arm wrestling.

Research objectives:

1. To identify the level of physical fitness of students involved in arm wrestling.

2. Theoretically, to develop and experimentally test the method of physical training of students involved in arm wrestling.

Material and methods: analysis of scientific and methodological literature, control tests (tests), pedagogical experiment, methods of mathematical statistics.

Results and its discussion. The study was conducted on the basis of the arm wrestling sports section at the educational institution "Francisk Skorina Gomel State university". It was attended by 20 arm wrestler students aged 18 to 24, with 1-2 sports categories.

Arm wrestling is a single sport, where the sports result is the main criterion for assessing the level of sportsmanship and the quality of training.

In order to identify the level of physical fitness of arm wrestler students, we conducted a comparative test on the following control exercises: rope climbing for time (s); bench press (kg); flexion and extension of the arms in an emphasis lying down for 10 s (number of times); pull-ups on the crossbar with an overhand grip (number of times); carpal dynamometry (right hand) (kg); carpal dynamometry (left hand) (kg); hanging on the crossbar on a bent arm (right) (c); hanging on the crossbar with a bent arm (left) (sec).

The pedagogical experiment pursued the goal of experimental approbation and verification of the effectiveness of the methodology of physical training of armwrestler students.

The digital material obtained as a result of the study was processed by generally accepted methods of frequency statistics with the calculation of the following values: arithmetic mean of the variation series ($\overline{X}$), standard deviation ($\pm\,\sigma$), arithmetic mean error ($\pm\,m$). After making sure that the statistical

series are close to the normal distribution law, we decided to choose a statistical test in favor of Student's t-test for related and unrelated samples, choosing the appropriate significance level (p). For statistical analysis, software packages IBM SPSS Statistics v.24, StatSoft Statistica v.10.0 were used.

The practical implementation of the characteristics obtained was expressed by comparing the mean values of the control and experimental groups, determining the significance of differences (Student's t-test) and the significance level ($p < 0.05$, $p < 0.01$, $p < 0.001$).

Each of these control exercises is an informative test due to the similarity of the movements performed in it with the movements in certain wrestling techniques.

The method of physical training developed by us for students-arm wrestlers was designed for 5 months and introduced into the educational and training process of the sports section in arm wrestling at the educational institution " Francisk Skorina Gomel State university" (Gomel, Belarus). At the same time, physical activity was dosed depending on the level of physical fitness of armwrestler students.

In the first week of training, physical activity was minimal. It was aimed at strengthening the muscles of the shoulder girdle. After a month of training, the load was dosed up to 40% of the maximum. On the third-fifth months of training, the dosage of physical activity approached 60% of the maximum, depending on the level of physical fitness of armwrestler students.

So, "hand training" was aimed at strengthening the ligamentous apparatus of the hands. The sequence of exercises is aimed at strengthening the muscles of the hand (finger flexors, wrist flexors, thumb extensors and abductors), forearm and shoulder girdle (pronator round, brachioradialis, finger flexors and extensors, wrist flexors and extensors, biceps brachii). Depending on the number of repetitions or approaches, the load for arm wrestlers with I-II sports category varied.

Workout "Back + hand" is aimed at strengthening the ligamentous apparatus of the muscles of the back and hand using the technique of fighting through the "top + hook". The sequence of exercises was designed to strengthen the muscles of the hand (finger flexors, wrist flexors, thumb extensors and abductors) and back (lats, teres major, teres minor, trapezius, and lower back muscles). In the first week of training, physical activity was minimal. It was aimed at strengthening the muscles of the back and hand. After a month of training, the load was dosed up to 40% of the maximum. On the third-fifth months of training, the load dosage approached 70% of the maximum, depending on the level of physical fitness of armwrestler students.

The exercise for the muscles of the forearm is performed in the initial position sitting on the bench, so that the hand lies with its back surface on the bench, we unbend the hand and lower the barbell onto the phalanges of the fingers, then we bend the hand to its original position.

Workout "Chest + Triceps" is aimed at strengthening the ligamentous apparatus using the muscles of the chest and the triceps muscle of the shoulder (the technique of fighting through the "side"). The sequence of exercises was designed to strengthen the muscles of the chest (pectoralis major, minor, serratus anterior) and triceps brachii (long fasciculus "posterior", lateral fascia "outer", medial "inner"). In the first week of training, the load was minimal. It was aimed at strengthening the muscles of the chest and the triceps of the shoulder. After a month of training, the load was dosed up to 45% of the maximum. On the third-fifth months of training, the load dosage approached 70% of the maximum, depending on the level of physical fitness of the armwrestler students.

"Legs training + working out the technique of fighting in the "up" way is aimed at strengthening the ligamentous apparatus of the muscles of the legs using the technique of fighting through the "up" (starting position in arm wrestling), a training fragment. The sequence of exercises was designed to strengthen the muscles of the legs (muscles of the front and back of the thigh, glutes and muscles of the back of the leg) and the arms, working in the starting position in the "up" way of fighting (flexors of the fingers, flexors and extensor of the wrist, extensors and abductors of the large finger; pronator round, brachioradialis, biceps brachii). In the first week of training, the load was minimal. It was aimed at strengthening the muscles of the legs and arms, working in the starting position in the "up" way of fighting. After a month of training, the load was dosed up to 40% of the maximum.

To test the hypothesis about the effectiveness of the developed method of physical training of students involved in arm wrestling, its experimental approbation was organized.

During the pedagogical experiment, its participants were divided into two groups: the EG (10 people) and the CG (10 people). Classes in the EG for students were held according to the methodology of physical training developed by us, while classes in the CG were conducted according to the methodology used in groups of general physical training according to the curriculum.

Classes with subjects from the EG and CG were held four times a week: Monday, Tuesday, Thursday, Friday. The duration of each training session was 90 minutes.

The results of testing at the beginning of the pedagogical experiment among students from the EG and CG did not reveal statistically significant differences in the indicators of the level of strength fitness (p>0.05).

At the beginning of the pedagogical experiment, the students of the EG and CG groups had no statistically significant differences in the indicators of the level of strength fitness (p>0.05).

Table 1 – Indicators of the level of physical fitness of arm wrestlers from the EG and CG after the end of the pedagogical experiment

№ p /p	Control exercise	EG (n=10) $\overline{X}\pm$ m	KG (n=10) $\overline{X}\pm$ m	t, p
1	Rope climbing for time, s	6.88±0.42	6.89±0.43	t=0.25; p>0.05
2	Bench press, kg	101.75±3.56	90.72±3.39	t=2.24; p<0.05
3	Flexion and extension of the arms in an emphasis lying for 10, s	20.10±0.75	16.60±0.73	t=3.33; p<0.01
4	Pull-ups on the bar with an overhand grip, number of times	23.30±0.87	16.60±0.87	t=5.44; p<0.001
5	Hanging on the crossbar on a bent arm (right), with	11.36±0.61	6.10±0.48	t=6.80; p<0.001
6	Hanging on the bar with a bent arm (left) (sec)	9.48±0.50	6.14±0.35	t=5.46; p<0.001
7	Carpal dynamometry (right hand), kg	66.70±2.68	54.40±2.28	t=3.50; p<0.01
8	Carpal dynamometry (left hand), kg	60.90±2.13	50.80±1.72	t=3.69; p<0.01

It follows from Table 1 that at the end of the pedagogical experiment, we recorded significant differences in favor of the EG athletes: bench press (t=2.24; p<0.05), flexion and extension of the arms in the lying position for 10 s (t=3 ,33; p<0.01), pull-ups on the bar with an overhand grip (t=5.44; p<0.001), hanging on the bar on a bent arm - right (t=6.80; p<0.001) and left (t =5.46; p<0.001), carpal dynamometry - right (t=3.50; p<0.01) and left (t=3.69; p<0.01).

Table 2 – Reliability of the dynamics of indicators of the level of physical fitness of armwrestlers from the EG and CG for the period of the pedagogical experiment

№ p/p	Control exercise	EG		KG	
		Growth, %	Reliability (t, p)	Growth, %	t, p
1	Rope climbing for time, s	4.85	t=0.53; p>0.05	1.42	t=0.15; p>0.05
2	Bench press, kg	8.85	t=1.60; p>0.05	1.34	t=0.25; p>0.05
3	Flexion and extension of the arms in an emphasis lying for 10, s	16.42	t=2.83; p<0.05	2.41	t=0.39; p>0.05
4	Pull-ups on the bar with an overhand grip, number of times	27.04	t=5.12; p<0.001	1.81	t=0.24; p>0.05
5	Hanging on the crossbar on a bent arm (right), with	46.04	t=6.78; p<0.001	1.31	t=0.12; p>0.05
6	Hanging on the bar with a bent arm (left) (sec)	35.13	t=5.41; p<0.001	0.98	t=0.12; p>0.05
7	Carpal dynamometry (right hand), kg	19.34	t=3.57; p<0.01	1.47	t=0.25; p>0.05
8	Carpal dynamometry (left hand), kg	17.41	t=3.87; p<0.01	0.79	t=0.16; p>0.05

Table 2 shows the reliability of the dynamics of indicators of the level of preparedness of armwrestler students over the period of the pedagogical experiment. Thus, the analysis of the results allows us to conclude that the students of the EG groups had a significant advantage in indicators (p<0.05–0.001), while the students of the CG groups showed unreliable changes (p>0.05) over the period of the pedagogical experiment.

Thus, the results of the analysis of the data of the pedagogical experiment on approbation of the methodology of physical training of students-armwrestlers allow us to conclude that its use in the educational and training process of students involved in armwrestling in the conditions of the university allows to effectively increase the level of their physical fitness and, accordingly, successfully to prepare students-arm wrestlers for competitive activities.

An analysis of the dynamics of the studied indicators over the period of the pedagogical experiment allows us to conclude that there is a significant advantage in the dynamics of indicators among the students of the EG groups (p<0.05–0.001), while the students of the CG groups have unreliable differences at the end of the pedagogical experiment (p>0.05).

We share the opinion of some authors [4] that the introduction of new methods of teaching the course "physical culture", including elements of power sports, carried out taking into account the physical culture and sports interests, the level of health and physical fitness of students, allows students to form motivation for physical improvement and a healthy lifestyle and will promote their physical development and health promotion.

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V. N. Starchenko, S. V. Sevdalev

METROLOGICALLY AND IDEOLOGICALLY CORRECT RANKING SYSTEM OF ATHLETES IN MODERN PENTATHLON

The article deals with the problem of metrological and ideological correctness of the existing system of ranking athletes in modern pentathlon.

The authors have presented an alternative ranking system for the participants of the competition. The proposed ranking system meets the requirements of the ideology of this sport and is metrologically more correct than the officially operating one. The use of the ranking system developed by the authors provides a more even connection between the places occupied by athletes in the types of the program and the final place in the all-around in comparison with the current system in which such types as fencing and the combined relay are clearly dominant.

At present, modern pentathlon is one of the most intensively developing sports in the Republic of Belarus. Belarusian athletes, as a rule, are among the ten strongest athletes in the world. The greatest success was achieved by the representatives of the women's modern pentathlon.

The modern pentathlon has undergone so many changes over the past century that it has actually become a quadrathlon. Competitions in running and shooting were combined into one combined event. Thus, four types remained: fencing, swimming, horseback riding and a combined type.

However, the ideology of this sport remains the same. The winner must be an athlete who is most comprehensively developed in all pentathlon exercises. In accordance with the testament of the founding father of the modern pentathlon, P. Coubertin, this sport should present the world with an ideal, versatile athlete [1].

However, the ranking system of athletes in this sport is rather confusing and not fully substantiated metrologically. The scoring system is used. Moreover, the athlete is awarded points in each type of program according to different rules, which leads to incomparability and non-equivalence of the results (points) scored in the all-around events. In other words, 300 points in fencing is not equivalent to 300 points in swimming, riding, or combined form. The complexity of

their set in various types of all-around is very different. Apparently, no one in the history of this sport has been able to score 300 points in fencing. In horse riding, the best participants score 300 points; in swimming, athletes often score more than 300 points, while in combined form, 600 points are not the limit. For example, at the World Championships in Cairo (2021) and Budapest (2019), the best results of athletes in the types of programs, expressed in points, looked like this (Table 1).

Table 1 – The best results of athletes in types of program, expressed in points, demonstrated by them at the 2021 and 2019 World Championship (men)

World Championship	Types of all-around (points)			
	Fencing	Swimming	Horseback riding	Combined form
Cairo 2021	**262**	**310**	**300**	**624**
Budapest 2019	**258**	**320**	**300**	**654**

Such an approach undermines the ideology of the all-around. In addition, from the point of view of metrology, it is impossible to summarize the points scored in this way, since the point is not a unit of measurement and, in connection with the foregoing, is not normalized, not tied to a material standard.

Thus, in modern pentathlon there is a problem of metrological and ideological correctness of the ranking system of athletes, both in each type of program and in the all-around.

The purpose of the study: to develop a metrologically and ideologically correct system for ranking participants in modern pentathlon competitions.

Results of the study and their discussion. If we schematically present a more adequate ranking system for competitors, then it can be the same as in Figure 1.
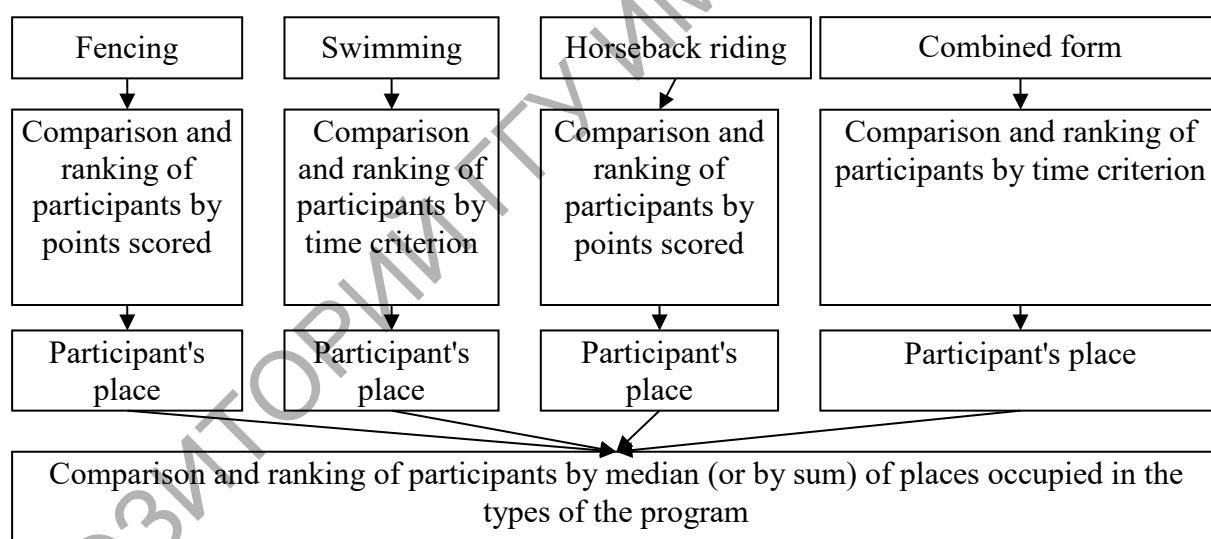
Figure 1 – Proposed ranking system for modern pentathlon competitors

Comparison and ranking of participants in fencing and horseback riding can be carried out according to already existing rules (according to the system of points scored), since in this way it is possible to qualitatively rank the participants and distribute them according to their places (assign ranks). In swimming and combined form, ranking of athletes (assignment of their places) can be done without points according to the result shown (time).

As a result of passing four types of all-around, each athlete takes a place corresponding to his level of preparedness in each of the types of the program (receives ranks of which there are only four). Moreover, it is obvious that, taking into account the fact that the ranks are assigned to athletes in the

same aggregate (the composition of athletes at specific competitions does not generally change), the first place taken by an athlete in swimming can be considered equivalent to the first place taken in fencing, horseback riding or combined form.

Further, the rules of metrology require to calculate the median of the ranks of each athlete and, according to the criterion of the median, rank them finally. We must recall, that an adequate statistical characteristic of the central tendency of the sample, if the measurements were carried out using a rank scale of measurements, is the median, but not the arithmetic mean. The median is a number that divides the sample in half in such a way that half of the sample elements are greater than the median, and the other half is less than the median [3].

However, this requirement conflicts with the ideology of modern pentathlon, which implies the most comprehensive development of athletes in all types of programs. For example, an athlete took the following places in the types of the program (received ranks) 5, 8, 11, 7, the median was 7.5. But the problem is that if he "failed" one type and received ranks 5, 8, 36, 7, then the median would not change. This state of affairs would push athletes to prepare for triathlon, since the value of the median would be influenced by the places occupied in only three of the four types of programs.

Taking into account the fact that the places (ranks) occupied by athletes in the all-around events are to some extent normalized, it is possible to sum up the places and, according to this criterion, carry out the final ranking of the participants.

In order to demonstrate and test our proposed system for ranking participants in modern pentathlon competitions, we used the official results of the 2019 World Championships in Budapest. Table 2 presents the official results of the 2019 World Championships participants and the results of their ranking according to the system we propose.

It is obvious that the system we propose is more in line with the ideology of the modern pentathlon. For example, an athlete, who officially took 4th place in the final protocol, ended up in 18th place according to the new ranking system, since he "failed" the combined event, taking 33rd place among 36 participants. There have been changes in the top three winners. The official champion from France yielded to an athlete from Britain in terms of the total number of places taken. Officially, the third athlete from Korea became fourth, and his place on the podium was taken by an athlete from Hungary, who officially ranked fifth. There are other changes as well. Of course, no one suggests revising the official results of the championship. The table is of purely scientific interest.

Table 2 – Official and adjusted results of the 2019 World Championship participants

Name	Nation	Fencing (place)	Swimming (place)	Horseback riding (place)	Combined form (place)	Total amount of points	Official place	The number of places taken in the types	Place according to the new system
1	2	3	4	5	6	7	8	9	10
Belaud Valentin	FRA	2	17	4	9	1468	**1**	32	**2**
Choong Joseph	GBR	6	1	9	15	1453	**2**	31	**1**
Jun Woongtae	KOR	8	9	24	4	1452	**3**	45	**4**
Lee Jihun	KOR	1	16	33	19	1439	**4**	69	**18**
Kasza Robert	HUN	13	8	5	17	1436	**5**	43	**3**
Tymoshchenko	UKR	5	33	16	7	1434	**6**	61	**11**
Palazkov Ilya	BLR	4	12	32	16	1429	**7**	64	**16**
Hamad Eslam	EGY	12	13	20	12	1426	**8**	57	**7**
Prades Valentin	FRA	17	21	15	5	1423	**9**	58	**9**
Cooke James	GBR	31	2	7	8	1419	**10**	48	**5**

1	2	3	4	5	6	7	8	9	10
Marosi Adam	HUN	7	4	19	27	1419	**11**	57	**7**
Jung Jinhwa	KOR	3	5	35	18	1418	**12**	61	**11**
Demeter Bence	HUN	14	23	1	22	1417	**13**	60	**10**
Grycz Marek	CZE	16	3	11	22	1415	**14**	52	**6**
Luo shuai	CHN	26	32	12	3	1414	**15**	73	**20**
Kinderis Justinas	LTU	10	19	8	28	1411	**16**	65	**17**
Tsikhanau Pavel	BLR	20	25	3	14	1409	**17**	62	**14**
Liebig Fabian	GER	28	20	2	11	1404	**18**	61	**11**
Zhang linbin	CHN	11	28	26	20	1403	**19**	85	**24**
De Luca Riccardo	ITA	9	36	27	23	1398	**20**	95	**30**
Elgendy ahmed	EGY	35	7	18	2	1398	**21**	62	**14**
Lifanov Alexander	RUS	22	22	14	13	1398	**22**	71	**19**
Kalimullin Danil	RUS	18	35	6	26	1396	**23**	85	**24**
Vlach Martin	CZE	32	24	34	1	1396	**24**	91	**27**
Sukharev Vladisl	KAZ	19	6	25	30	1391	**25**	80	**22**
Toolis Thomas	GBR	21	10	13	29	1386	**26**	73	**20**
Stasiak Sebastian	POL	25	18	21	25	1380	**27**	89	**26**
Carrillo Duilio	MEX	15	29	29	33	1377	**28**	106	**33**
Colasanti Daniel	ITA	34	31	22	6	1375	**29**	93	**28**
Zvedeniuk Pavlo	UKR	23	15	23	32	1374	**30**	93	**28**
Regos Gergely	HUN	36	27	10	10	1367	**31**	83	**23**
Dogue Patrick	GER	30	26	17	24	1363	**32**	97	**31**
Seo Changwan	KOR	29	14	28	31	1359	**33**	102	**32**
Curry Samuel	GBR	33	11	30	35	1342	**34**	109	**34**
Staskiewicz Szy	POL	24	34	31	36	1326	**35**	125	**35**
DogueMarvin Faly	GER	27	30	36	34	1325	**36**	127	**36**

Of interest is also the correlation between the results of athletes in the types of programs and their place in the all-around (Table 3). The calculation of Spearman's rank correlation coefficient showed that with the official ranking system of participants, the closest relationship between the number of points scored in the form of a program and the final place of athletes in the all-around is observed in fencing ($\rho = 0.737$) and combined form ($\rho = 0.533$). The least close relationship is observed in swimming ($\rho = 0.407$) and horseback riding ($\rho = 0.304$). According to the authors, an uneven relationship between the types of pentathlon and the final place was also revealed in the women's modern pentathlon [4, 5, 6]. As for the ranking system of athletes we propose, the value of the rank correlation coefficient between the places occupied by athletes in the types of programs and the final place in the all-around ranges from 0.505 to 0.579. Thus, a more even relationship is observed and none of the species clearly dominates.

Table 3 – Correlation between the results of athletes in the types of programs and the final place in the all-around (taking into account the applied ranking system)

Types of all-around (points/places)	Final place	
	by points scored	according to the number of places taken
Fencing	**0,737**	**0,505**
Swimming	**0,407**	**0,579**
Horseback riding	**0,304**	**0,569**
Combined form	**0,533**	**0,543**
All ρ values are statistically significant (p<0.05)		

Conclusion. Thus, our proposed ranking system for modern pentathlon competition participants, in general, meets the requirements of the ideology of this sport and is metrologically more correct than the official one.

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V. N. Starchenko, S. V. Sevdalev

**STRUCTURAL-CONTENT MODEL OF COMPETITIVE CULTURE
OF ATHLETES, SPECIALIZING IN MODERN PENTATHLON**

In the article, within the framework of the activity approach, a theoretical model of the competitive culture of athletes specializing in modern pentathlon is developed and presented, its constituent components and elements are introduced. The goal and systemic tasks of the competitive training of the pentathlete have been determined. The structural elements of the thinking activity and executive components of the athlete's competitive culture are introduced. The following is presented: structural-functional model of the need-motivational sphere of the competitive culture of the pentathlete; structural-content model of the competitive knowledge of the pentathlete; the composition of the competitive skills of the pentathlete; the structure of the pentathlete's physical fitness.

At present, modern pentathlon is one of the most intensively developing applied types of sports all-around in the Republic of Belarus. Belarusian athletes are usually among the ten strongest athletes in the world. The greatest success was achieved by the representatives of the women's modern pentathlon. Further maintenance of the reputation in the post-doping era is possible through the development of theoretical models of competitive culture, competitive activity, competitive training, adequate diagnostic tools, development of pedagogical principles, means and methods of training athletes within the framework of activity, systemic and cultural approaches. In other words, by connecting a previously little demanded pedagogical resource, the possibilities of which are huge.

Today it is obvious that in order to achieve a high result in modern pentathlon, a rational combination of all elements of the athlete's competitive culture is necessary [1; 2; 3].

This article is devoted to the development of a model of the competitive culture of athletes specializing in modern pentathlon.

The purpose of the study: to develop a structural-content model of the competitive culture of athletes specializing in modern pentathlon.

Research methods. The set of methods used to achieve the stated goal included: theoretical analysis and generalization of data from scientific and methodological literature, modeling.

Results of the study and their discussion. The purpose of competitive training of a pentathlete is to form a competitive culture of an athlete. Its functional purpose is to ensure the competitive adequacy of the pentathlete, by which we mean the ability of an athlete to solve competitive tasks as successfully as possible at the motor and intellectual levels.

In general, competitive culture is a systemically organized unity of competitive thinking and knowledge, competitive needs and motives, competitive skills, physical fitness in a competitive exercise united by competitive activity [4; 5]. The listed elements are combined into two components of the competitive culture: *mental activity component and executive component* (Fig. 1).

When all the components and elements of the competitive culture of an athlete are formed and systematically ordered, then in the course of his competitive activity he becomes a champion.

A champion is an athlete who has mastered an adequate way (culture) of competitive activity and successfully implemented it in competitions, which allowed him to fully implement the competitive idea, demonstrating the highest competitive achievement among the participants [6].
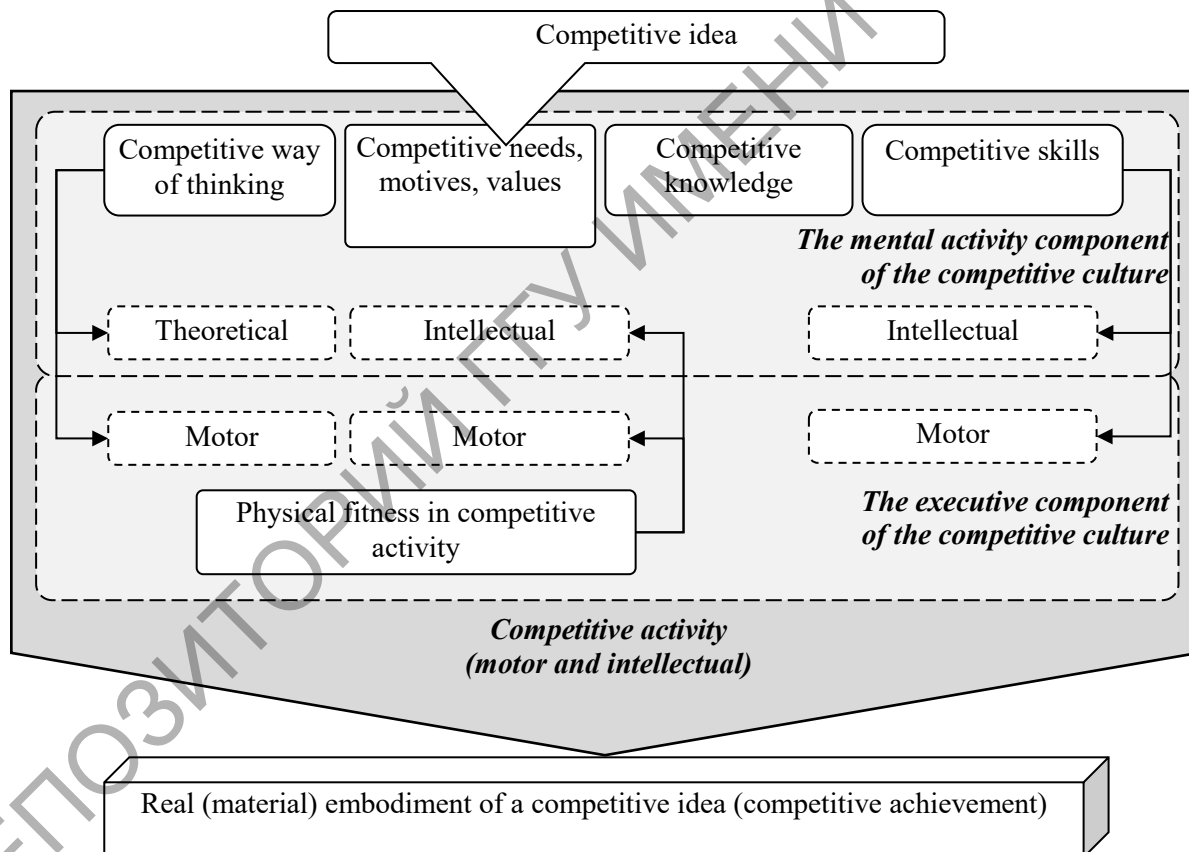

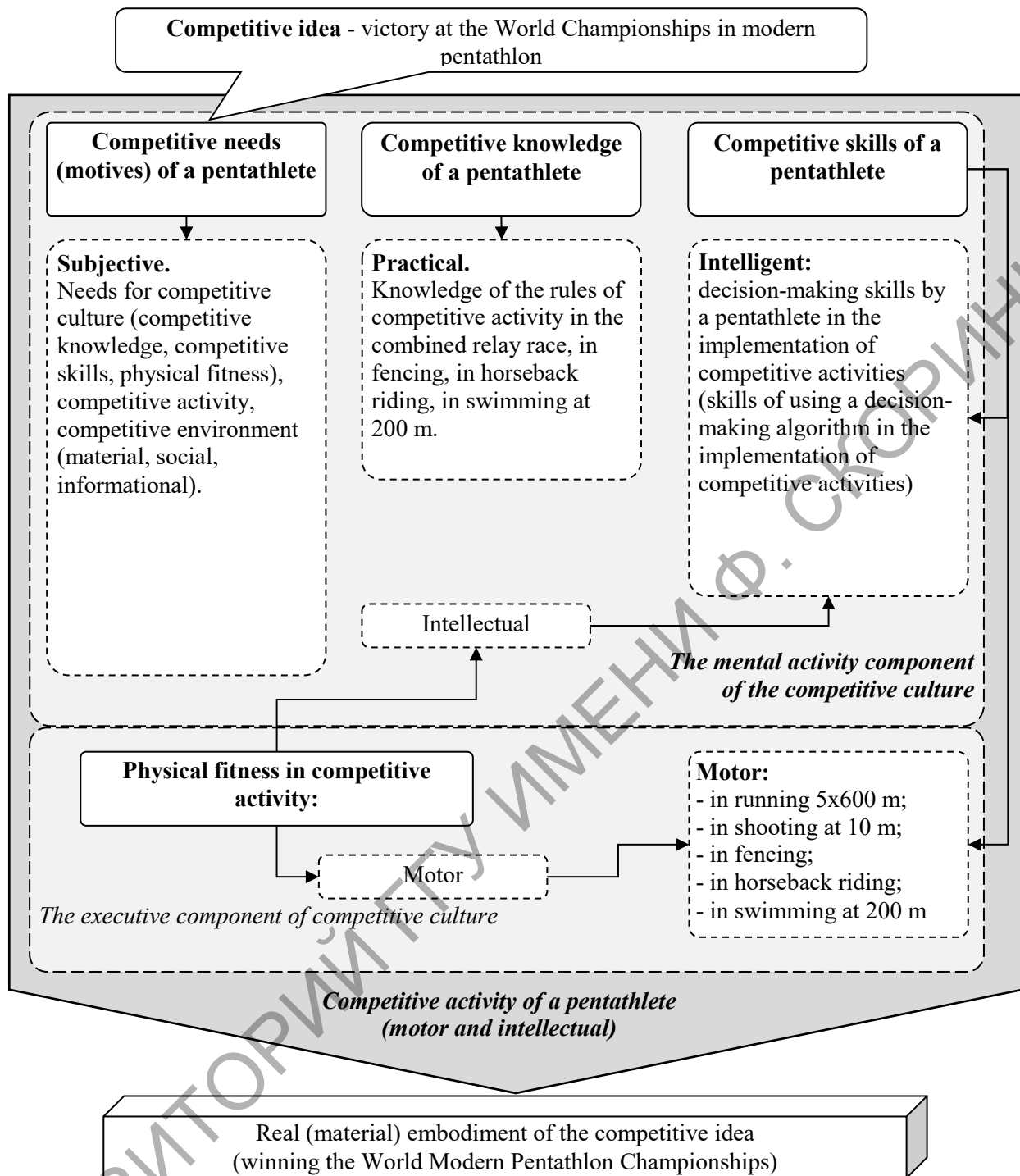Figure 1 – Athlete's competitive culture model

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Figure 2 – Competitive culture model of a pentathlete

Let's try to unfold and concretize the model of competitive culture in relation to modern pentathlon and get a model of the competitive culture of a pentathlete (Fig. 2).

The need-motivational sphere of the pentathlete's competitive culture performs the function of a "driving belt" that ensures his active and interested participation in competitive activities. With its help, the competitive idea controls the behavior of the pentathlete.

The need for competitive activity generates the need for a body adequate to the requirements of competitive activity, the need for competitive culture as a way of competitive activity and the need for a competitive environment [7].

To materialize a competitive idea, an agent of competitive activity (pentathlete) needs a means of activity, which is his body (musculoskeletal system). At the same time, the body must comply with the anthropometric requirements imposed by competitive activity. Hence the need for the anthropometric component of the pentathlete's physicality arises.

The need for competitive activity also generates the need for a competitive culture as a way of competitive activity. This, in turn, gives rise to the need for the components of a competitive culture: the need for competitive skills, the need for competitive knowledge, the need for physical fitness. In addition, the need for competitive activity creates a need for a competitive environment (social, material). The social environment of competitive activity implies the presence of at least several agents of activity (sportsmen, teams). The material and technical environment of competitive activity implies the presence of sports facilities and sports equipment. Each need can be specified in a galaxy of motives corresponding to it [7; 8].

It is possible to offer the following version of the model of the target structure and content of the need-motivational sphere of the competitive culture of the pentathlete (Table 1).

Competitive knowledge of a pentathlete is a practice-tested ideal idea of competitive activity and its rules. To put it simply, competitive knowledge is information that a pentathlete remembers and is able to use in the implementation of competitive activities. Competitive knowledge provides an answer to the question: "what needs to be done to materialize a competitive idea"? Competitive knowledge of a pentathlete can be classified as theoretical, methodical and practical.

The theoretical knowledge of a pentathlete includes knowledge of the theory and history of the competitive activity of modern pentathlon.

The methodological knowledge of a pentathlete includes knowledge related to the methodological aspects of competitive training.

The practical knowledge of a pentathlete includes knowledge of the rules of the competitive activity of modern pentathlon and the lexicon adopted here, including both official terminology and slang.

Practice shows that practical knowledge is enough for a pentathlete to carry out competitive activities. Theoretical and methodological knowledge is most often the prerogative of the coach.

Concretizing, we note that the practical knowledge of a pentathlete includes knowledge of the rules of competitive activity in all types of all-around.

Moreover, these rules are very extensive and require a good command of the lexicon of modern pentathlon.

Table 1 – Model of the target structure and content of the need-motivational sphere of the competitive culture of the pentathlete

Competitive needs	Competitive motives
1	2
The need for competitive activity	The desire to be an active participant in competitive activities in modern pentathlon
	The desire to be a winner (champion), record holder of competitive activity in modern pentathlon
The need for competitive skills and abilities	The desire to learn how to perform the modern pentathlon competitive exercise technically correctly
	The desire to master the technique of performing a competitive exercise in modern pentathlon at the level of technical mastery
The need for physical fitness for competitive activity	The desire to engage in general physical training and be strong, enduring, fast, agile, flexible
	The desire to achieve the maximum level of physical fitness in the modern pentathlon competitive exercise

End of table 1

1	2
Need for competitive knowledge	The desire to acquire the theoretical and methodological knowledge necessary to manage their preparation for competitive activities in modern pentathlon
	The desire to know the rules of modern pentathlon competitions
The need for a competitive environment	The desire to use sports facilities, inventory, equipment necessary for competitive activities in modern pentathlon
	The desire to compete and communicate with other pentathletes, to feel belonging to a sports team
Need for physicality	The desire to have a body anthropometrically adequate to the requirements of competitive activity of modern pentathlon
	The desire to have a strong, fast, enduring, flexible body that allows you to successfully participate in the competitive activities of modern pentathlon

Competitive skills of a pentathlete are stable stereotypes of competitive (motor and intellectual) activity. In pentathlon, the most important skill is the performance of a competitive exercise (consisting of five exercises), which ideally should be brought to the level of technical mastery. Competitive skills perform the function of means of competitive activity. Through them it is carried out.

The motor competitive skills of the pentathlete include the skills of running 5x600 m, shooting at 10 m (combined relay), fencing, riding, swimming at 200 m.

Intellectual competitive skills of a pentathlete are the algorithms of decision-making by an athlete brought to automatism in the course of competitive activity.

Physical fitness in competitive activity is a reserve of strength and energy that a pentathlete can spend on the implementation of competitive (motor and intellectual) activities. It is often the decisive factor for demonstrating a championship or record competitive achievement. A pentathlete needs physical fitness in running 5x600 m, in shooting at 10 m (combined relay), in fencing, in horseback riding, in swimming at 200 m.

Physical fitness in intellectual competitive activity determines the ability of a pentathlete to overcome psychological and physical fatigue throughout the competition, adequately respond to changes in competitive activity and make the right decisions in accordance with the decision-making algorithm.

Conclusion. The competitive culture of a pentathlete is a systemically organized unity of competitive needs and motives, competitive knowledge, competitive skills, physical fitness in a competitive exercise, united by competitive activity. The listed elements are combined into two components of the competitive culture: mental activity component and executive component.

The model of competitive culture of a pentathlete makes it possible to single out the systemic tasks of his competitive training. These include: to form a system of competitive needs and motives of a pentathlete; to form a system of competitive knowledge of theoretical, methodological and practical levels; to form a system of competitive skills (motor and intellectual); to ensure the maximum level of physical fitness in competitive activities; to include the pentathlete in active competitive and quasi-competitive activities.

Further practical application of the theoretical model of the competitive culture of athletes specializing in modern pentathlon involves the development of diagnostic tools to control the structure of the preparedness of a pentathlon athlete. In particular, a toolkit is needed to determine the state of the need-motivational sphere of competitive culture, the level of formation of competitive knowledge, the level of formation of competitive skills and physical fitness in the exercises included in the competitive exercise of the pentathlete.

The state of competitive culture (its structural components and elements) serves as the main criterion for differentiation and individualization of the process of training athletes. At the same time, when organizing the training process, one should take into account both the structure of the

competitive culture and the individual characteristics of a particular pentathlete and rely on his leading motor abilities. Such an organization of the training process, based on the constant consideration of the individual characteristics of each athlete is the most justified at the stage of the highest sports achievements [9; 10; 11].

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O. V. Tozik

THE IMPACT OF WORKOUT LESSONS
ON THE PHYSICAL FITNESS OF STUDENTS IN GRADES 10–11

The article is devoted to the application of workout at the sectional classes for high school students. The study reveals peculiarities of the dynamics of physical fitness indicators of high school students. The effectiveness of the use of workout in the physical education of students of 10–11 grades that live in Vetka city was experimentally proved.

Healthy lifestyle problems of the population, particularly the younger generation, are among the most pressing issues in modern society. The health of modern children and adolescents is exposed to several adverse factors, among which are poor nutrition, unfavorable ecology, and, most importantly, reduced level of physical activity. Human life in modern society has become much more difficult: the pace of life has increased, as well as the amount of stress, increased psychological stress, while the physical load has decreased [1].

Currently, in the physical education of children, adolescents and young people there is a paradoxical situation: despite the unconditional both personal and social importance of health, optimal physical development and level of physical fitness, all these indicators tend to deteriorate from one generation to the next. To a large extent this can be countered by means of physical education, so to address this negative problem are used different means and methods: improving the program of physical education of students of secondary schools, developing its new types, which have sports, health, educational orientation. However, the problem of preserving and strengthening the health of the younger generation of the country is still far from its real resolution [2].

To rationally organize physical education of high school students, it is necessary to know the age development patterns of the basic systems of the body. High school age is the period of the end of puberty, which is characterized by a high rate of physical development in general. During this period of life muscle strength and endurance are growing, the formation of physical coordination skills is coming to an end, and posture is formed. Besides. there are changes in the cardiovascular and respiratory systems, the strength of the skeleton increases, and the development of the central nervous system is coming to an end [3].

At the same time, according to the data from literature sources, there is a catastrophic decrease in motor activity of people both adults and schoolchildren, due to the mechanization and automation, computerization of many aspects of labor and learning activities.

The health-improving effect of physical exercises is observed only when they are rationally balanced in orientation, intensity, and volume considering the capabilities of the individual student. In addition, it is important to consider the aspirations and wishes of schoolchildren themselves, since specifically active and conscious physical exercise is the basis of effective physical education at all educational stages [4; 5].

In connection with the above, the purpose of our study was to research the effect of workout exercises as part of sectional classes on the physical fitness of high school students.

The modern paradigm of physical education of students in schools involves the formation of abilities in the optimal way to solve motor tasks, considering the characteristics and capabilities of the body of children and adolescents. However, with the modern approach of physical education at school, the functioning of this system is complicated by the fact that it requires doing exercises regularly. It makes it even more urgent to use innovative means and methods of physical training in the lessons of physical education.

New areas of sports activity (parkour, gimbarr, break-dance) allow today's youth to become active and athletic, to evaluate themselves more critically in physical and social terms. One of these

new directions is the youth movement of workout (street-workout). The unique feature of workout, on the one hand, is the ability to train free of charge anywhere and anytime, because sports equipment can be any urban facility – from special areas and city parks to the courtyards. On the other hand, it is a freedom from limits and conventions in exercises being used, when a physical training becomes a way of self-expression.

Workout is a rational combination of elements of strength exercises, gymnastics, and cardio training, used in an accessible form to improve physical fitness and maintain an active lifestyle.

The pedagogical experiment was conducted to substantiate the effectiveness of the use of workout at section classes of high school students living in Vetka. For this purpose, based on secondary school number 1 of Vetka an experimental program of workout classes as extracurricular physical education classes (sections of general physical training) was implemented. Eleven students of the 10th grade and 14 students of the 11th grade (boys) participated in the study.

The main purpose of the workout was to increase motor activity and promote a healthy lifestyle among the younger generation. The training process was carried out by performing well-known gymnastic exercises such as pull-ups, push-ups, squats, lunges, and plank on an outdoor sports ground (or gymnastics equipment in the gym) – horizontal bar, uneven bars, wallboard, handrail, and an inclined bench. The wide range of variation in the performance of basic exercises, as well as combining them into more complex elements and combining them into bundles allows you to build a multi-functional workout aimed at developing all major muscle groups of our body. All kinds of workout exercises allow the development of all leading human motor abilities – strength, agility, endurance, speed, flexibility and coordination qualities.

The experimental program implied workout training during extracurricular classes of physical education – general physical training sections. The program of workout training as elective classes was drawn up for 140 hours (70 training sessions) with a session's frequency of 2 times a week. The exercises that were included in the training program were designed for the elementary level of physical fitness.

The total duration of one session was up to 120 minutes. Training began with a running warm-up for 10–15 minutes, then there were general training exercises on the spot and in motion.

The main method in the session's major part was circuit training. Trainees were divided into several groups. Each group performed certain exercises: for example, Group 1 – pull-ups, Group 2 – push-ups, Group 3 – abdominal exercises. All exercises, except for the abs, were performed one at a time. After completing a set, the equipment and exercises were changed.

Approximate distribution of exercises by stations was as follows:

– pull-ups – 5 approaches of 5 reps: 1 approach – wide grip, 2 – middle grip, 3 –narrow grip, 4 – lower grip, 5 – multi-grip;

– push-ups: 5 sets of 10 reps: 1st set – on fists, 2nd – with clap in front of chest, 3rd – decline pushups (feet on the bench), 4th – with narrow arms, 5th – with wide setting of hands;

– bench press: hanging from the bar – 2 sets of 10 repetitions, from the pose; lying on the back, torso raising – 2 sets of 20 repetitions;

– arm bending and extensions on uneven bars – 5 sets of 5 repetitions;

– squat jumps – 2 sets of 15 reps.

In the main part of a class, we learned the simplest exercises of street-workout: different standing positions, horizontal positioning, exercise "human flag", and acrobatic exercises.

In the final part of a class stretching exercises to relax muscles were performed, which contributed to speedy recovery of muscles and ligaments after exercise.

The results and discussion of the study. Pedagogical control tests were conducted using the tests recommended by the curriculum, but for a more qualitative assessment of the growth of strength abilities we additionally used 4 tests recommended by the curriculum for the subject "Physical Education and Health" for grades X–XI of institutions of general secondary education with Russian language teaching and education as educational standards for mastering skills, skills, development of motor abilities of students in grades X–XI.

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At the end of the pedagogical experiment statistically significant changes in the physical fitness indicators of high school students were established.

The most pronounced changes were seen in standing long jump: while the average result of 10th graders at the beginning of the year was 226.12±4.25 cm, by the end of the experiment it improved to 236.8±4.31 cm (reliability of differences was up t=3.22, p<0.01); for students of 11 grade at the beginning of the year the average result was 232.28±5.23 cm, having improved to 243.08±5.65 cm (t=3.34, p<0.01).

In the 30 m run, which characterizes the level of speed development, the 10th grade students at the beginning of the year had an average group result of 4.61±0.14 s, improving to 4.57±0.12 s by the end of the year, with t=2.46, p<0.05. In grade 11, at the beginning of the year, this index was 4.56±0.16 s, with improvement to 4.49±0.17 s, with t=2.34, p<0.05, by the end of the school year.

The results of the test "4x9m shuttle running", which characterizes the level of development of coordination abilities, have improved in grade 10 from 9.49±0.09 to 9.28±0.11 seconds (with t=2.46, p<0.05), in grade 11 – from 9.31±0.11 to 9.12±0.12 seconds (with t=2.41, p<0.05).

There were significant differences at p<0.001 for " pull-ups on the crossbar" test: in grade 10 students it improved from 6.12±1.59 times to 11.31±2.04 times (at t=6.12), in eleventh graders – from 7.92±1.65 times to 13.21±1.88 times (at t=6.19).

The flexibility index (test "Lean forward from sitting position"), in grade 10 improved from 9.04±1.68 cm to 12.56±1.85 cm (t=2.41, p<0.05), in grade 11 it improved from 9.67±1.73 cm to 12.67±1.84 cm (t=2.37, p<0.05).

Similar reliability of differences was revealed in the test "Running 1500 m", which characterizes the level of endurance. For 10th graders at the beginning of the year this indicator was 6.42±9.23 minutes, improving to 6.18±9.68 minutes by the end of the year (with t=2.31, p<0.05). For 11th grade students at the beginning of the experiment, the average index of this test was 6.18±9.33 minutes, improving to 6.34±9.39 minutes by the end of the year (with t=2.33, p<0.05).

The positive dynamics of test results could not but affect the average scores received by students for performing exercises.

Thus, the 10th grade students' overall average score improved from 5.75±1.33 to 7.30±1.42 during the experiment. There was an enhancement from 6,84±1,34 to 7,62±1,15 for the 30 m run, from 5,61±1,28 to 6,21±1,18 for shuttle run 4x9 m, from 6,22±1,38 to 8,14±1,16 for standing long jump, pull-up and hanging on the bar - from 4.86±1.25 to 8.26±1.19, forward leaning from a sitting position - from 5.79±1.29 to 7.34±1.22 and for 1500 m run – from 5.18±1.31 to 6.23±1.28. Significance of differences was t=3.27, p<0.01.

In the 11th grade high school students the total average score increased from 5,99±1,49 to 7,29±1,52. For the 30 m run it improved from 6.62±1.39 to 7.21±1.42, for the shuttle run 4x9 m – from 4.98±1.36 to 6.14±1.39, for standing long jump – from 6.08±1.42 to 8.23±1.45, pull ups hanging on the bar from 6.84±1.37 to 8.32±1.44, for the forward leaning from a sitting position from 5.78±1.41 to 7.47±1.52, and for the 1500 m run from 5.68±1.32 to 6.34±1.39. The reliability of differences was t=3,31, p<0,01.

Conclusion. As the results of our pedagogical experiment have shown, the workout classes contribute to improving the physical fitness of students in grades 10–11.

According to the results of physical fitness tests of high school students in grades 10-11, reliable differences at p < 0.05 were seen in such tests as "Running 30 m", "4x9 m the shuttle run", "Forward leaning from a sitting position " and "Running 1500 m". With the reliability of differences p < 0.01 the results for "standing long jump" with the average score for the 6 main tests (both in grade 10 and 11), as well as the pull-ups on the crossbar (for tenth graders) improved.

The most significant changes (with reliability p < 0.001) were seen in the tests "Pulling up on the crossbar ", "L sitting on the parallel bars", "Bar pullover", "Dips on parallel bars" for students in grades 10–11, and "Muscle-up" for students in grade 11.

Thus, the conducted research of the influence of workout classes during additional sectional classes for the students of high school in Vetka has proved the effectiveness of our proposed approach, which has resulted in the increase of physical fitness of the students.

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V. Yu Usovich, G. I. Narskin

THE APPLICATION OF ELASTIC SHOCK ABSORBERS TO IMPROVE THE PHYSICAL CONDITION OF SPORT VETERANS

This article presents the results of the analysis of the use of elastic shock absorbers to improve the strength and flexibility of sports veterans, middle-aged men, members of the Gomel regional organization of the Belarusian public association "Veterans of Physical Culture and Sports".

We have received reliable information about the improvement of the physical condition of sports veterans, which indicates the rationality of using elastic shock absorbers for individual correction of the physical condition of sports veterans, middle-aged men.

The analysis of the scientific and methodological literature and the results of the research on the practical activities of the Gomel regional organization of the Belarusian public association "Veterans of Physical Culture and Sports" made it possible to identify the theoretical prerequisites for the need for individual correction of the physical condition of sports veterans, middle-aged men, in modern conditions.

The social significance of the professional and social activities of sports veterans in the formation of a healthy lifestyle for young people is great, as well as the preservation, strengthening and improvement of the physical condition of representatives of economically active age groups [1; 2; 3].

It should be noted that veterans of sports, middle-aged men, whose multifaceted professional and social activities require good physical condition, often themselves need its individual correction.

The purpose of the study is to experimentally evaluate the effect of using exercises using elastic shock absorbers to improve the physical condition of sports veterans, middle-aged men.

Organization and research methods

We used the following methods: study and analysis of modern domestic and foreign scientific and methodological literature, interviewing sports veterans, pedagogical experiment and methods of mathematical and statistical analysis.

The ascertaining experiment to substantiate the expediency of using exercises using elastic shock absorbers to improve functional indicators, strength capabilities and flexibility of sports veterans, middle-aged men, was conducted on the basis of the Gomel regional organization of the Belarusian public association "Veterans of Physical Culture and Sports".

Research results

The survey conducted by us among the members of the Gomel regional organization of the Belarusian public association "Veterans of Physical Culture and Sports" showed that sports veterans do not perform enough exercises to develop flexibility and only a few use the elastic resistance of elastic shock absorbers to develop strength qualities.

The weekly plans of physical culture and health-improving classes developed by us with sports veterans, participants of the second control group in the ascertaining experiment, provided for group classes aimed at improving functional indicators and strength qualities using modern elastic shock absorbers 2 times a week. Also, the participants independently daily (at the main stage) performed exercises to develop flexibility and improve mobility in the joints using modern elastic shock absorbers [4; 5].

In our work, we used popular and commonly available types of shock absorbers: mini-ribbons, rings, rope and tubular shock absorbers. Each shock absorber has variations in the degree of resistance: "light", "medium" and "heavy", while different manufacturers produce them in different colors.

It must be emphasized that the mounting options for shock absorbers are also very different. Depending on the location of the training, we used various attachments for fastening: carabiners, holders, loops, etc., as well as different-level shock absorber attachment points – lower, middle and upper.

Based on practical experience, we have developed for sports veterans, middle-aged men, sets of exercises using elastic shock absorbers for group strength training plans and individual flexibility training (Table 1).

Table 1 – Plan for strength training with sports veterans at the "main" stage (second 8 weeks of the stage)

Content	Dosage	Recommendations for the use of shock absorbers type "medium" and "heavy"	Time
1	2	3	4
Preparatory part			
Main part			
bending the leg at the knee joint (standing on one knee, the second leg on the stand)	3-4 sets of 8-12 reps per leg	tubular shock absorber with mounting point at the bottom	4-6 minutes
alternating traction with the knee towards the chest (standing on one knee)	3-4 sets of 8-12 reps per leg	tubular shock absorber with upper attachment point	4-6 minutes
alternating bench press in front of you forward at chest level (sitting)	3-4 sets of 8-12 reps	tubular shock absorber with mounting point at the middle level behind the back	4-6 minutes

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1	2	3	4
alternately bringing the hands to the opposite shoulder (sitting)	3-4 sets of 8-12 reps per arm	ring or tubular shock absorber with mounting point at the lower level on the side	4-6 minutes
simultaneous pull of the hands to the chin (standing)	3-4 sets of 8-12 reps	ring with lower attachment point on the side of the legs	4-6 minutes
alternate bending of the arms in the elbow joint (sitting)	3-4 sets of 8-12 reps per arm	tubular shock absorber with mounting point at the lower level in front of you	4-6 minutes
pull to yourself with two hands from above (standing)	3-4 sets of 8-12 reps	ring with attachment point in front of you at the top level	4-6 minutes
simultaneous bending of the legs at the knee joint and pulling them to the chest (lying on your back)	3-4 sets of 8-12 reps	ring with the upper attachment point in front of you	4-6 minutes
Final part			

It should be noted that sports veterans independently carried out an individual selection of shock absorbers and the distance from the attachment point to the trainee, which was carried out in a certain sequence in accordance with the step-by-step algorithm developed by us (Figure 1).

Step 1 – taking into account the stage of conducting the training and methodological recommendations in the plan, the trainee needs to choose the type of shock absorber used (Figure 1-A).

Step 2 – taking into account the stage of conducting the training and methodological recommendations in the plan, the trainee needs to choose the degree of elasticity of the shock absorber (Figure 1-B).

Step 3 – if necessary, the student needs to choose a mount for inventory (Figure 1-C).

Step 4 – depending on the exercise being performed, the practitioner needs to mount the shock absorber at the indicated point: lower, middle or upper (Figure 1-D).

Step 5 – The trainee needs to slowly move away from the attachment point until the shock absorber is brought into a state of light tension (Figure 1-E)

Step 6 – the trainee needs to independently, empirically, individually for each free limb, determine and fix the distance at which he can complete the number of repetitions recommended in the training plan in one approach (Figure 1-F).

Figure 1 – Algorithm for individual selection of shock absorbers

During the training, the principle of gradual and consistent application of physical activity was used. The individual characteristics and physical capabilities of those involved were also taken into account. It was taken into account that compliance with the condition of unlimited loads is an important factor in the health-improving effectiveness of training. In physical culture and health-improving training with sports veterans the most important role was assigned to the degree of adequacy of physical loads, which were selected individually.

It should be emphasized that during the training the dynamics of functional indicators was recorded, the optimal values of heart rate were within 60–80% of the maximum heart rate determined for this specific age of veterans.

The main attention during group sessions was given to individual dosing of load volumes. When working with elastic resistance, the used shock absorbers were often adjusted according to the degree of elasticity, as well as the distance from the attachment point, which was selected individually, taking into account the physical condition of those involved.

After statistical processing of the obtained data on the dynamics of indicators of the functional state, strength abilities and flexibility of sports veterans from EG-2, we recorded the following:

– blood pressure indicators were significantly improved from 132.31 to 129.75 mm Hg. Art.;

– positive shifts of the Romberg test from 9.37 to 13.25 seconds were recorded;

– performance of strength-oriented exercises made it possible to obtain significant positive changes in carpal dynamometry indicators of both the right (from 50.69 to 55.50 kg) and left (from 40.25 to 43.94 kg) hands;

– along with the indicators of carpal dynamometry, positive dynamics was also shown in tests for flexion and extension of the arms in an emphasis lying on the floor (from 8.75 to 13.25 times), as well as in pull-ups from the hang on a high crossbar (from 3.44 to 5.19 times) and in standing long jump (from 144.75 to 151.81 cm);

– positive dynamics was recorded in the test for lifting the body from a supine position (from 11.37 to 13.62 times);

– regular performance of exercises for the development of flexibility using various elastic shock absorbers determined significant positive changes in the performance of the "forward bend from a sitting position" test (from -0.06 to 3.94 cm).

Conclusion

Thus, the rationality of the use of the health-improving physical culture means proposed by us to improve the physical condition of sports veterans, middle-aged men, namely, strength training using modern elastic shock absorbers 2 times a week and daily exercise for developing flexibility using elastic resistance, is substantiated by the results of the study.

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