Available online at: https://miopap.aspu.am/index.php/miopap

KHACHATUR ABOVIAN ARMENIAN STATE PEDAGOGICAL UNIVERSITY

ISSN 1829-1295 (print)
ISSN 2953-7878 (online)

MAIN ISSUES OF PEDAGOGY AND PSYCHOLOGY

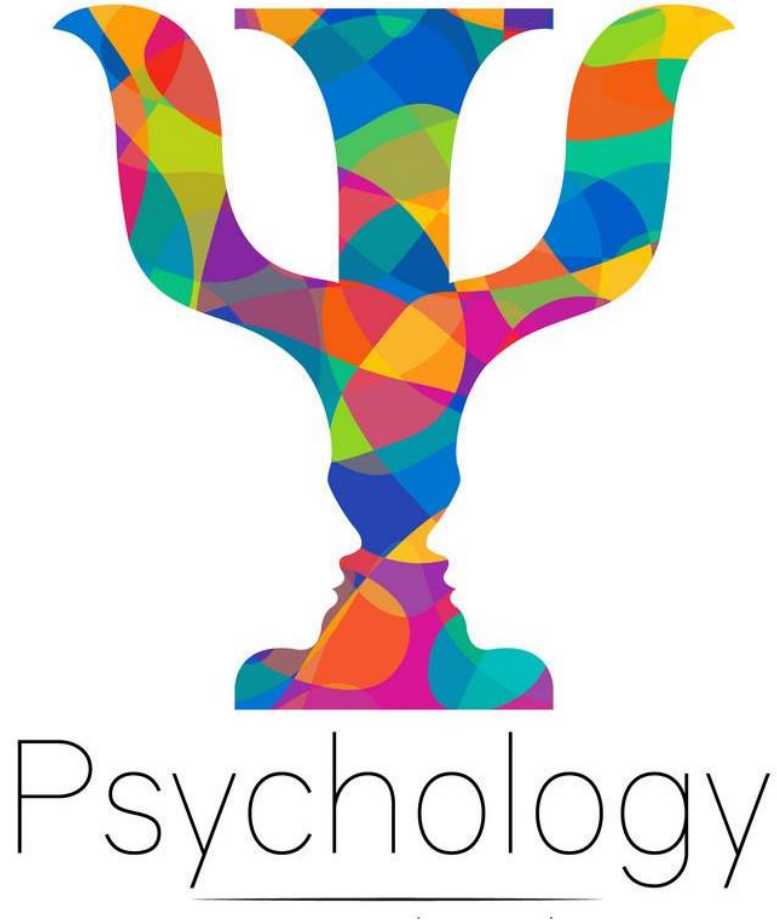
Scientific Periodical

vol. 10 No. 1 (2023)

CONTENTS

SECTION 1.

PSYCHOLOGY



RESEARCH OF EMOTIONAL INTELLIGENCE OF CHESS TEACHERS AND PUPILS

DOI: 10.24234/miopap.v10i1.456

Anzhela SARGSYAN, *Lecturer at Academician Mkrtich Mazmanyan Chair of Psychology Khachatur Abovian Armenian State Pedagogical University,"Chess" Scientific Research Institute*

E-mail: *sargsyananzhela54@aspu.am*

Armine KHACHATRYAN, *PhD in Psychology, Associate Professor at the Chair of Developmental and Educational Psychology at Khachatur Abovian Armenian State Pedagogical University, "Chess" Scientific Research Institute*

E-mail: khachatryanarmine54@aspu.am

ABSTRACT

The research relevance is conditioned by the lack of experimental data on the study of the level of emotional intelligence of school teachers and learners of chess. The aim of the research is to identify the level of emotional intelligence of teachers and junior schoolchildren and their manifestation during the teaching and mastering of the "Chess" subjects. In accordance with the purpose of the research, "Happy and sad", "Do you understand emotions by mimics?", "Emotions identification, pupil", "Emotions identification, teacher", N. Holly's intellectual level diagnostic methodologies have been applied. The study results. Summarizing the results of analyses of all the applied methods during this research, it can be concluded that the low indicators of empathy of the teachers, managing emotions of themselves and others affects both the motivation to success of the 3rd and 4th grade pupils as well as the negative attitude to obtaining the teacher's appraisal, as a result of which the indicator of a positive attitude towards the teacher of the chess is diminished. The practical significance of the research. Taking into account the data analysis of the results of this study, we suggest providing training program in the chess teachers. The aim is to increase the level of development of chess teachers' emotional intelligence, to develop the ability of schoolchildren to recognize, distinguish and title the emotions of chess classes. The goal is to increase the level of development of chess teachers' emotional intelligence, to develop the ability to recognize, distinguish and title the emotions of schoolchildren in chess classes.

Keywords: *"Chess" subject, junior schoolchild, emotional intelligence, emotion identification, author's method, Chess teachers, group training program, efficient lerning*

process/ efficiency learning process.

INTRODUCTION

Emotional intelligence as a psychological phenomenon is relatively new, and so far there is no clear definition of this concept. In 1990 P. Salovey has published an article titled "Emotional intelligence", which is the first edition on this topic. P. Salovey and J. Mayer define emotional intelligence as "personality manifestations expressed in the ability to perceive and understand emotions and to manage emotions based on intellectual processes" (Salovey P., Mayer J., 2015, pp. 132-135).

Emotional intelligence model, developed by P. Salovey, J. Mayer, D. Caruso, includes the following components:

1. Identification of emotions - the ability to accurately perceive and express emotions.

2. Emotional stimulation of thinking - the possibility of creating emotions that will contribute to the solution of intellectual problems.

3. Understanding emotions - an opportunity to understand complex emotions and their causes.

4. Managing emotions - the ability to maintain or change the emotional state of yourself or others.

Later by adding three more components of the model proposed by P. Salovey and J. Mayer, D. Goleman combines cognitive abilities with personality attributes, including enthusiasm, perseverance, and social skills. And if before just four major components were distinguished in the structure of emotional intelligence, which are self-consciousness, self-control, affection, communication skills, then D. Goleman classifed motivation as one of those components (Goleman D., 2010, p. 487).

In 1985 R. Barn-On imported the concept of "emotional coefficient" and offered the "E. Kyu's questionnaire" for its diagnosis. R. Barn-On defines emotional intelligence as knowledge and competence that enables a person to overcome obstacles in different situations (Simonova, 2011, p. 160).

In 2004, the russian psychologist D. Lyusin proposed a new approach to emotional intelligence. According to the author, emotional intelligence is characterized by the ability to understand and manage individual's emotions and emotions of others (Lyusin D.V, 2004, p.176). Lyusin divides two types of emotional intelligence distinguishing by their mechanisms and form of expression which are interpersonal and personal.

K. Weisbach and U. Dacks regard emotional intelligence as the ability to manage personal emotional life, which contributes to personal and professional growth (Kravtsova A.K.,

2012, p. 22).

According to O. Tikhomirov "emotional intelligence" is equivalent to "emotional thinking". Characterizing the peculiarity of emotional thinking, the author points out that emotional states are involved in the problem-solving process. In Tikhomirov's opinion, all the emotional phenomena (affect, emotions, feelings) are related to the process of thinking (Andreyeva I.N., 2008, p. 95).

I. Andreyeva provides a special approach to the structure of emotional intelligence by which two main aspects are separated:

1. Personal- it consists of components such as realizing personal emotions, self-esteem, self-confidence, responsibility, patience, self-control, activity, flexibility, interest, new aspirations, achievements' motivation, and optimism.

2. Interpersonal - Includes being easy-going, empathy, taking into account the interests of others, respect for them, predicting and evaluating interpersonal relationships, ability to work in a group (Andreyeva I.N., 2011, p.388).

Thus, psychology includes several emotional intelligence approaches:

- Theory of emotional-intellectual abilities (Mayer et al., 2001),
- Theory of emotional competence (D. Goleman),
- Non-cognitive theory of emotional intelligence (R. Bar-On),
- Theory of the dual components of emotional intelligence (D. Lyusin).

Discussing the psychological peculiarities of emotions, P. Eckman mentions that emotions do not have a continuous influence on personal activity, however, we feel emotions at some point, and in the next moment ,we can feel nothing. Emotions often occur when we feel that an event is expected. It can have a positive or negative impact on us, so emotions arise to prepare a person for quick action in life's most important situations According to P. Eckman there are seven emotions: joy, amazement, sadness, anger, disgust, contempt, fear (Eckman P., 2001).

Since 2011, chess has been included in the education system of the Republic of Armenia and is taught as a compulsory subject. This stimulated the conduct of pioneering experimental research in the field of psychology in order to identify the educational values of chess.

So, In 2014 "Chess Research Laboratory" was founded through the initiatives of the President-Founder of the Chess Academy of Armenia, Smbat Lputyan with the objective to identify the effectiveness of teaching chess in elementary schools of the Republic of Armenia. The Laboratory is installed at Khachatur Abovian Armenian State Pedagogical University. The experiments have been carried out at primary schools number 50 and number 60, among the 2nd and 4th-grade students with low, medium, and high academic progress in different regions

of the Republic of Armenia. For comparative analysis, considerable efforts have also been invested in relevant studies at schools number 1 and number 7 in Stepanakert, Nagorno-Karabakh Republic – among the 4th-grade students with no chess-learning experience. Taking into consideration the educational goals of elementary-school standards for chess as a curriculum item, the Chess Research Laboratory set forth relevant research objectives and pertinent methodology. Aim: to form and develop Learner's mental abilities; Objective: to detect and compare the level of logical thinking among the groups of students learning chess and those who don't; Methodology: Raven progressive matrices. Methodological analysis of raven progressive matrices: According to the Correlation principle in matrices, 4th-grade students with low, medium and high-level academic progress learning chess have recorded a higher degree of efficiency in differentiating the main elements of structure and identifying relations between them b. identifying the missed element and tracing comparison with the given examples. According to the Similarity Principle, the 4th-grade chess learners with low, medium and high academic progress managed to use the ability to identify symmetry and linear differentiation in decision-making According to the Progressive Change Principle, 4th-grade learners of chess with low, medium and high academic progress managed to use the abilities of dynamic (quick) observation, following changes, dynamic attention and imagination, consequently, their logical thinking has developed (Khachatryan A., Sargsyan A., 2014, p.14).

Armenian Psychologists presents the objective test results of chess research carried out by the Laboratory analysis of the Republic of Armenia. In order to identify the effectiveness of teaching academic chess, the research was carried out among the Armenian primary schools in 2-4 grades of high, medium, and low academic performance, concentration, and barriers to students' attention towards stability, response rates, as well as the moving objects. The focus of barriers to sustainability is put on appraisal methods of analysis, and it is clear that the barriers to sustainability assessment criteria are low, among the 4th-grade students with medium and high academic performance, there was an apparent increase in the number of true confrontations. Therefore, the stability of the learners' attention was increasing. The "counter the moving object" methodology results suggest that Reaction to Moving Object coefficient, which is equal to the number of delays and early confrontation quotient, is gradually decreasing, adding the exact number of confrontations. The aim of teaching academic chess at schools is to develop teaching and students' cognitiv e sphere, in particular, logicalthinking, imagination, analyzing capacity, thus contributing to th e academic study of other subjects (Mirzakhanyan K., Gevorgyan S., & Khachatryan A., 2016, p. 478).

The researches on the psychological processes – based on general methodological

orientation – might conventionally be classified into three major phases: researches which refer to (1) the intellectual potentials of chess, (2) the educational value of chess, and (3) the social value of chess. It goes without saying that all the phases declared appear interconnected and mutually completing, however, as we perceive it, the target-based researches of the aspects announced would enlarge the field of evaluation of the educational and cultural functions of chess. The functions mentioned are introduced below together with the current situation of the research of these components, as well as, the possibilities to enlarge them in accordance with the vision of the expert group of the Chess Academy of Armenia (Mirzakhanyan R., Gevorgyan S., Karapetyan V., & Petrosyan R., 2016, p. 18-24).

One of the the present researches in the Republic of Armenia evidences that, in the case of similar chess skills, the manifestation of cognitive dissonance, and the own argumentation as well are detectable within the domain of extroversion – emotional instability. Such children, even more than the introverts, need the school psychologist's support. The cognitive consonance is typical of those of the children involved who are ready to gain new experience and appear to be more positively charged towards their rivals or opponents (Mirzakhanyan R., Gevorgyan S., Karapetyan V., Dallakyan A., & Berberyan A., 2019).

One of the research projects of present purpose to reveal the influence of individual psychological characteristics of schoolchildren who studied chess subject on the results of chess test. The method was of free drawing, «My chess lesson», was used, and the method of assessing chess knowledge and skills was also applied using the developed chess test. Based on the school chess curriculum, the test was compiled by a team of experienced specialists in the field of chess education, psychologists, sociologists and professional chess players. The materials of an empirical study on a sample of schoolchildren from all regions of the Republic of Armenia (N=383) are presented. Comparing the review of previous studies and empirical data, authors talk about the conditionality of chess skills by individual psychological characteristics of children, such as introversion, intuition, intelligence, reflexivity, etc. Psychological resources and the gender of schoolchildren also determine the development of chess skills. The results emphasize the need to consider individual psychological characteristics both in the preparation of the program and in teaching chess as a general subject at school (Sarkisyan V.Zh., Manukyan S.A., Ispiryan M.M., Gevorgyan L.L., Khachatryan E.A., 2022).

The novelty of the research is that the author's method developed and applied by us for identifying the level of emotional intelligence of younger schoolchildren can be useful both for chess teachers and specialists working in this field. We also propose to theoretically develop a group training program aimed at developing the emotional intelligence of teachers teaching

in the lower grades of an elementary education school, taking into account the data of research work conducted among students. Such a combination can be useful in order to make the learning process in the lower grades more efficient.

THE PRACTICAL SIGNIFICANCE OF THE RESEARCH. Taking into account the data analysis of the results of this study, we suggest providing a training program for chess teachers. The aim is to increase the level of development of chess teachers' emotional intelligence, to develop the ability of schoolchildren to recognize, distinguish and title the emotions of chess classes. The goal is to increase the level of development of chess teachers' emotional intelligence, to develop the ability to recognize, distinguish and title the emotions of schoolchildren in chess classes.

METHODS AND METHODOLOGY

An important precondition in the learning process is the ability to understand and manage emotions of the teacher and learners. It should be mentioned that at present there are no experimental data on the study of the emotional intelligence of "Chess" teachers and learners. That is why our research team has set a goal to expose the emotional intelligence of chess teachers and schoolchildren.

Since 2017, the psychologists research team of the “Chess” scientific research institute has conducted experimental studies in Schools № 168 and 155 of Yerevan. The experiment involved 60 schoolchildren from the 3rd and 4th grades, with high, average and low academic performance and 10 teachers of the "Chess" subject.

The research relevance is conditioned by the lack of experimental data on the study of the level of emotional intelligence of teachers and learners of the "Chess" subject. ***The aim*** of the research is to identify the level of emotional intelligence of teachers and junior schoolchildren and their manifestation during the teaching and mastering of the “Chess” subjects. In accordance with the purpose of the research, "Happy and sad", "Do you understand emotions by mimics?", "Emotions identification, pupil", " Emotions identification, teacher", and N. Holly's intellectual level diagnostic methodologies have been applied.

The methodological bases of the research are theoretical approaches to the structure of emotional intelligence of P. Salovey, J. Mayer, D. Caruso (Salovey & Mayer, 2015), main ideas about the main emotions of P. Eckman (Eckman P., 2001).

The research has been conducted in two stages:

1. Selection of methodologies for research purposes, development of authoring methods, pilot application

2. Research results data analyses.

The following methods have been selected and applied in accordance with the research objective:

1. "Happy and sad" (Ilyina M.N., 1998)
2. "Do you understand emotions by mimics?" (Psychological tests, 2000)
3. "Identification of emotions, pupil" (Author's methodology development)
4. "Identification of emotions, teacher" (Author's methodology development)
5. N. Holly's Emotional intelligence diagnostic method (Schutte N.S., Malouff J.M., Hall L.E., Haggerty D.J., Cooper J.T., & Golden C.J et al., 1998).

RESULTS AND DISCUSSION

Now, let's take a closer look at the results' analyses of each methodology. They are developed according to the relevant indicators, which are also given in the form of diagrams to make it more visible.

The results of the "Happy and sad" method were analysed according to the indicators of the following positions:

1. Position of the chess studying at the school,
2. Motivation to succeed in the chess class,
3. Attitude toward the chess teacher,
4. Position of getting the teacher's praise or being highly assessed,
5. A position of willingness to participate in a chess class.

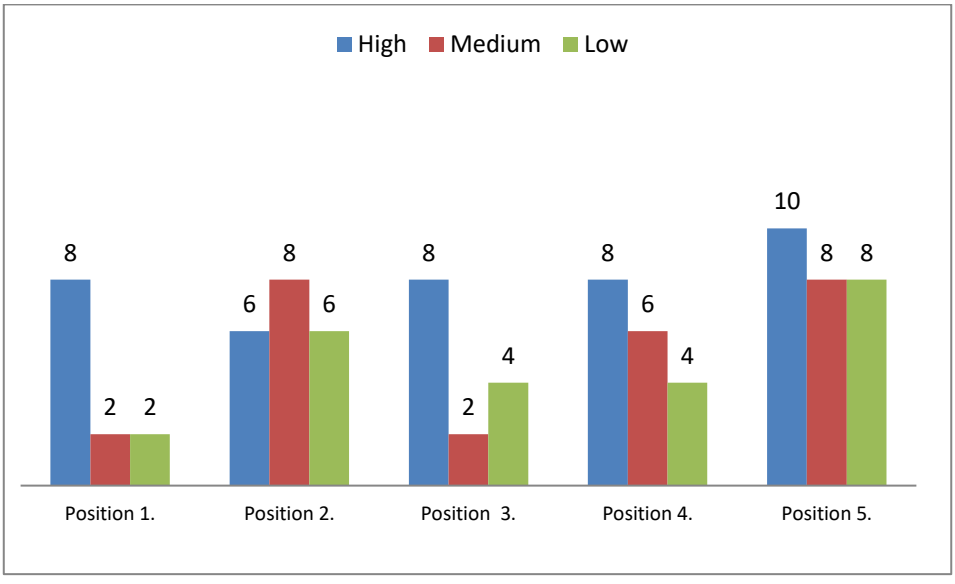


Diagram 1. Analyses of "Happy and sad" method' reserach results. 3rd grade

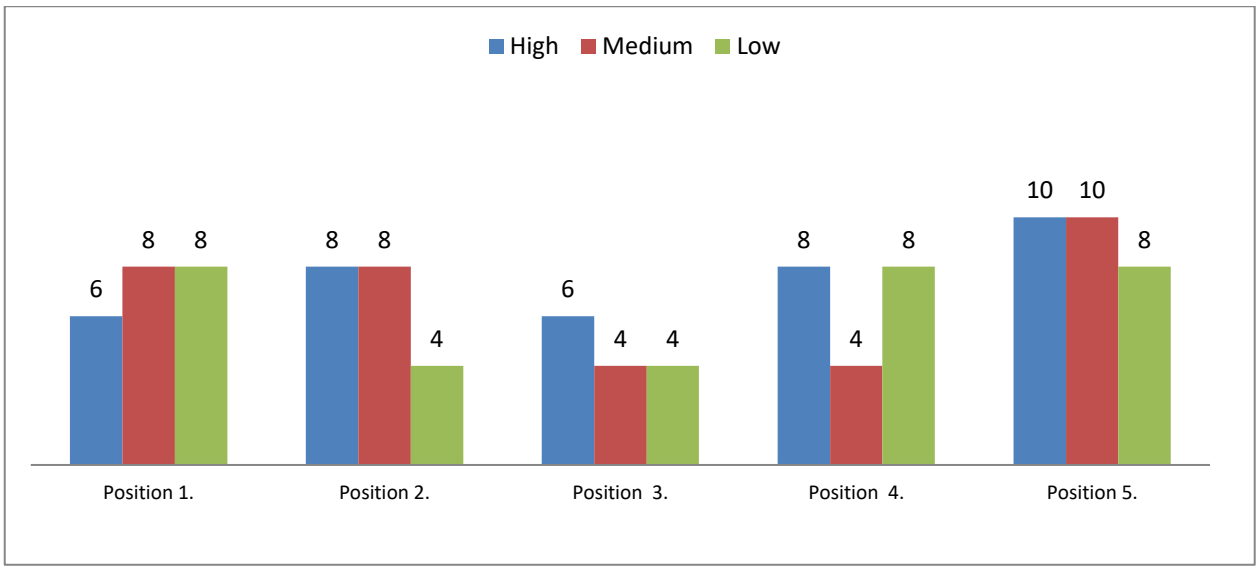


Diagram 2. Analyses of "Happy and sad" method research results. 4th grade

Analysing the results of the application of " Happy and sad" method it becomes clear that:

- The 3rd grade pupils with high academic performance have shown a positive attitude to all of the above mentioned indicators, except for the motivation to succeed in the chess class,
- Interestingly, pupils with average and low academic performance, on the other hand, have shown a high level of motivation for success in the chess class while at the same time positive indicators have been revealed in terms of teacher's praise or being highly assessed and willingness to participate in chess classes.

Analysis of the 4th grade research data showed the following result:

- Pupils with high and average academic performance have demonstrated a willingness to participate in chess classes, a positive attitude towards chess in school, a high level of motivation to success in chess classes,
- Pupils with average and low academic performance have shown a low level of motivation to succeed in chess class, a negative attitude towards a teacher's praise or being highly assessed, and towards the chess teacher.

The result data of "Do you understand emotions by mimics?" method have been analyzed according to the ability to identify and title the main 12 emotions.

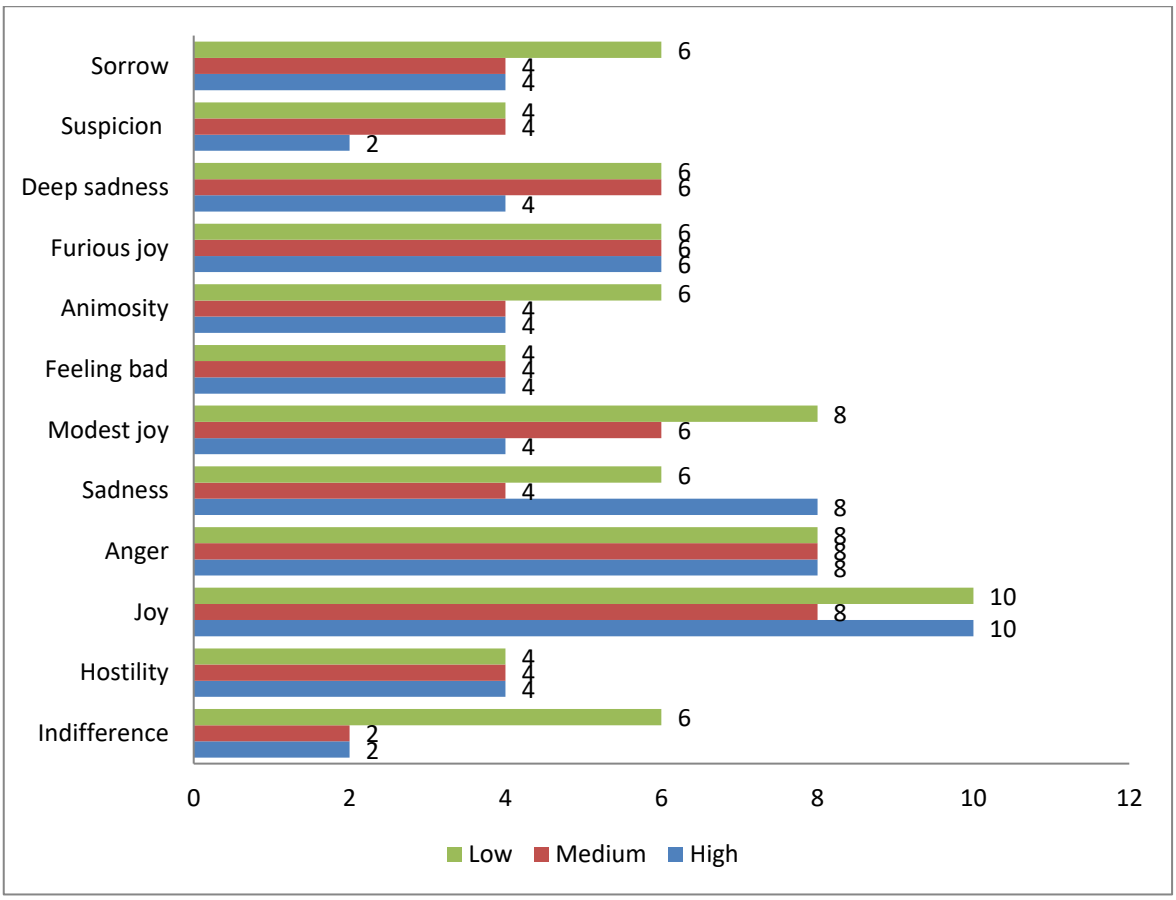


Diagram 3. Analyses of result data of "Do you understand emotions by mimics?" method application: 3rd grade

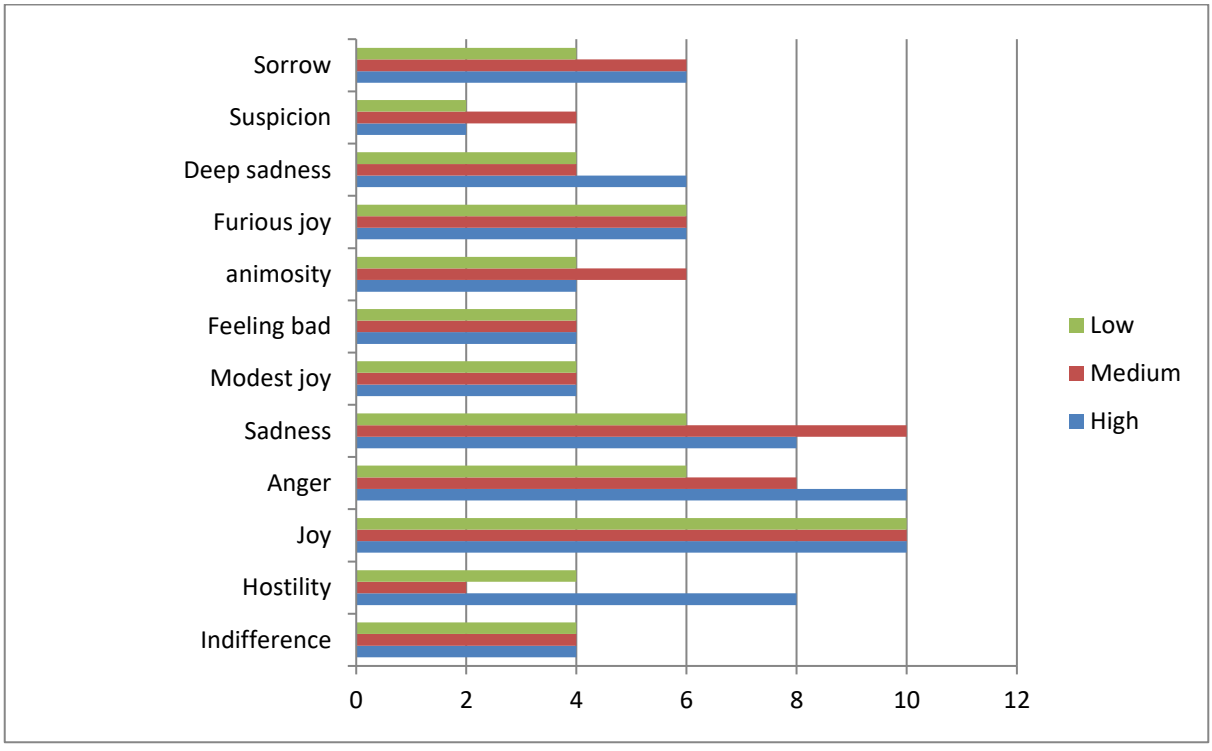


Diagram 4. Analyses of result data of "Do you understand emotions by mimics?" method application: 4th grade

Analyses of result data of “Do you understand emotions by mimics?” method application showed that, regardless to the academic performance, the 3rd and 4th grade pupils identify and title “happiness”, “sadness” and “anger” expressing emotions.

“Emotions identification, pupil” method results data have been analyzed according to expression of the following emotional positions during the chess class.

1. Towards the teacher,
2. Towards the classmate,
3. Towards the participation in the chess class.

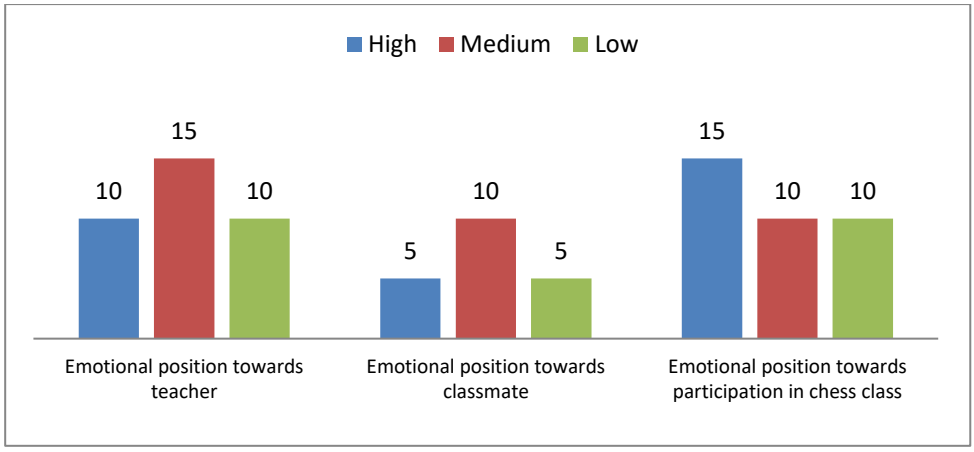


Diagram 5. Analyses of result data of “Emotions identification, pupil” method application: 3rd grade

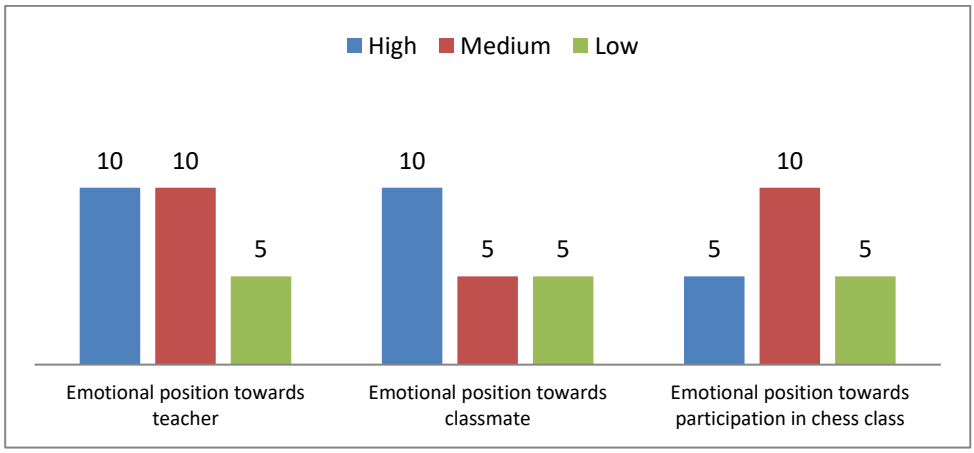


Diagram 6. Analyses of result data of “Emotions identification, pupil” method application: 4th grade

Analyses of results' data of “Emotions identification, pupil” method showed that, regardless to the academic performance, the 3rd and 4th grade pupils generally demonstrate a positive and neutral position towards the teacher and participation in the chess class. The result

is different in the case of the emotional position towards the classmate, where low indicators are performed.

Analyses of result data of “Emotions identification, teacher” method has been implemented according to the schoolchild’s position of the teacher’s following emotional positions:

1. Towards the pupil,
2. Towards assessment and monitoring,
3. Towards personal emotions’ control and management.

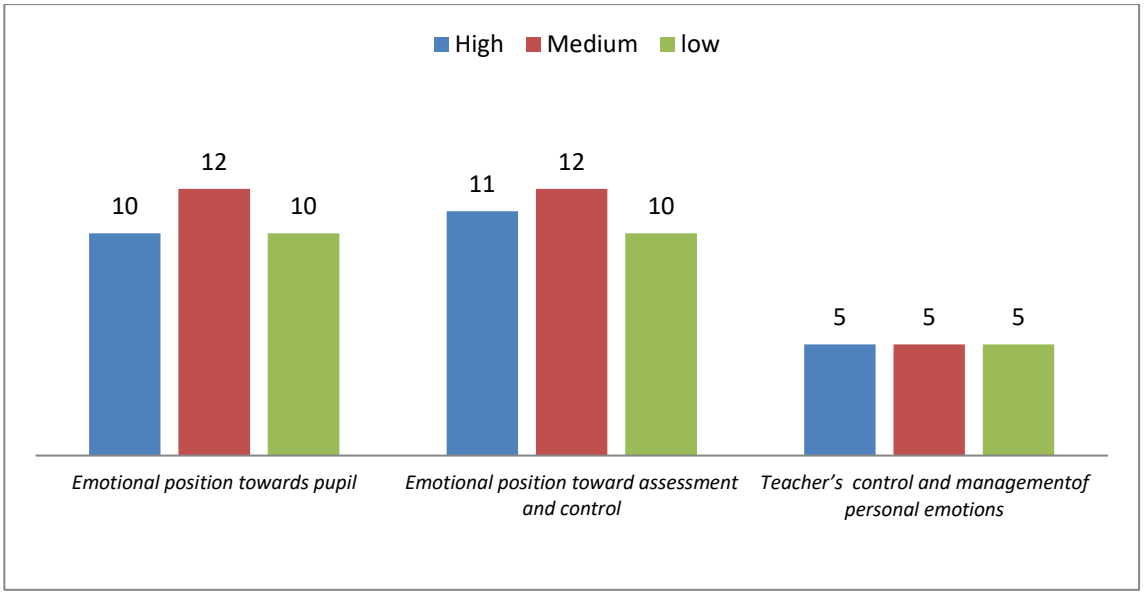


Diagram 7. Analyses of result data of” Emotions identification, teacher” method application. 3rd and 4th grades

Analyses of result data of “Emotions identification, teacher” method application reveals that in the 3rd and 4th grades has performed equivalent indicators. Regardless of the pupils’ academic performance, in their opinion teachers demonstrate a positive attitude toward pupils and their assessment and control. However, from the point of view of pupils, teachers show lower levels of control and management of their emotions in chess classes.

The results of the "Emotional intelligence level assessment" methodology were analysed according to the following criteria:

1. emotional awareness,
2. control over personal emotions,
3. self-motivation,
4. empathy,
5. control over other people emotions.

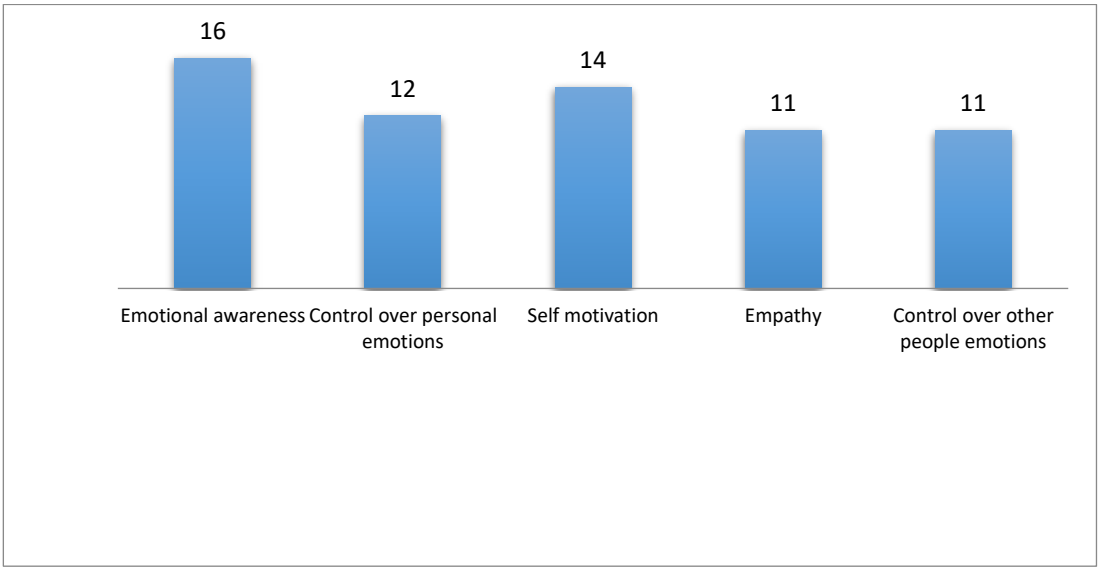


Diagram 8. Analyses of result data of "Emotional intelligence level assessment" method application

Analysis of the results shows that although the chess teacher's emotional awareness and self-motivation indicators in the school are high, the picture is different from the empathy and in the case of the self and other's emotions.

CONCLUSIONS

Summing up the analysis of the results of all the methodologies conducted during the experiment, we conclude:

1. Chess teachers demonstrate a high level of emotional awareness, while the pupils, on the contrary, are able to recognize only the joy, sadness and anger out of basic emotions,

2. The low level of empathy of the teacher, the influence on self and other's emotional control indicators impact the 3rd and 4th grade schoolchildren, also affects the motivation of succeeding in chess classes as well as the negative attitude towards getting the teacher's praise, thereby reducing the positive attitude towards indicator of the chess teacher,

3. Regardless the positive attitude of the teacher towards schoolchildren, if the teacher's emotions management and control indicators are low in the educational process, then it essentially affects both the emotional position of learners, their attitude towards classmates, and the position of participation in the chess class.

REFERENCE LIST

Andreyeva, I. N. (2008). O STANOVLENII PONYATIYA "EMOTSIONAL'NYI INTELLEKT" [THE FORMATION OF THE CONCEPT OF "EMOTIONAL INTELLIGENCE"]. *Voprosy psikhologii, 5, 83-95.*

Andreyeva, I. N. (2011). EMOTSIONAL'NYI INTELLEKT KAK FENOMEN SOVREMENNOI PSIKHOLOGII [EMOTIONAL INTELLIGENCE AS A PHENOMENON OF MODERN PSYCHOLOGY]. *Novopolotsk: PGU. (Seriya "Sotsial'no-gumanitarnye nauki"; vyp.8).*

Baron, R. M. (2006). THE BAR-ON MODEL OF EMOTIONAL-SOCIAL INTELLIGENCE (ESI). *Psicothema, 18 Suppl, 13–25.*

Goleman, D. (2010). EMOTSIONAL'NYI INTELLEKT NA RABOTE [EMOTIONAL INTELLIGENCE AT WORK]. (A. P. ISAEVA, TRANS.). *Moscow, Russia: AST; AST MOSKVA; Vladimir; VKT. (Original work published 1998)*

Ilyina, M. N. (1998). PODGOTOVKA K SHKOLE: RAZVIVAYUSHCHIE UPRAZHNENIYA I TESTY [SCHOOL PREPARATION: DEVELOPING EXERCISES AND TESTS]. *Saint Petersburg, Russia.*

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). EMOTIONAL INTELLIGENCE AS A STANDARD INTELLIGENCE. *Emotion, 1*(3), 232–242. https://doi.org/10.1037/1528-3542.1.3.232

Khachatryan, A., & Sargsyan, A. (2014). CHESS RESEARCH LABORATORY. *Paper presented at the International Conference "Chess in Schools"*.

Kravtsova, A. K. (2012). TIP UPRAVLENCHESKOGO VZAIMODEYSTVIYA LIDEROV I EMOTSIONAL'NYI INTELLEKT [THE TYPE OF LEADERSHIP INTERACTION OF LEADERS AND EMOTIONAL INTELLIGENCE]. *Sovremennye Issledovaniya Sotsial'nykh Problem [Modern Research of Social Problems], (6), 42-51. Retrieved from http://sisp.nkras.ru/e-ru/issues/2012/6/kravtsova.pdf (Accessed: 04 September 2012). [in Russian]*

Lyusin, D.V. (2004). SOVREMENNYE PREDSTAVLENIYA OB EMOTSIONALNOM INTELLEKTE [MODERN IDEAS ABOUT EMOTIONAL INTELLIGENCE]. *In D.V. Lyusin & D.V. Ushakov (Eds.), Sotsialnyi intellekt: Teoriya, izmerenie, issledovaniya [Social intelligence: Theory, measurement, research] (pp. 29-36). Moscow: Institute of Psychology, Russian Academy of Sciences RAN. [in Russian]*

Mirzakhanyan, R., Gevorgyan, S., & Khachatryan, A. (2016). AN ADEQUATE PERCEPTION ON ATTENTION TOWARDS STABILITY AND OBSTACLES OF

SPACE AND TIME, AS AN ASSIMILATE RECORD OF AN ACADEMIC CHESS. *Sociology Study. https://doi.org/10.17265/2159-5526/2016.07.006*

Mirzakhanyan, R., Gevorgyan, S., Karapetyan, V., & Petrosyan, R. (2016). TARGET-ORIENTED RESEARCH OF THE STRATEGIC PROGRAMMES ON CHESS ACTIVITIES AS SPECIALIZED EXPERIMENTAL PLATFORM FOR DYNAMIC DEVELOPMENT OF PUBLIC EDUCATION. *European Law Review. https://doi.org/10.21859/eulawrev-08041*

Mirzakhanyan, R., Gevorgyan, S., Karapetyan, V., Dallakyan, A. M., & Berberyan, A. (2019). TYPICAL EXPRESSION OF COGNITIVE DISSONANCE AND CONSONANCE IN THE COURSE OF ARGUMENTATION AMONG PRIMARY-SCHOOL CHILDREN PLAYING CHESS*. Imastut'yun, 13(2), 75–84. https://doi.org/10.24234/wisdom.v13i2.281*

Pavlovich, I. E. (2013). EMOTSII I CHUVSTVA. 2-E IZD.: PERERABOTANNOE I DOPOLNENNOE. *Izdatelskiy dom "Piter". (Emotions and Feelings. 2nd edition: revised and expanded. Publisher "Piter".)*

Ekman, P. (2010). PSIKHOLOGIYA EMOTSIY. YA ZNAYU, CHTO TY CHUVSTVUESH. 2-E IZD. [PSYCHOLOGY OF EMOTIONS. I KNOW WHAT YOU'RE FEELING. 2ND ED.]. (M. MATVEYEVA, TRANS.). *Saint Petersburg, Russia: Piter. (Series "Sam sebe psikholog").*

Sarkisyan, V., Manukyan, S., Ispiryan, M., Gevorgyan, L., & Khachatryan, E. (2022). THE INFLUENCE OF STUDENTS' PSYCHOLOGICAL CHARACTERISTICS ON THE RESULTS OF LEARNING CHESS. *Counseling Psychology and Psychotherapy, 30(4), 97–123. https://doi.org/10.17759/cpp.2022300406*

Simonova, L.B. (2011). RAZVITIE EMOTSIONAL'NOGO INTELLEKTA BUDUSHCHEGO PEDAGOGA [DEVELOPMENT OF EMOTIONAL INTELLIGENCE OF THE FUTURE TEACHER]. *In T.Yu. Andryushenko, A.G. Krintski, & O.P. Merkulova (Eds.), Psikhologiya obrazovaniya v XXI veke: teoriya I praktika. Materiali Mezhdunarodnoy nauchno-prakticheskoy konferentsii. Volgograd, 14-16 sentyabrya 2011 g.: 80-letiyu Volgogrdskoy gosudarstvennogo sotsialno-pedogagicheskogo universiteta [Psychology of education in the XXI century: theory and practice. Materials of the International scientific-practical conference. Volgograd, September 14-16, 2011: the 80th anniversary of the Volgograd State Socio-Pedagogical University] (pp. 284-286). Volgograd: Peremena. [In Russian]*

Salovey, P., Mayer, J. D. (1990). EMOTIONAL INTELLIGENCE. *Imagination, Cognition, and Personality, 9.*

Schulte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). DEVELOPMENT AND VALIDATION OF A MEASURE OF EMOTIONAL INTELLIGENCE. *Personality and Individual Differences, 25(2), 167-177.*

The article submitted and sent to review: 22/10/2022
Accepted for publication: 09/03/2023

PSYCHOLOGICAL STUDY OF TEACHERS` PERCEPTION OF CREATIVITY IMPORTANCE

DOI: 10.24234/miopap.v10i1.453

Astghik GEVORGYAN, *PhD student, General psychology, theory and history of psychology, personality psychology, Public Administration Academy of Republic of Armenia*
E-mail:astgh.gevorgyan@gmail.com

ABSTRACT

The purpose of the article is to study the perception of creativity of teachers and experts in the field of education and to present the importance of creativity among the professional psychological qualities of a teacher. To achieve this goal, we conducted a theoretical analysis of creativity and teachers' creativity and did a questionnaire study of experts in the field of education and teachers. Based on the research data we concluded that experts and teachers value creativity more than its components: curiosity, versatility, originality of thinking and ingenuity. This proves that there is no clear understanding of creativity among teachers and experts. They highlight creativity. However, they have no perception of the exact content of it. It turned out also that the importance of creativity and its components as professional qualities for teachers rises along with teachers' work experience.

Keywords: *Creativity, perception of creativity, teaching creatively, creativity for teaching, self-efficacy, teacher`s professional qualities.*

INTRODUCTION

In the background of rapid changes taking place in the world, the education system seems set and stable. Changes here, if they even happen, are very slow and do not coincide with the cognitive requirements and personal development of students. Systemic changes require time, which students do not have. Therefore, teacher remains the one who implements current and continuous change. The teacher becomes the initiator of the change of the external environment with his personal qualities. For such a change, it is important for the teacher to have a creative approach, creative thinking and creativity as a personal quality with its components: curiosity, imagination, not avoiding complexity and the ability to take risks.

It should be noted that today Armenian legislation gives an important place to the manifestation of creativity and creative thinking of teachers and students. With the amendments of the decision of the Government of the Republic of Armenia in 2021, creative thinking was included as an important standard and competence for students in general

education (RA Government Decision No. 439-N). Thus, as one of the final results of primary education, the graduate should be able to demonstrate logical and creative thinking and be able to reflect and respond to his own and others' work. A graduate of the general education program should be able to find creative approaches to solving problems and compare them, recognize different creative genres and styles, creatively express his ideas and emotions through art. A graduate of the secondary program should acquire the ability to critically and comprehensively study and analyse realities, as well as to apply creative and innovative approaches. Critical and creative thinking is emphasized in almost all subjects of the general education program, from the Armenian language to science and arts and crafts.

Moreover, in the RA Law on Public Education, creative thinking and creative results are emphasized at different levels (RA Law on General Education). First of all, the Government undertakes to promote creativity, analytical and critical thinking of students in educational institutions. Then the director of a school undertakes to encourage and promote the creative initiatives of the employees. In their turn, teachers undertake to carry out creative results and research activities on the one hand and to develop independence, initiative and creativity in students on the other hand.

Creativity researchers argue that even if a person is not creative, it is possible to develop creative thinking and the personal qualities necessary for creativity.

The scientific novelty of the research lies in the analysis of the concepts of creativity for teaching and teaching creatively, as well as in the results of an experimental study of teachers' and education experts' perceptions of creativity. Despite the interest in creativity, perceptions about its content and meaning are distorted and limited to its relevance more often. The research identifies the perception of creativity and its characteristics among teachers and education experts, as well as how teachers' work experience affects their emphasis on creativity.

The purpose of the article is to study the perception of creativity of teachers and experts in the field of education and to present the importance of creativity among the professional psychological qualities of a teacher. To achieve this goal, we conducted a theoretical analysis of creativity and teachers' creativity and did a questionnaire study of the experts in the field of education and teachers.

LITERATURE REVIEW

Creativity is the ability to create a result that is novel and at the same time corresponds to the content. Such a result can be, for example, a thought, a solution to a problem, music product, a story or an advertisement. The new result should be original and unexpected. It should be different from what was created before. It should also be adaptive and meet the

different constraints of the situation. The characteristics of creativity also are technical quality of the work and the use of the creative result by society (Lubart, Mushiru, Torjman, & Zenasni, 2009, pp. 10-11).

Boden finds it controversial that the product created as a result of coincidence is creative, as she assumed that creativity is the result of complex, purposeful work (Lubart, Mushiru, Torjman, & Zenasni, 2009, p. 11). Meanwhile, De Bono mentions “chance, accident or by mistake” as the source of creativity (De Bono, 1992, p. 47).

An important aspect of creativity is the creative result. John Bayer defines the creativity as the ability to create a new, original and unexpected, high-quality and relevant, useful and problem-solving product (Sternberg, Grigorenko, & Singer, 2004, p. 226).

S. Poghosyan notes that creativity is a systemic quality, the presence of which enables a person to perceive new things, see alternatives, free the mind from "prison", propose new and unique solutions to problems, take risks, make independent and diverse decisions and formulate the conditions of the environment (Poghosyan, 2022, p. 212).

As for the teacher's creativity, the result can be the creative events organized with the students during the educational process. The result can also be the student with his/her creative thinking and personal qualities. According to Kuzmina, the teacher's creativity manifests when making decisions in unexpected situations, building the educational process according to the peculiarities of children (Puzep, 2017, p. 116).

In the scientific literature, there are two perspectives on creativity in the teachers` activities: creative teaching and teaching for creativity. In the first case, the centre is the creative personal and professional abilities of the teacher, and in the second case, the centre is the development of the student's creativity by the teacher. According to Cremin, teaching creatively “involves teachers in making learning more interesting and effective and using imaginative approaches in the classroom” (Lapeniene & Dumciene, 2014, p. 279). Teaching creatively is primarily related to the teacher's personal characteristics, personal level of creativity, and its manifestations in daily activities. Teaching for creativity “is seen to involve teachers in identifying children’s creative strengths and fostering their creativity” (Lapeniene & Dumciene, 2014, p. 279). By developing motivating materials and approaches to teaching and by using creative teaching, the teacher is able to manage the learning process and the development of innovative thinking. Teaching for creativity, on the other hand, focuses on encouraging learners to believe in their own creativity at the level of identity and ability (Daniels, Gregerson, Kaufman, & Snyder, 2013, p. 16).

These two perspectives are closely related (Jeffrey & Craft, 2004). Because teaching for creativity is possible only if the teacher has the desire to teach in a creative way, to promote

creativity. After all, the teacher is a model for the students, whose example the students follow (Craft, 2005). The teacher's personal creativity is the main prerequisite for creative teaching. And in all those cases when the teacher's personal creativity is at a low level, there is a need to take steps to develop it. Therefore, taking into account our research goals, we will focus especially on creative teaching, where the teacher and his creativity are at the centre of the study.

The studies of Jeffrey and Craft show that teaching creatively includes these components:

- “using imaginative approaches;
- making learning more interesting;
- being effective” (Craft, 2005, p. 42).

Referring to the efficiency component, Rindak defines creativity in the teacher's activity as the most important and necessary characteristic and factor for the teacher's professional development and effectiveness. According to him, it is the teacher's ability to realize and overcome obstacles to professional development, to find constructive ways out of professional crises, thus achieve higher levels of professionalism (Ryndak, 2014, p. 4).

Ozkal notes that there is a positive relationships between teachers' creativity fostering behaviours and their self-efficacy beliefs (Cayirdag, 2017, p. 1962). The results of another study showed that there are positive relationships between teachers' self-efficacy on the one hand and their behaviour patterns, psychological well-being, including personal achievement, job satisfaction and commitment on the other hand (Daniels, Gregerson, Kaufman, & Snyder 2013).

According to Bandura, self-efficacy is the conviction that one can successfully execute the behaviour required to produce outcomes (Bandura, 1997, p. 193). Teacher efficacy has been defined as "the extent to which the teacher believes he or she has the capacity to affect student performance" or as "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Tschannen-Moran, Hoy & Hoy, 1998, p. 202). According to Tschannen-Moran and Woolfolk Hoy, teachers with high self-efficacy are more open to new ideas and teaching methods, demonstrate high-level planning and organizing skills, are more constructive in dealing with students' mistakes, and are more persistent in dealing with complications (Lazarides, & Warner, 2020).

Caprara defines the self-efficacy of the teacher as a “teacher’s belief in his/her ability to successfully cope with tasks, obligations and challenges related to his/her professional role”. Costa and McCrae mention that teachers with higher levels of openness to experience and conscientiousness have a stronger sense of efficacy (Barni, Danioni & Benevene, 2019, p. 2).

It is interesting to note that the most of the personal qualities connected to the teacher`s self-efficacy coincide with the main personal qualities of creativity. They are particularly the openness for new experience, constructive approach to the students` mistakes, not being discouraged by difficulties and the persistence to overcome them.

These qualities are emphasized by the authors of the multivariate approach to creativity, represented by T. Lubart. According to this approach, the personal characteristics that contribute to creativity are:

- Perseverance. There are many obstacles in creative work, which are connected to problems and environmental conditions. It is possible to have a creative result when one can overcome those obstacles persistently.
- Willingness to take risks. The creative idea is far from the stereotypes. In case of success, it can bring public recognition or financial reward. However, there is always a risk of failure and loss.
- Willingness to tolerate ambiguity. Creative people are comfortable with uncertain ideas, stimuli, and situations and even yearn for them. Meanwhile, people who are not capable of this react to uncertainty with stress, act in a hurry and abruptly.
- Openness to new experiences. Creative people are open to the unknown and new things. They are interested in the inside and the outside world. Appearing in a new situation, they do not panic.
- Individuality, opposition to conformism.
- Psychoticism, is prone to create far and not ordinary associations (Lubart, Mushiru, Torjman, & Zenasni, 2009).

As a result of the study of creative teachers Horng mentions those personal characteristics, which influence on the teaching creatively: self-confidence, persistence, desire to learn, humour, openness to the experience, imagination, emotional sensitivity, energy and aspirations, questioning norms, being non-conformist, attracted to complexity, aesthetic orientation, flexible thinking and risk taking (Ayob, Hussain, & Majid, 2013).

Of course, teacher`s creativity depends not only just on the teacher's profile, but also on the teaching environment, on the profiles of classroom, school and director, which are the external conditions of creativity. Rogers, the representative of humanistic approach, mentions those internal and external conditions, which are necessary for the creative work.

Internal conditions are:

- Openness for the experience. A creative environment should motivate, break down barriers and traditional limitations.
- Internal locus of evaluation. A creative environment allows a person to evaluate their

own new ideas or products without outside criticism.

- The ability to make unusual combinations. Ability to play with elements and concepts. There are no strict rules, which helps to explore the problem in a playful way.

External conditions are:

- Psychological security and protection, absence of external evaluation, recognition of human value,
- Psychological freedom of self-expression (Il'in, 2009, p. 17).

Thus, the creative environment has an important influence on the formation and expression of creativity. A person shows his creativity in an environment that is open and accepts his/her thoughts, does not criticize and is not guided by stereotypes. The environment that values people and their ideas is safe for expression and creativity.

At the same time, it should be remembered that creativity contains an adaptive component, which means that the creative result must "correspond to the various limitations of the given situation" (Lubart, Mushiru, Torjman, & Zenasni, 2009, p. 11).

Taking into account the importance of creativity in the efficacy of a teacher, there are discussions on the question of which is preferable: to develop the creativity of teachers or to highlight their creativity level in the selection process.

Renzulli and De Wet state that the selection of teachers may be more important than their training because some characteristics such as openness to new experiences, flexibility, non-authoritarian personality, optimism and enthusiasm are “starting material” and difficult to develop by training. As we can notice, these are more personal qualities than external factors (Cayirdag, 2017, p. 1969-1970).

T. Borodina and colleagues also emphasize the inclusion of the formation of creative thinking during professional training as a prerequisite for the formation of a teacher's creative thinking. Their research among future teachers showed that students generally have an average level of creativity. Only 33 percent of students had a high level of creativity. It is also important to note here that along with professional training, the level of creativity decreases. It was 70 percent in the first year of professional training, and 30-33 percent in the last two years. They came to the conclusion that the teacher training program at the university has a negative effect on the teacher's creativity. The reasons, according to the researchers, are repetitive and standardized tasks that require routine solutions, and the stereotypical nature of the learning process (Borodina, Sibgatullina & Gizatullina, 2019).

Considering this fact, we can conclude that as long as university programs do not develop the creativity of future teachers, it is important to emphasize the development of creativity of teachers by trainings.

To develop the creativity of students and teachers, Davis emphasizes on forming a creative attitude, Sternberg highlights the formation of a creativity habit, and Maslow and Suchodolski state the importance of a creative way of life in general. A strong positive attitude towards creativity or a creative attitude can be expressed as a set of knowledge and beliefs about creativity, about the positive impact of creativity and about positive behavioural responses to creativity (Daniels, Gregerson, Kaufman, & Snyder, 2013, p. 16). This means that if a teacher or student has a negative opinion about creativity, he/she thinks that creativity is not for everyone. It can affect his behaviour towards creativity, and he/she will avoid creative activities.

Szmidt suggests creative techniques for teaching, which belong to three general categories:

- inquisitive thinking (generating questions, active and close observation, speculations);
- combinatorial thinking (associations, analogies, metaphors);
- transformative thinking (product/idea improvement, transforming one object into another) (Daniels, Gregerson, Kaufman, & Snyder, 2013, p. 27).

Based on the above, a necessary prerequisite for the manifestation of teachers' creativity is the awareness of the need to know and apply creative techniques and ideas for teaching and to have a positive attitude towards creativity.

RESEARCH METHODOLOGY

We consider it important to understand how education experts and teachers perceive creativity, which characteristics they value most in their activities. For this purpose, we conducted research involving education experts and teachers. We chose school principals, vice principals, candidates of pedagogical sciences as experts (n=10). A questionnaire was prepared, where the psychological qualities necessary for the teacher's activity were presented. According to the questionnaire's instructions, it was necessary to evaluate the mentioned qualities according to their importance with a 1-to-10-point system, where 1 point is the least important quality and 10 points is the most important one. The following qualities were included: responsibility, emotional stability, patience, curiosity, the desire for self-awareness and self-development, originality of thinking, well-rounded, ingenuity, creativity, purposefulness, thinking flexibility, impartiality, ability to empathise, tact. The list of qualities was compiled considering the set of a teacher's professional psychological characteristics (Romanova, 2003, p. 384), as well as the qualities necessary for a creative teacher. The list of creative qualities includes curiosity, originality and flexibility of thinking, versatility, ingenuity and creativity.

RESULTS

According to the experts, the primary qualities for teachers are: responsibility, emotional stability, patience, impartiality, and tact. These qualities were evaluated with 10 points.

Purposefulness (9,3), as well as curiosity (8,7), originality, versatility, and ingenuity (9) were evaluated as the least important. Among other qualities of creativity, the flexibility of thinking was evaluated 9,3. In general, creativity as a necessary psychological quality for a teacher is evaluated by experts as 9,4. It turns out that the qualities necessary for creative thinking were evaluated lower than creativity. Thus, we can conclude that the perception of creativity does not correspond to its real content. The same problem exists among teachers (see Table 1). 50 teachers participated in the research, of which the research data of 41 teachers are valid.

Table 1

Creativity and its characteristics	Average mark (n=41)
Curiosity	8.8
Versatility	8.8
Originality of thinking	8.9
Ingenuity	8.9
Creativity	9.1
Flexibility of thinking	9.2

As we can see in Table 1, teachers value creativity more than its components: curiosity, versatility, originality of thinking and ingenuity. This proves that there is no clear understanding of creativity among teachers. If so, we can assume that teachers do not purposefully use creative methods during teaching, that is, theoretical approaches to teaching creatively are also not purposefully applied in practice. Here, a factor hindering the manifestation of creativity can be simply not being familiar with the content of creativity. Referring to the most important qualities necessary for teacher's activities, the teachers mentioned responsibility (9.7), impartiality (9.4), the desire for self-awareness and self-development (9.3).

The study and analyses of the research data yielded another interesting result. The importance of creativity and its components appear to be rising alongside teachers' work experience. Thus, teachers with 30 and more years of working experience evaluated creativity and its components as necessary and highly rated qualities. Teachers with 10-20 years of work experience evaluated them the lowest (see Figure 1).

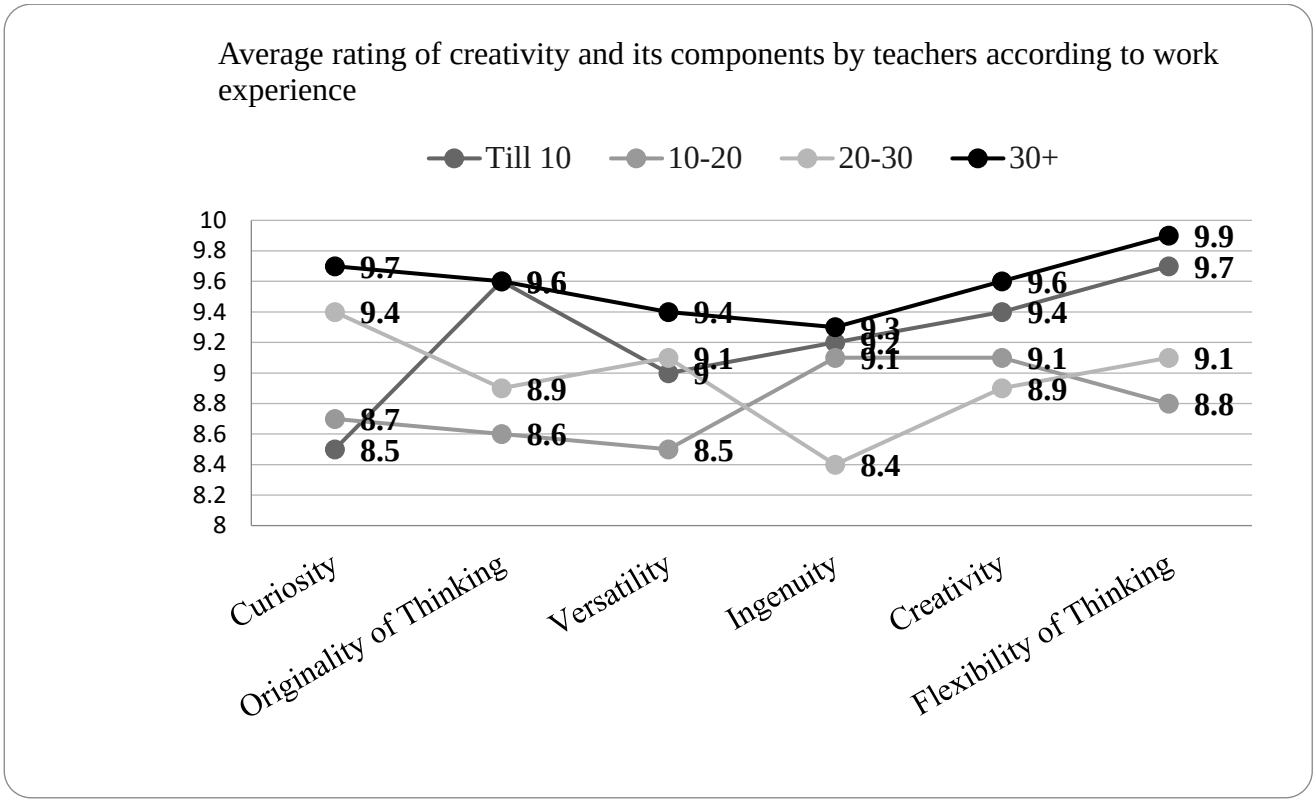


Figure 1

CONCLUSION

Summarizing the theoretical approaches to creativity and the research on teachers' perceptions of creativity, we can come to the conclusion that although creativity is an important general educational standard in the legislative level, its application in practice faces a number of obstacles.

Firstly, the change inside the system seems slow. Secondly, creativity is not perceived in its true content among teachers and experts in the field of education. According to the results of experimental data analyses, teachers and education experts value creativity in teachers, but not as the individual characteristics of creativity, which practically makes it difficult to apply creative teaching. After all, in the case of teaching creatively, the creative personal qualities of teachers and the creative approach in their professional work are the most important aspects. This is the most important factor that enables to realise the next aspect of teaching – teaching *for* creativity. In this case, the focus is the teacher's mission to develop students' creativity.

According to Davies, Sternberg and Maslow, in order to develop the creativity of teachers, they need to develop a creative attitude, habit and lifestyle, because it is the teacher who becomes an example for the manifestation and development of the student's creativity by her/his creative activity and positive attitude towards creativity. A creative, imagination-based

approach that ensures students' involvement not only contributes to the development of students' creativity, but also to the increase of teachers' self-efficacy.

All this gives us the basis to continue our research in the direction of the study of teachers' creativity in order to understand what can promote or hinder the manifestation of teachers' creativity, to ensure the awareness of teachers about the real content of creativity and to train them by introducing creative teaching methods.

REFERENCE LIST

Ayob, A., Hussain, A., & Majid, R. A., (2013). A REVIEW OF RESEARCH ON CREATIVE TEACHERS IN HIGHER EDUCATION. *International Education Studies,* Vol. 6, No. 6, 11-12. doi:10.5539/ies.v6n6p8

Bandura, A. (1997). SELF-EFFICACY: TOWARD A UNIFYING THEORY OF BEHAVIOURAL CHANGE. *Psychological Review,* 84(2), 191–215. doi.org/10.1037/0033-295X.84.2

Barni, D., Danioni, F., & Benevene, P. (2019). TEACHERS' SELF-EFFICACY: THE ROLE OF PERSONAL VALUES AND MOTIVATIONS FOR TEACHING. *Frontiers in Psychology,* 10, Article No. 1645. doi.org/10.3389/fpsyg.2019.01645

Borodina, T., Sibgatullina, A., & Gizatullina, A. (2019). DEVELOPING CREATIVE THINKING IN FUTURE TEACHERS AS A TOPICAL ISSUE OF HIGHER EDUCATION*. Journal of Social Studies Education Research,* 10 (4), 226-245. Retrieved 17.03.2023, from https://files.eric.ed.gov/fulltext/EJ1241711.pdf

Cayirdag, N. (2017). CREATIVITY FOSTERING TEACHING: IMPACT OF CREATIVE SELF-EFFICACY AND TEACHER EFFICACY. *Educational Sciences: Theory & Practice,* Vol. 17(6), 1959-1975. doi: 10.12738/estp.2017.6.0437

Craft, A. (2005). CREATIVITY IN SCHOOL: TENSIONS AND DILEMMAS. *Taylor & Francis e-Library.*

Daniels, S., Gregerson, M. B., Kaufman, J. C., & Snyder H. T. (2013). TEACHING CREATIVELY AND TEACHING CREATIVITY. *New York: Springer Verlag.*

De Bono, E. (1992). SERIOUS CREATIVITY: USING THE POWER OF LATERAL THINKING TO CREATE NEW IDEAS. *NY: Harper Business.*

Il'in, E. P. (2009). *PSIHOLOGIJA TVORCHESTVA, KREATIVNOSTI, ODARENNOSTI* (PSYCHOLOGY OF CREATIVITY, GIFTEDNESS). *SPb: Piter.*

Jeffrey, B., & Craft, A. (2004). TEACHING CREATIVELY AND TEACHING FOR CREATIVITY: DISTINCTIONS AND RELATIONSHIPS. *Educational Studies,* 30:1, 77-87. doi: 10.1080/0305569032000159750

Lapeniene, D., & Dumciene A. (2014). TEACHERS' CREATIVITY: DIFFERENT APPROACHES AND SIMILAR RESULTS. *Procedia, Social and Behavioural Sciences* 116, 279 – 284. doi: 10.1016/j.sbspro.2014.01.208

Lazarides, R., & Warner, L. M. (2020). TEACHER SELF-EFFICACY. *Oxford Research Encyclopedia of Education.* doi: 10.1093/acrefore/9780190264093.013.890

Lubart, T., Mushiru, K., Torjman, C., & Zenasni, F. (2009). PSIHOLOGIJA KREATIVNOSTI (PSYCHOLOGY OF CREATIVITY IN RUSSIAN). *Moscow: Cogito-Centre.*

Poghosyan, S. (2022). ANDZI STEGHTSARARUTYAN BATSAHAYTMAN EV DRSEVORMAN ARANDZNAHATKUTYUNNERY (FEATURES OF DISCOVERY AND MANIFESTATION OF PERSONAL CREATIVITY). *Yerevan: Author's Edition.*

Puzep, L. G., (2017). KREATIVNOST' KAK ODNA IZ HARAKTERISTIK LICHNOSTI BUDUSHHEGO PEDAGOGA (CREATIVITY AS ONE OF THE PERSONALITY CHARACTERISTICS OF THE FUTURE TEACHER). *Omsk Scientific Bulletin, N4(58), 115-117. Retrieved 17.03.2023, from https://cyberleninka.ru/article/n/kreativnost-kak-odna-iz-harakteristik-lichnosti-buduschego-pedagoga/viewer*

RA Government Decision No. 439-N, PROCEDURE FOR FORMING AND APPROVING THE STATE STANDARD OF GENERAL EDUCATION, 08.04.2010. Retrieved 17.03.2023, from https://www.arlis.am/documentview.aspx?docid=149792

RA Law on General Education. Retrieved May 26, 2016, from https://www.arlis.am/documentview.aspx?docid=173821

Romanova, E. (2003). 99 POPULJARNYH PROFESSIJ. PSIHOLOGICHESKIJ ANALIZ I PROFESSIOGRAMMY (99 POPULAR PROFESSIONS. PSYCHOLOGICAL ANALYSIS AND PROFESSIOGRAMS). *SPb: Piter.*

Ryndak, V. G. (2014). FORMIROVANIE KREATIVNOSTI BUDUSHHEGO UCHITELJA PRI IZUCHENII PEDAGOGICHESKIH DISCIPLINE (FORMATION OF CREATIVITY OF THE FUTURE TEACHER IN THE STUDY OF PEDAGOGICAL DISCIPLINES). *Academic Bulletin of the Institute of pedagogical and adult education RAE: Man and Education N2 (39), 4-9. Retrieved 17.03.2023, from https://cyberleninka.ru/article/n/formirovanie-kreativnosti-buduschego-uchitelya-pri-izuchenii-pedagogicheskih-distsiplin/viewer*

Sternberg, R. J., Grigorenko, E. L., & Singer, J. L. (2004). CREATIVITY: FROM POTENTIAL TO REALIZATION. *Washington DC: American Psychological Association.*

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). TEACHER EFFICACY: ITS MEANING AND MEASURE. *Review of Educational Research,* 68(2), 202–248. doi.org/10.2307/1170754

The article submitted and sent to review: 18/11/2022
Accepted for publication: 10/03/2023

SOCIAL-PSYCHOLOGICAL ADAPTATION OF SYRIAN-ARMENIAN CHILDREN DIFFICULTIES IN PRIMARY SCHOOL EDUCATION PROCESS

DOI: 10.24234/miopap.v10i1.457

Lilit LACHINYAN, *PhD in Psychology, Khachatur Abovyan Armenian State Pedagogical University, Chair of Psychology named after academician M. Mazmanyan.*
E-mail: lachinyanlilit54@aspu.am

Ani SARGSYAN, *Master of Pedagogical Psychology. Khachatur Abovyan Armenian State Pedagogical University.*
E-mail: ani_sargsyan_1995@inbox.ru

ABSTRACT

This article analyses and reveals the socio-psychological difficulties of adaptation of Syrian-Armenian children during elementary school educational activities. The effectiveness of social-psychological adaptation in the educational process is conditioned not only by the correct choice and application of educational programs, methods, means, but also by the pedagogues who implement the whole systematic educational process. The problem of the adaptation of Syrian-Armenian children in the educational process of primary classes can be called one of the most important problems of the school. It needs extensive research in terms of pedagogy and psychology and practical work in this direction. In order to study and identify the difficulties of adaptation in the educational process of Syrian-Armenian children, we have carried out research and corrective works from previously developed psychological tasks. The positive results of the research can be used to work with Syrian-Armenian children in educational institutions, reducing their social and psychological adjustment problems in the educational process.

Keywords: *social-psychological adaptation of Syrian-Armenian children, educational activities, social-psychological difficulties of adaptation, anxiety, primary school age, adaptation.*

INTRODUCTION

In the modern world, the process of adaptation of migrants has a complicated structure. It requires taking into account a number of factors such as a regional component, a social status, a family migration path, learners' age group, adaptability, school-cultural environment, the experience of intercultural interaction. Despite the increasing public and public efforts to

address the problem of migrant adaptation, the issue remains topical as it relates to national security and the country's stability. (Lavrinec E.A. 2017).

The mass influx of Syrian-Armenians faced to new challenges to Armenia, due to the fact that there were no appropriate policies to address the problems. For the study of the latter, we researched about the personality-age peculiarities of the junior schoolchildren in the works of I.Yu. Kulagina (Kulagina I.Yu. 2001), L.I. Bozhovich (Bozhovich L.I. 2008), A.I. Lipkina (Lipkina A.L. 1976), A.L. Wenger (Wenger A.L. 1994), A.Z. Zak (Zak A.Z. 1984). On the issue of school readiness, there has been done analysis of professional literature of the works of L.A. Wenger (Wenger A.L. 1985), L.I. Bozhovich (Bozhovich L.I. 1999), L.U. Vygotsky (Vigotsky L.S. 2005). Besides, we have researched the four types of social-psychological adaptation of A.K. Bolotova (Bolotova A.K. 1994), the problem social-psychological adaptation according to A. Maslow (Maslow A. 1997), Z. Freud, A. Adler (Sablin V.S. 2004).

Now let's look through some of the characteristics of junior high school students of I. You. Kulagina (Kulagina I.Y. 2001), such as their high emotional arousal. The teacher's touching words, bright colours, watching a movie, reading a fairy tale completely captivate children’s attention. In contrast, the long and tedious emotionless verbal narration, the instructional sermons, tire the distraction of the primary school student. One of the characteristics of primary school students is imitation. Children of this age love to repeat and reproduce the movements and behaviours of adults. The first object of their imitation is the teacher, who becomes the highest authority for them. Unfortunately, children also imitate negative phenomena, so adults should avoid negative behaviours.

According to L.I. Bozhovich (Bozhovich L.I., 2008), junior high school student development is connected to school progress, both good and bad grades. In addition to the social motives, the main motive in the learning process is the motive of scoring highly. High grades are another source of encouragement for the young pupil, the basis of his emotional well-being is the subject of pride.

DISCUSSION

Thus, if a child in the educational process begins to rejoice in the fact that he has learned something, so he has developed adequate motivation for the structure of educational activity.

According to M.M. Bezrukikh (Bezrukikh M.M. 2000), when a child learns successfully, he is praised by both teachers and parents, and he is as an example for other children. Moreover, in the classroom where the teacher's opinion is not only decisive but the only authoritative opinion, high or low grades provide the appropriate status.

At the same time, poorly scoring students develop compensatory motive. These are

secondary motives for educational activities, which allow to establish oneself in other spheres, such as sports, music, painting, etc. (Bugaeva N.N. 2009). According to A.I. Lipkina (Lipkina I.A.1976), when the need of self-affirmation is satisfied in a certain field of activity, low progress does not become a source of anxiety for the student. The problem of progress, the evaluation of educational performance is central in primary school. The development of educational motivation depends on the assessment, and it is on this basis that in some cases difficult feelings and school maladaptation are followed. L.A. Wenger mentions (Wenger L.A. 1994) that school grades also have a direct effect on self-esteem. The children, focusing on the grade, consider themselves as the best among their classmates as excellent, "two recipients", "average", etc., attributing appropriate qualities to the representatives of each group. At the beginning of education, the assessment of progress, in fact, is the assessment of the person, determining the social status of the child. High self-esteem is established in excellent students. Failures of low-achieving and low grades of the students reduce self-confidence (Obukhova L.F. 1996, p. 76). But even when the child compensates for his low academic progress with success in other fields, the feeling of inferiority, the acceptance of the status of "falling behind" faces to negative consequences.

The complete development of a person supposes the formation of a sense of competence, which E. Erickson (Erickson J.G. 2000) defines the main innovation of this stage. Educational activity is the leading activity for a primary school student and if the child does not consider himself competent in it, so his personal development is distorted.

Meanwhile, new relationships are established between the children during the joint educational activity. They begin to pay close attention to the behaviour of a child sitting on the same bench next to them, interacting with classmates who sympathize with them or who they have the same interests with (Zak A.Z. 1984).

School readiness for a successful start to school determines a more conducive environment for children to develop. (Kulagina I.Yu. 2001) (Lavrinec E.A. 2017). But there are other development options that require corrective work.

When enrolled in school, it is sometimes found that a certain component of development is underdeveloped. According to pedagogues, in the process of teaching a child it is easier to develop intellectually than personal features. According to L.I. Bozhovich (L.I. Bozhovich 1999), old interests and motives lose their motivation, afterwards they are replaced by new ones. From now on, what is connected with the educational activity becomes more valuable than what is connected with the game. The junior high school student is interested in playing, he will probably play for a long time, but the game ceases to be the main content of his life. The important thing is how the child feels the system of relationships in which he is included,

whether it is a stable or strongly changing relationship. The perception of one's own place in the system of relations changes, that is, the social situation of development changes, the child appears on the verge of a new age stage (Vygotsky L.S. 2005).

Thus, in this period, blaming the child for failures, insulting, rudeness will create a complex of "not being smart" in him - self-confidence, which can accompany him throughout his life. And, of course, we shouldn't forget about the problem of social-psychological adaptation of primary school students, which also has its impact on the educational activities of primary school students. According to A. Maslow, psychological adaptation is the optimal interaction between a person and his environment. The goal of such adaptation is to achieve positive mental health (Maslow A. 1997).

In F. Freud's and A. Adler's work adaptation is presented from the point of view of the analysis of a person's defence mechanisms. Adaptation includes "conflict-related situations" and "ego-free" conflict processes (Sablin W.S. 2004). In other words, a well-adjusted person lives without a functioning disorder, with a balanced state of mind. The person is changed in the process of adaptation, the environment also changes.

Thus, socio-psychological adaptation is built on the interaction of a person and group, during which the person acts normally with the internal-external environment without serious long-term conflicts, i.e., fulfils his role, satisfies his social needs, self-affirms.

It is necessary to mention about the absence of unclear time limitation for the process of social-psychological adjustment. In this case, the ability to adaptation can be judged by its flow rate (Shabanova M.A. 1998).

The problem of adaptation of Syrian-Armenian children in the primary school education process can be considered as one of the most important problems of the school. On the way of the adaptation to the new educational reality, Syrian-Armenian children have to overcome a number of obstacles due to the difference of worldview, new social environment, communication with peers, language problem (from Armenian to Eastern Armenian), as well as teaching.

The presence of traumatic factors of migration in the social environment does not allow children to develop sustainably and safely.

The main condition for the effectiveness of the process of adaptation of the children in migrant families is the maximum possible satisfaction of their real needs. In this case, facing the needs of material well-being, comfortable living conditions, acquisition of knowledge, attitude, belonging to a certain group, social-psychological security, and confidence in the future.

The novelty of the work lies in the fact that the socio-psychological difficulties of Syrian-

Armenian children in Armenia are not studied enough in elementary education, in particular. Also, there are no scientific researches carried out yet. In the process of adapting to the new educational reality, Syrian-Armenian children have to overcome a number of obstacles which are caused by various concepts: the perception of the world, a new social environment, connecting with peers, language differences (from Western Armenian to Eastern Armenian, Russian), and coursework.

Among Syrian-Armenians children, especially school-age children, have great difficulty in adapting to a new environment, as the latter have two challenges: overcoming not only the new living and environmental conditions, but also the adaptation of the new educational environment to school curricula. In this case to the differences between the new cultural environment and the existing curricula the gap between the new language and the teaching of Russian is added. Unfortunately, we do not have secondary schools with the specialists-pedagogues with skills, experience of working with Syrian-Armenian children, which in turn makes the problem more difficult.

RESERCH ORGANIZATION

Adaptation work with Syrian-Armenian children should be consisted of four main components.

1. Special educational programs aimed at the learning of Eastern Armenian by Syrian-Armenian children: This is a really big problem, taking into account the difference between the grammatical-syntactic categories of Western Armenians and Eastern Armenians and the peculiarities of pronunciation.
2. The problem of compulsory teaching of Russian as a second foreign language: In this case schools have a lot to do, particularly in terms of making changes in the content of curricula specifically for Syrian-Armenian children.
3. Communications: The pedagogical-psychological staff of the schools should carry out serious work to improve the communication between the Syrian-Armenian children and their classmates.
4. Cultural diversity: The Syrian-Armenian child should be properly introduced to the cultural differences between the Armenians of the Diaspora living in Armenia (Bolotova A.K. 1994).

Thus, the process of social-psychological adaptation of children has been and still remains in the centre of attention of educators and psychologists. After all, the level of their educational process depends on the successful process of adaptation. The effectiveness of social-psychological adaptation in the educational process is conditioned not only by the right

choice, development, application of educational programs, methods, means, but also by the pedagogues who are involved in the whole systematic educational process.

Adaptation of children in general is a very complex long process that takes place in three directions (Morris C. 1967).

- Psychological adaptation - the child's psychological adaptation and readiness is manifested in the fact that he enjoys going to school, doing homework, and telling about school. The opposite attitude is evidenced by the child not adapting to school.
- Physical adaptation - the adaptation process to school is accompanied by the stress in the child's body. Medical research shows that children who lose weight abruptly have frequent headaches and low blood pressure and are in the process of physiological maladaptation.
- Social adaptation - this is an ongoing process of entering an individual's new social environment.

Thus, social adjustment is a condition for successful socialization of the child, which takes place in three main directions: activity, communication and awareness.

RESEARCH BASES AND METHODOLOGY

The purpose of our study is to identify the social-psychological difficulties of Syrian-Armenian children in the educational process of elementary grades. As a result of the change in the social environment of Syrian-Armenian primary school students, social-psychological difficulties of adaptation are revealed in the educational process, so far the identification of these difficulties and the implementation of corrective work will help to reduce their difficulties.

We have conducted the research with 80 Syrian-Armenian children aged 7-8, 40 girls and 40 boys.

In order to achieve our goal, we have used the following methods:

1. N. G. Luskanova "School Motivation Assessment" (https://psylist.net/praktikum/00173.htm)
2. B. Phillips "Diagnosis of school anxiety level " (http://www.miu.by/kaf_new/mpp/162.pdf)
3. "My attitude towards school subjects" table, formed by us.
4. We have also implemented a training program formed by us.

The results of N.G. Luskanovait s assessment of school motivation show that there is no high level of motivation - 0%, about 5% has a good level of school motivation, about 15% has a positive attitude towards school, about 55% has a low level of school motivation, and about 25% has a negative attitude towards school. According to N.G. Luskanova's method, we have particularly singled out the questions of classmates about the relationship and attitude towards

Syrian-Armenian children, as the child's relationship is an integral part of his adaptation in the team. According to our data, Syrian-Armenian children have a negative attitude towards their classmates. To the question "Do you have many friends in the classroom", 60% have answered that they do not have, 40% – few, and many friends, no one has – 0%.

In other words, most of the respondents do not have friends in the classroom, which in turn makes it difficult for them to adapt to both at school and in the educational process.

The next question, which is related to the previous question, is the following. "Do you like your classmates?" Overall, 10% of participants like their classmates, 60% - not so much, and 30% do not like their classmates. It was found out from the above results that Syrian-Armenian children have a problem communicating with their classmates. Most of the respondents do not have friends in the class, so they do not like him or his classmates, that is why they do not have friends in the class.

Due to the fact that their motivation to go to school is low, therefore their educational motivation is also low. After N.G. Luskanova's school motivation assessment methodology, we have conducted B. Phillips's "School Anxiety Level Diagnosis" methodology for identifying participants' level of anxiety at school.

Analysing the results of the methodology, we have found out that about 25% of the total participants the level of anxiety is normal, about 60% have high level of anxiety and about 15% have not very high level.

Thus, about 60% of the majority of participants have a high level of anxiety at school.

Now let's analyse B. Phillips method "Diagnosis of school anxiety" by syndromes. About 25% of participants have a normal level of anxiety at school. High levels are distinguishable in 45% of participants. There is a very high level of about 30%. About 25% of those surveyed have had normal levels of social stress. About 75% have a high level of social stress. No one has a very high level of social stress – 0%. A normal level of frustration for the need to succeed is about 30% of those surveyed but about 65%of them have a high level. At the same time a very high level is seen at about 5%of the participants. Fear of self-expression is in the framework of the norm of 15%. A high level of fear of self-expression is expressed about 30%of the participants. 55% of the students have a very high level of fear of self-expression. About 25% of participants are afraid of testing their knowledge. A high level of fear of knowledge testing is expressed about 5%. About 70% of them have a very high level of fear of knowledge testing.

Fear of not agreeing with the opinions of others is within the norm of 0%, a high level is about 35%and only about 65% have a very high level of fear of not responding to the opinions of others! Low physiological resistance to stress management is in the range of about 15%, a

high level is present in about 20%, and a very high level is present in 65% of those surveyed.

The syndrome of the problems and fears while communicating with teachers is normal in about 15%, the high level is present in 65%, and the very high level is present in 20%.

It should be mentioned that high, very high levels of anxiety, in turn, make it difficult for a child to socialize psychologically both at school and in the educational process. Such levels of anxiety cause children to fear self-expression, problems and fears with teachers, fear of knowledge testing, which in turn is a major obstacle to their socio-psychological adjustment. As our task is to study the peculiarities of the Syrian-Armenian children's adaptation to the educational process, and as the teaching process is based on the subjects, so it is possible to find out the attitude of the students towards those subjects. To solve this problem, we have formed an typical table, which allows us to understand their attitudes about this or that subject, what they like, what they find difficult. All will allow us to identify the difficulties of Syrian-Armenian children adapting to educational subjects. Let's look through the table below.

"My attitude towards school subjects"

Table 1.

N	Subjects	I like this subject very much	I am not interested in it	I don't like it; it is difficult for me
1.	The Armenian language	15%	10%	75%
2.	Mathematics	50%	20%	30%
3.	Russian	0%	15%	85%
4.	English	85%	15%	0%
5.	Science	10%	15%	75%
6.	Reading	10%	10%	80%
7.	Physical Education	80%	10%	10%
8.	Handicraft	75%	15%	10%
9.	Music	20%	10%	70%
10.	Chess	50%	30%	20%
11.	Art	85%	15%	0%

Looking at Table 1, we can distinguish between those who like Syrian-Armenian children and those who do not. The 75% of the students-participants do not like this subject, find it difficult, 15% of them like it, and 10% are indifferent towards it. In our opinion, the negative attitude towards the subject lies in the pronunciation, written, syntactic and grammatical differences between Western Armenian and Eastern Armenian. Basing on the science, self-reading and music are directly related to the mother tongue, and, therefore, it turns out that they are equally difficult for them too. The 75% of the respondents find the subject science

difficult, self-reading goes to 80%, music to 70% of those who dislike them.

Syrian schools, unlike Armenian schools, do not teach Russian. It is a completely new, unfamiliar language for them. The picture we get while investigating are the followings: 85% do not like it, it is difficult, and 15% are indifferent. The table shows the complete opposite picture related to the English language. The reason is that in Syria they have passed that language, they are familiar with the language. 85% of them like the subject, 15% are indifferent. What refers to the subjects that are related to other types of activities such as painting, games, physical culture, chess, technology - children have a positive attitude. Afterwards we can conclude that the subjects related to written-oral language are difficult for most children and the subjects that are related to other types of activities like games, physical education, painting, fine arts, etc., they have no difficulty, they like those subjects. Their difficulty is related to the native languages especially how to read, pronounce, write.

RESULTS

Thus, at the confirmation stage, studies show that Syrian-Armenian children have difficulty adjusting to the educational process. The following stage is a training program. The aim of the training program is to build collaborative capacity with classmates, to increase school learning motivation, and to develop mental processes. We have singled out the following issues for the implementation of the training program are the followings:

- To develop the necessary positive motivation in children;
- To develop self-analysis and self-reflection in schoolchildren;
- To give students the opportunity to build on their strengths եւ use it in the learning process;
- To give children the opportunity to recognize their weaknesses և try to correct them;
- To develop mental processes.

After the training program, we have conducted a checking study using the methods used in the preliminary study. The purpose of the checking study is to determine the effectiveness of the training program to reduce the difficulty of adapting Syrian-Armenian children to the educational process. Next, we will present the results of the certification and test stages through the comparative analysis.

The comparative analysis of the results of N.G. Luskanova's "School Motivation Assessment" methodology shows a significant change in the results. We did not have a high level of school motivation in the certification phase, but in the test phase it has become 5%. It was around 5% in the good school motivation phase and 15% in the test phase. 15% of respondents had a positive attitude towards the school, but then it has become 35%. About

55% had a low level of motivation in the certification phase, but 30% in the test phase. What is more 25% had a negative attitude towards the school, but we have managed to reduce their number to 15%. The results show that we have managed to improve the attitude of children towards school, raising their level of school motivation.

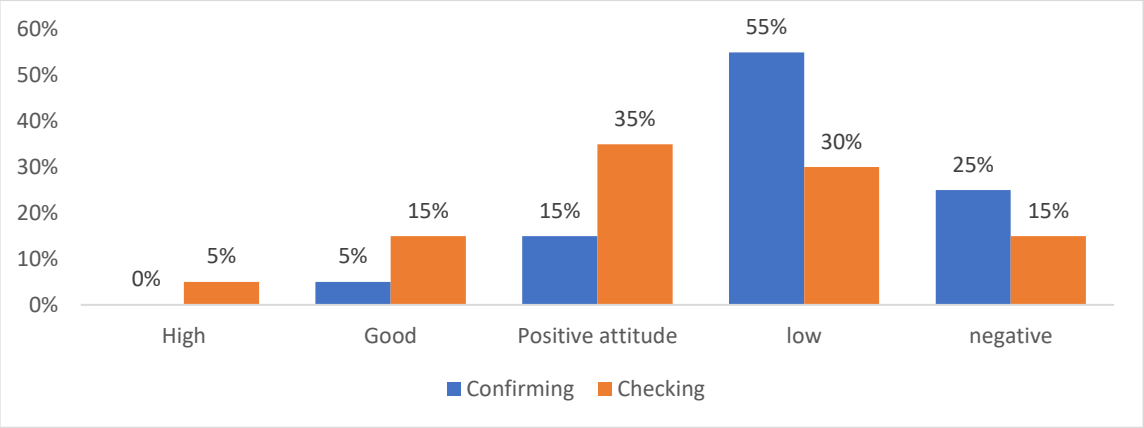


Figure 1. Comparative analysis of the results of N.G. Luskanova's "School Motivation Assessment" methodology

The results of a comparative analysis of B. Phillips's school-level anxiety diagnostic methodology show that there has been a positive change. In the assurance phase we had a very high level of anxiety of 15%, which in the test phase became 0%. About 60% were diagnosed with high levels of anxiety, which dropped to 45% during the testing stage. In the assurance stage, the normal anxiety level was around 25%, and in the control stage, the number has increased to 55%.

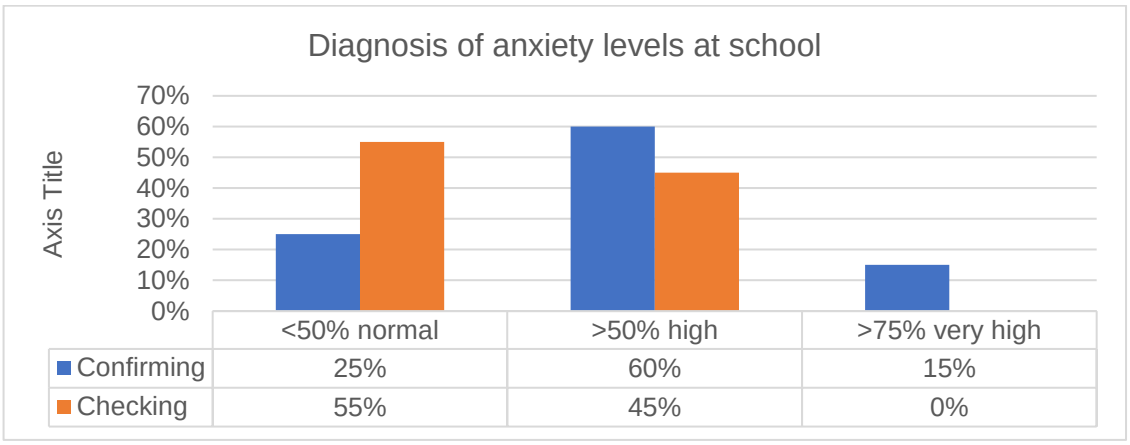


Figure 2.Comparative analysis of B. Phillips "Alarm level determination at school" method

Now let's present comparative analysis of the results of the B. Phillips method "Diagnosis of school anxiety" by syndromes. Thus, the diagram shows the results of the confirming stage

in blue and the test stage in green. The confirming stage was dominated by the high level, which was converted to the normal level in the test stage, becoming 60%. The prevalence of social stress syndrome was high at 75%, which we managed to reduce to 45%. The frustration of the need to succeed was at a high level in 65% of participants, but in the test stage, the prevailing level became normal about 50%. In the experimental experiment, the fear of self-expression was at a very high level of 55%, but in the test stage this figure changed to 30%, and the prevailing level of fear of self-expression became 50%. Fear of knowledge testing was very high at 70%, which was reduced to 35% during the testing phase. 65% of the participants were afraid of not responding to the surrounding opinions, which increased to 35% during the test stage. Fear of teachers had a high level of the syndrome in 65% of participants, and in the test stage it has become to in 35%.

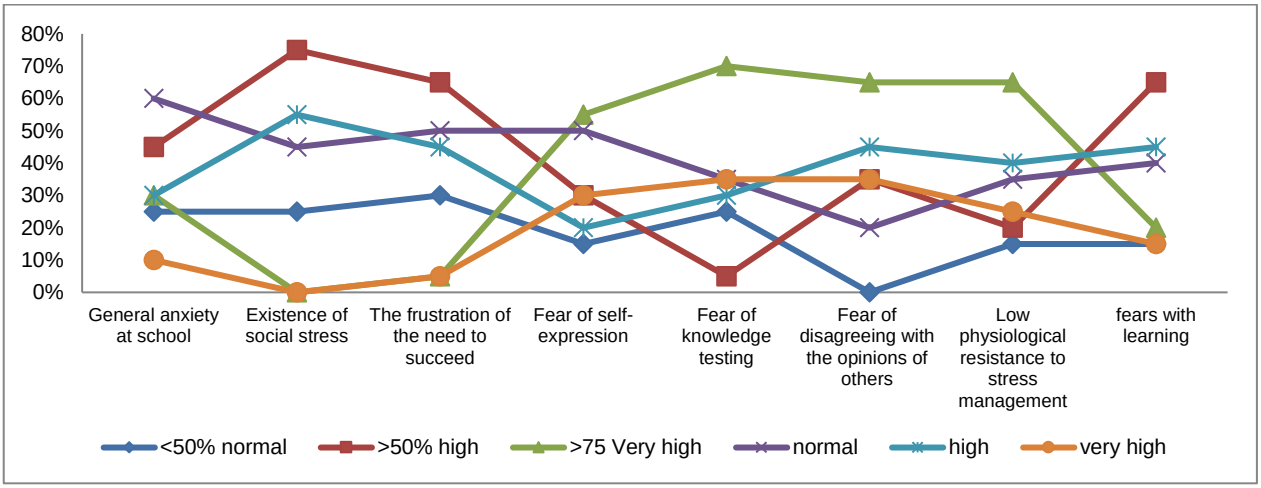


Figure 3. Comparative analysis of the results of B. Phillips "School Anxiety Diagnosis" method by syndromes

Summing up the analysis of the comparative results, we can conclude that the training program we have used served its purpose and was efficient, which was to reduce the difficulties of social-psychological adaptation of Syrian-Armenian children in the educational process through the use of the program.

Thus, the hypothesis put forward by us has been proved that as a result of the change in the social environment of Syrian-Armenian primary school students, social-psychological difficulties of adaptation are revealed in the educational process, so the identification of difficulties and the implementation of corrective work will help them reduce difficulties.

CONCLUSION

To summarize, the adaptation to the environment is the process of adapting the structure and function of organisms and organ systems. It is not only the ability to succeed in a given

environment, but also the ability for personal, psychological and social development in the future. And, of course, let us not forget that the main condition for the effectiveness of the process of adaptation of the children of Syrian-Armenian families is the maximum possible satisfaction of their real needs.

REFERENCE LIST

Bezrukikh, M. M., & Efimova, S. P. (2000). REBENOK IDET V SHKOLU: UCHEBNOE POSOBIE (4-E IZD., PERERAB.) [THE CHILD GOES TO SCHOOL: A TEXTBOOK]. *Moscow, Russia: Academia. 245 p.*

Bolotova, A. K. (1994). FAKTOR VREMENI V PEREZHVANII I PREODOLENII SITUATSII SOTSIAL'NOY NESTABIL'NOSTI [THE FACTOR OF TIME IN EXPERIENCING AND OVERCOMING SITUATIONS OF SOCIAL INSTABILITY]. *Psychology of the person in conditions of social instability (pp. 47-62). Moscow, Russia.*

Bozhovich, L. I. (1968). LICHNOST' I EE FORMIROVANIE V DETSKOM VOZRASTE. (PSIKHOLOGICHESKOE ISSLEDOVANIE [PERSONALITY AND ITS FORMATION IN CHILDHOOD. (A PSYCHOLOGICAL STUDY.)] *Moscow, Russia: "Prosveshchenie". 464 p*

Dubrovina, I. V. (2008). L. I. BOZHOVICH I SOVREMENNAYA PSIKHOLOGIYA DETSTVA (K 100-LETIYU SO DNYA ROZHDENIYA) [L. I. BOZHOVICH AND CONTEMPORARY PSYCHOLOGY OF CHILDHOOD (ON THE 100TH ANNIVERSARY OF HER BIRTH)]. *World of Psychology, 3, 266-271.*

Bugayeva, N. N. (2004). KOMFORT MLADSHIKH SHKOL'NIKOV V OBRAZOVATEL'NOY DEYATELNOSTI [COMFORT OF PRIMARY SCHOOL CHILDREN IN EDUCATIONAL ACTIVITIES]. *Primary school, 1, 6-9.*

Erikson, E.H. (1996). DETSTVO I OBSHCHESTVO [CHILDHOOD AND SOCIETY]. *(A.A. Alexeeva, Trans. & Ed., with articles by D. Elkind and V.A. Sonin). St. Petersburg, Russia: Psikhologicheskiy Tsentr "Lenato"; Balashikha, Russia: Fond "Univ. kn."*

Kulagina, I. Yu., & Kolyutskiy, V. N. (2001). VOZRASTNAYA PSIKHOLOGIYA: POLNYY ZHIZNENNYY TSIKL RAZVITIYA CHELOVEKA [DEVELOPMENTAL PSYCHOLOGY: THE COMPLETE LIFE CYCLE OF HUMAN DEVELOPMENT]. *(2nd ed.). Moscow, Russia: TC "Sfera". (Original work published 1994).*

Lavrinets, E.A. (2017). OSOBENNOSTI SOTSIAL'NO-PSIKHOLOGICHESKOY ADAPTATSII PODROSTKOV-SPORTSMENOV IZ SEMYI MIGRANTOV [FEATURES OF THE SOCIO-PSYCHOLOGICAL ADAPTATION OF ADOLESCENT ATHLETES FROM MIGRANT FAMILIES]. *NovaUm.Ru (Electronic Journal). Retrieved from https://www.novayagazeta.ru/articles/2017/11/06/74560-osobennosti-sotsialno-psikhologicheskoy-adaptatsii-podrostkov-sportsmenov-iz-semey-migrantov*

Lipkina, A. I. (1976). SAMOOCENKA SHKOL'NIKA [SELF-ESTEEM OF THE SCHOOL STUDENT]. (DOCTORAL DISSERTATION). *Moscow, Russia: Znanie.*

Maslow A. (1997) PSYCHOLOGY OF BEING. *M.: Refl-book.*

Merton, R. K. (1967). ON THEORETICAL SOCIOLOGY: FIVE ESSAYS, OLD AND NEW. *New York: Free Press.*

Morris, C. W. (1956). VARIETIES OF HUMAN VALUE. *Chicago: University of Chicago Press.*

Obukhova, L. F. (1996). DETSKAYA (VOZRASTNAYA) PSIKHOLOGIYA [CHILD (DEVELOPMENTAL) PSYCHOLOGY]: *Textbook. Moscow, Russia: Rospedagentstvo.*

Palagina, N. S. (2007). OSOBENNOSTI SOTSIAL'NO-PSIKHOLOGICHESKOY ADAPTATSII VYNUZHDENNYKH MIGRANTOV V PREODOLENII ZHIZNENNOGO KRIZISA [FEATURES OF THE SOCIO-PSYCHOLOGICAL ADAPTATION OF FORCED MIGRANTS IN OVERCOMING THE LIFE CRISIS]. *(Doctoral dissertation, Kursk State University, Kursk, Russia).*

Sablin, V. S., & Slakva, S. P. (2004). PSIKHOLOGIYA CHELOVEKA: KURS LEKTSIY: STRUKTURNO-LOGICHESKIE SKHEMY [HUMAN PSYCHOLOGY: COURSE OF LECTURES: STRUCTURAL-LOGICAL SCHEMES]. *Moscow, Russia: Examen.*

Shabanova, M. A. (1998). DOBROVOL'NYE I VYNUZHDENNYE ADAPTATSII [VOLUNTARY AND FORCED ADAPTATIONS]. *Svobodnaya Mysl', (1), 34-45.*

Vygotsky, L.S. (2005). SELECTED PSYCHOLOGICAL RESEARCH. *Moscow: Publisher of the Academy of Pedagogical Sciences of the RSFSR.*

Venger, A.L. (1985). PSIKHOLOGICHESKAYA GOTOVNOST' DETEY K OBUCHENIYU V SHKOLE [PSYCHOLOGICAL READINESS OF CHILDREN FOR SCHOOL EDUCATION]. *Razvitie myshleniya i umstvennoe vospitanie doshkol'nika, 165-191. Moscow: Pedagogika*.

Wenger, L.A., Marcinkovskaya, T.D., & Wenger, A.L. (1994). GOTOV LI VASH REBENOK

K SHKOLE [IS YOUR CHILD READY FOR SCHOOL?]. *Moscow: Znanie.*

Zak, A. Z. (1984). RAZVITIE TEORETICHESKOGO MYSHLENIYA U MLADSHIKH SHKOL'NIKOV [DEVELOPMENT OF THEORETICAL THINKING IN YOUNGER SCHOOLCHILDREN]. *Moscow: Pedagogika.*

The article submitted and sent to review: 09/11/2022
Accepted for publication: 10/03/2023

STUDY ON TEACHERS' PERSONAL QUALITIES, SELF-DEVELOPMENT SKILLS

DOI: 10.24234/miopap.v10i1.458

Vardine MESROBYAN, *PhD student, Public Administration Academy of the RA. Chair of Psychology of Management, Languages and Information Technology. Psychologist,*

Email: vardine.mesropyan@mail.ru

ABSTRACT

The article presents the results of an experimental study on teachers' personal qualities, as well as their self-development abilities. The aim of the study is to find out the peculiarities of lecturers' personal qualities and self-development. Among the lecturers the following personal factors have been found above the average: warmth, rule-consciousness, emotional stability, social boldness, abstractedness, openness to change. And the indicators of self-development are average for lecturers, which shows that lecturers are able to realize their own opportunities, to develop themselves for professional growth. And after the analysis of the questionnaire results, we can conclude that for the Armenian lecturers the actions taken for self-recognition are as follows: self-development, retraining, communication with their colleagues, they prefer to be professional. The lecturers of the psychological weakness considered the following qualities: kindness, sincerity, difficult to accept innovations, lack of language knowledge.

Keywords*: Lecturer, personal qualities, self-development, self-knowledge, experimental research, questionnaire.*

INTRODUCTION

Nowadays, there is a great interest in teachers' activities at the university, their experience and the operation of their models. This is evidenced by the majority of psychological research in the field of education management. Modern education requires new approaches and new professional and psychological qualities. The relevance of the topic is by the fact that such researches are still scarce in our country, they do not show the existence of critical professional-psychological qualities of the lecturers working at the university. While implementing current reforms, it is necessary to take into consideration the important professional-psychological qualities of the lecturers. Thus, our goal is to study the personal qualities of the lecturers and their peculiarities.

The personality of the lecturer is the main integral part of the educational process, as there exists a person-to-person relationship. The acmeological studies of the lecturer's

personality (Anisimov, O.S. 2000, Bodalyov, A.A. 1983, Derkach, A.A. 2002, Kuz'min N.V. 1995) provide an opportunity to find out the peculiarities of a person's development, their patterns at the stage of professional maturity, their pursuit on the professional path. Due to all this, we are able to describe theoretically the professional activity of a university teacher/lecturer.

The lecturer, as a subject of professional activity, performs various responsibilities, develops individual ways of performing and organizing the mentioned responsibilities, which is the result of the integration of professional skills and individual features of the specialist. Therefore, the self-analysis and self-development intentions are the main guarantee to succeed as a lecturer. These qualities, first of all, describe the process of dynamic development of the lecturer's personality. The lecturer not only builds their personality, but also chooses productive ways between professional and pedagogical activities. They qualitatively transform themselves, overcome psychological barriers, transform professional expectations, look for their own opportunities and style to develop professional qualities. They also create an individual way of professional development with their own persons.

The following work presupposes not only the possession of professional knowledge and skills, but also the existence of certain psychological qualities in order to carry out the activity with maximum efficiency. In any work process, a person's personal qualities are important, as they have a certain impact on the efficiency of work activities. And nowadays modern imperatives bring new demands on the application of the professional “psychological qualities” of lecturers. Teacher’s personality and activity are an integral part of the educational process. The lecturer, like the researcher, must be able to improve the way of understanding the reality and in their own search. Which is reflected on the way of their activity and professional self-development.

Considering the above mentioned, we aimed to study the personal qualities of teachers, as well as the peculiarities of their self-development. Thus, we have found it preferable to use Cattell's personal identity questionnaire. This test reveals the personal characteristics of the lecturers and their mutual agreement on the work process. Cattell’s 16 factor questionnaire is a method of individual-psychological assessment of a person. It reveals 16 relatively independent factors characteristic of a person. The questionnaire consists of 105 statements. Each question has three possible options: a /, b /, c /. When answering, the researcher chooses one of them, which more accurately expresses their point of view. The methodology allows to unite the factors according to the blocks: to establish intellectual, emotional, communication and interpersonal relations.

The self-development-self-realization test gives an opportunity to understand what kind of work the lecturers do for the development of their professional direction; whether they are able to realize their own abilities, to develop. The Self-Development Skills Identification Questionnaire gives an opportunity to identify the path of the teacher's self-development, what motivates, what problems teachers face in the work process, as well as their strengths and weaknesses as an education manager.

THEORETICAL LITERATURE REVIEW

Currently, there is a great interest in the activities of teachers' experience and implementation of their models. This is evidenced by most of the psychological research in the education management field. However, such studies are still rare in our country and do not indicate the existence of psychologically-professionally qualified qualities of education managers working at the university. We have taken into consideration lecturers as education managers. For the study of the professional-psychological qualities of the lecturers, we have used the theories of the following authors as theoretical bases: Kamzaba&, T.K. 1968, Makarenko, A.S. 1968, Matyowshkina, S.D. 1977, Kondrat&, M.Y. 1987, Postnikova, M.I. 1993, O'lshanski, V.B. 1994, Kowzmin, N.V. 1995, Markova, A. 1995, Aminov, N.A. & O'sadcheva, I.I. 2003, Nemov, R'.S. 2005, Smir'nov, S.D. 2005, Er'shova, L.V. 2006, Avdienko, A.G. & Lowsaeva, G.S. 2010, Ilyin, E.P. 2012, Ver'bicki, A.A. 2014, and others.

METHODOLOGY

In accordance with the set goal and objectives, we have developed a research strategy. We have adopted the systemic approach as a methodological basis. Based on the theoretical analysis, we found it expedient to use, expert survey method, testing, questionnaire method, content analysis method. Psychological testing method allows to evaluate certain personal qualities of the subject. The test method belongs to the group of objective psychological research methods. It is a procedure for measuring the characteristics and different characteristics of the person being studied. Presenting itself as an objective tool of psychodiagnosis, a number of requirements are presented to the test, in case of its approval the test can be considered scientifically substantiated. Questionnaires, presented as a group of subjective methods of psychological research, include questions, affirmations, assertions, the results of which are based on self-assessment. Thus, the subject gives information about their personality traits, their own behaviour strategy in different situations. The types of questionnaires are personal questionnaires and forms. One of the types of this method is personal questionnaires, in which the respondent answers the questions with the consent or

disagreement. In the personal questionnaire, "closed" or "open" answers variants are offered. Thus, in the first case, it is suggested to evaluate this or that question, or to choose one of the possible answers, and the second type assumes the possibility of giving free answers. Another type of questionnaire implementation is a question form, which does not directly address the psychological characteristics of the respondent. For the most part, this group includes biographical questionnaires that include open, closed, and semi-closed questions.

Thus, the combination of the information obtained from the application of the test and questionnaire will allow to make a general analysis of the problem on the study.

RESEARCH RESULTS. RESEARCH PERIOD

80 lecturer-experts from different Armenian universities participated in the experimental research. The survey was conducted from 2021 to March 2022, inclusively.

The results of Cattell's survey on personal issues are shown below.

Cattell's average test results

Table 1.

	M - average value	σ - standard deviation
Warmth	8	2.4
Reasoning	3	1.1
Emotional stability	7	2.1
Dominance	6	2.0
Liveliness	5	1.9
Rule-Consciousness	9	1.9
Social boldness	8	1.5
Sensitivity	7	2.0
Vigilance	5	2.0
Abstractedness	7	1.8
Privateness	6	2.2
Apprehension	6	2.0
Openness to change	8	2.9
Self-Reliance	5	2.3
Perfectionism	7	1.3
Tension	5	2.2
Motivational distortion	7	1.6

The summary of Cattell's test experimental study results of the lecturers' personal characteristics enables to come up to the following conclusion.

As shown in Table 1, the following personal factors were found to be above average among the lecturers: warmth, rule-consciousness, emotional stability, social boldness, abstractedness, openness to change. Cattell's personal factors average and standard deviations are not scattered around the mean. This means that the group is homogeneous (see Table 1).

The high rate of warmth indicates that lecturers establish interpersonal relationships easily. They are more sociable, benevolent, unencumbered. They are active in conflict resolution; they tend to cooperate. They prefer to work with people, get involved in active group activities. They are not afraid of criticism; they remember faces and names well. Average indicators of rule-consciousness indicate that they are responsible, benevolent, followed by sense of duty and responsibility, and follow the general norms. The emotional stability of the lecturers is also high, which speaks about emotional stability, restraint, calmness of the university administrators. They are able to control their emotions and behaviour. They quickly adapt to new conditions. They are emotionally mature, courageous, self-confident, steady in their plans and interests. They are characterized by great emotional stability, they are realistic, they face the demands of reality, they follow behaviour and moral norms rules. They can be distinguished by diligence, stability of interests. They are able to control their emotions and feelings, as well as control their own behaviour. The high value of perfectionism is 7.10, which proves that teachers' behaviour control is quite developed. The indicator of social boldness shows that lecturers tend to take risks, to cooperate with strangers in an unfamiliar environment, sometimes to make non-standard decisions, to demonstrate leadership qualities. Such people are stress-resistant, courageous, fond of extremes, inattentive to details, ignore danger signals, waste a lot of time on conversations. They prefer active contacts, do not lose control, face unexpected difficulties, quickly forget about failures. The index of openness to change speaks about the fact that the lecturers are conservative in the issue of knowledge of rules and principles. Sometimes they can show opposing behaviour towards new ideas, changes. It should be noted that, surprisingly, the reasoning of teachers is low.

The development of a person is very important and at the same time complex process, which includes concepts such as self-recognition and self-development. Self-recognition is the study of a person's personal mental and physical features, self-understanding. Self-awareness starts from childhood and then continues throughout conscious life. It is awareness of your individual self, i.e., to understand who I am, why I live, what I want. Self-development is a process of comprehensive human development, which is expressed by self-study of

something, implementing that knowledge in practice, and all this is done without any external control. According to the indicators of the self-development test, the lecturers received an average of 61 points, which testifies that the lecturers are able to realize their own abilities, to develop themselves for professional growth.

Thus, after analysing the results of the questionnaire, we can say that for Armenian lecturers, the actions taken for self-recognition are as follows: self-analysis comes first in the issue of self-recognition. 11 out of 80 lecturers try to analyse themselves, consider it in-depth analysis, during which they reveal their strengths and weaknesses. 7 out of 80 people considered important to communicate with other people - friends, parents, colleagues, students, married couples, with whom communication allows you to look at your own self from someone else's point of view. 12 out of 80 read psychological books for self-discovery, self-knowledge, which helps to know one's self, to develop and become a professional. To the question “What motivates you during the work?” 12 out of 80 lecturers considered important the result as a motivating factor when the specialist is able to evaluate their own selves and enjoy the desirable result. 12 lecturers considered the salary and material incentive as a motivating factor. 12 mentioned of being appreciated, both among students and colleagues. 7 specialists highlighted the fact of having a good team, good colleagues as the main motivational criterion. 5 specialists used the fact of having an interested, literate student as a motivational factor. It is considered to be a basic competence which should education manager possess. Professionalism was a priority for the lecturers, 80/10 rated it as a possible advancement in their profession. It is interesting that the lecturers mentioned professional-personal qualities together - high professional-personal qualities as 9. 10 people considered important the professional knowledge. 10 lecturers highlighted the ability to manage as an important competence. In modern working relationships, emotional stability has become important, which is considered to be primarily the ability of a competent professional. 10 lecturers considered it necessary. Tolerance was chosen by 5 lecturers. Stress-resistance - Stress-management was chosen by 6 people. Creativity by 5 people. 80 out of 10 lecturers considered professional trainings as a factor of self-development. having continuous trainings within the frames of their profession helps the specialist to be complete and to have up-to-date knowledge. 22 of the lecturers considered important to read professional books, materials, daily magazines, which helps the specialist to be on professional track, to know the latest news, to implement it in professional work. As a strong side, 8 out of 80 lecturers singled out purposefulness as a strong side. The next strong point is patience, which was important for 10 lecturers. Very often in their work process they lack patience. Flexibility as a primary factor in the profession establishment process was singled out by 5 people. What psychological

qualities would you like to obtain? The lecturers singled out the following answers to the question. The primary quality they want to obtain is patience - 10 people. Which proves that sometimes education managers need to be calm in their work, to have a stable mental state. The next important quality that teachers would like to have, is composure in overcoming mistakes, attitudes, and conflict situations of the others. Stress resistance as the main psychological quality was important for 5 people. What are your weaknesses as an education manager? For 10 of the lecturers, kindness was considered a weak point in this issue, which is a hindering circumstance in their work. 9 people considered sincerity as a weakness, which often hinders them in their working relationships. What measures do you take to improve the activity?

The lecturers do the following for the development of the professional path: trainings - 10 people, professional knowledge updating, reading books – 12 people. 8 lecturers considered self-education and self-development important. They try to correct the mistakes. 20 lecturers review and correct their mistakes and find new solutions to them. 8 people have discussions with their superiors. Professional dream for the lecturers is the following: 5 lecturers dream of having a professional title: Head of the Chair, Doctor. 15 lecturers want to be high demand specialists. 6 people want to be a famous specialist.

CONCLUSION

According to the data of the expert research, the Armenian lecturers are distinguished by the following personal qualities: warmth, rule-consciousness, emotional stability, social boldness, abstractedness, openness to change. The lecturers are able to make various contacts, they are guided in their work by honesty, they are brave, and they can take risks. As for emotional stability, we can say that the lecturers are distinguished by their restraint and calmness. They are able to control their emotions and behaviour. They quickly adapt to new conditions. They are emotionally mature, brave, they do not stop dreaming, have self-development, self-recognition in the process of professional development. They tend to be aware of professional development, to participate in trainings, to be informed about the latest developments. They stand out with their competence, strengths and weaknesses. On their way of professionalism, they can sometimes stop, and do not have progress, which indicates that sometimes they do not aspire to have more, they are satisfied with the position they have, and professional knowledge they obtain.

REFERENCES LIST

Aghzumtsyan, R., Petrosyan, L., Poghosyan, S., Xachatryan A. (2015). KAR'AVARCHAKAN GORC'OWNEOWT'YAN AR'AND'NAHATKOWT'YOWNNERI HOGEBANAKAN NKARAGIRY' (PSYCHOLOGICAL ASPECTS OF MANAGEMENT ACTIVITIES PECULIARITIES, IN ARMENIAN). *Yerevan: PAARA.*

Aghzumtsyan, R. V. (2015). ANALIZ PSIHOLOGICHESKIH HARAKTERISTIK PREPODAVATELEJ VUZA [ANALYSIS OF PSYCHOLOGICAL CHARACTERISTICS OF UNIVERSITY LECTURERS]. *Vysshaja shkola: opyt, problemy, perspektivy [Graduate school: Practice, issues, perspectives], 534-537.*

Avanesyan, H. M. (2010). P'ORD'ARARAKAN HOGEBANOWT'YOWN (PRACTICAL PSYCHOLOGY, IN ARMENIAN). *Yerevan: Edit Print.*

Harchenko, L. N. (2014). PREPODAVATEL' SOVREMENNOGO VUZA: KOMPETENTNOSTNAJA MODEL' (IMAGE OF MODERN UNIVERSITY LECTURER: COMPETENCIES MODEL, IN ARMENIAN). *Moscow: Directmedia*

Mesrobyan, V. (2018). *KRT'OWT'YAN KAR'AVARICHNERI MASNAGITAKAN & HOGEBANAKAN ORAKNERI OWSOWMNASIROWT'YOWN [STUDY ON PROFESSIONAL AND PSYCHOLOGICAL FEATURES OF EDUCATION MANAGERS]. Public Administration Scientific Journal, July, 229-236.*

Nikandrov, V.V. (2003). JEKSPERIMENTAL'NAJA PSIHOLOGIJA (EXPERIMENTAL PSYCHOLOGY, IN RUSSIAN). *St. Petersburg: Rech.*

Podpovetnaja, Ju.V., Rezanovich, I.V. (2012). KONCEPCIJA RAZVITIJA NAUCHNO-METODICHESKOJ KUL'TURY PREPODAVATELJA VUZA: MONOGRAFIJA (THE DEVELOPMENT OF SCIENTIFIC-METHODOLOGICAL CULTURE OF UNIVERSITY LECTURER: MONOGRAPHY, IN RUSSIAN). *Moscow: Vlados*.

Skok, G. B. (1987). ANALIZIRUEM DEJATEL'NOST' PREPODAVATELJA [ANALYZING LECTURER'S ACTIVITIES]. *Vestnik vysshej shkoly [Higher school herald], 6, 50-53.*

Smirnov, S. D. (2001). PEDAGOGIKA I PSIHOLOGIJA VYSSHEGO OBRAZOVANIJA: OT DEJATEL'NOSTI K LICHNOSTI (PEDAGOGY AND PSYCHOLOGY OF HIGHER EDUCATION: FROM ACTIVITIES TO PERSONALITY, IN RUSSIAN). *Moscow: Academy.*

Stepanyan, R., Galstyan, A. (2012). HOGEDIAGNOSTIKA (PSYCHODIAGNOSTICS, IN ARMENIAN). *Yerevan: YSU Publishing*.

The article submitted and sent to review: 12/10/2022
Accepted for publication: 18/03/2023

HARDWARE AND PSYCHOLOGICAL INDICATORS OF INDIVIDUAL OBJECTIVIZATION OF PSYCHOPHYSICAL ABILITIES OF YOUTH

DOI: 10.24234/miopap.v10i1.459

Sergei BOLTIVETS, *State Institute of Family and Youth Policy of Ukraine,*
Ukraine, 01001, Kyiv, Esplanadna Street, 17,
E-mail: botivetssergij@i.ua

ABSTRACT

The article substantiates the relevance of tempering youth on the psychophysiological basis of identification of a young person in his own self-awareness. Its individual psychological reflection is embodied in the psychophysiological parameters of specially created for this purpose and manufactured psychological devices "Duzhin", "Pyatra", "Rin" and others, which are distinguished by the uniqueness of both the design and the technical implementation. The psychological system "Duzhin" ensures the definition and development of the ability to emotional and volitional self-regulation without age restrictions, as a rule, starting from the age of three - with the acquisition of the ability to imitative reproduction of psychomotor action. Measuring the coefficient of emotional-volitional regulation using the psychological device "Duzhin" allows one to establish the individual dynamics and development of emotional-volitional regulation caused by the development of primary control of impulses - psychomotor processes of brain self-control of one's own activity by periodically determining the variability of its coefficients; to develop the ability for emotional-volitional self-regulation of psychomotor processes of cerebral self-control of one's own activity, to focus the volitional function of the psyche on conscious management of one's own actions and regulation of behaviour, to carry out psychological correction of impulsive behaviour caused by a violation of impulse control. The "Pyatra" device has five main levels of complexity, the mastery of which reveals psychomotor abilities in their creative expression, allows you to go beyond the proposed standard tasks and randomly try to implement your own options for performing psychomotor exercises. "Piatra" contains a subtest for measuring the psychomotor praxis of thinking "Rin for distinguishing indicators of mental development F-70-73, determining related intellectual functioning as a conditional mental norm - related to the sufficiency of mental development, as well as a special mental ability. The indicators recorded in the protocol are given psychological examination according to the scale of the psychomotor praxis of thinking "Rin". The fundamental principle embodied by the above means of objectification of individual self-awareness of psychophysical abilities is the mythologeme of community, which includes

everyone and does not reject anyone from the human population commensurate with the possibilities of their own psychophysical development.

Keywords: *lifelong projection, individual-psychological reflection, psychophysiological parameters, prerequisites of individual abilities, emotional-volitional regulation, psychomotor praxis of thinking.*

INTRODUCTION

Own self-awareness in the correlation of oneself with the future lifelong projection of self-realization requires certainty and reliability of the fundamental foundations. The identification of a young person and youth as an age community in their own self-awareness is based on this, their formation, the construction of an individual life status, its ordering, creation and habituation.

A young person's search for his self in conditions of rapid social change leads to the need for certainty, reliability, and a basis for building a solid structure of ideas about his future life. Such a basis is the individual psychological reflection of one's own uniqueness, implemented in psychophysiological parameters specially created for this purpose and manufactured according to our project by the Kyiv Telekom-pneumatik plant of the Medaparatura production association of the Duzhin, Pyatra, psychological facilities. Rin and other which are distinguished by the uniqueness of both the idea and the technical implementation.

METHODOLOGY AND PROCEDURES

Thus, the psychological system Duzhin is designed to determine and develop a person's ability for emotional and volitional self-regulation without age restrictions (Ramezanpour Susan & others 2016), as a rule, starting from the age of three - with the acquisition of the ability to imitatively reproduce the psychomotor action of separating the two hemispheres in opposite directions and focusing on them returning to the originally perceived form of one's integrity (Boltivets, S & oters 2022). The psychological system provides clarification of the presence and development of the primary control of impulses that characterize individual behaviour (Vardanyan, K. 2022). These possibilities of the psychological system are important for determining the features of psychomotor processes and cerebral self-control of one's own activity, which allows for individualization of recreational work for persons with attention deficit syndrome, hyperactivity, and other mental disorders (Karapetyan, V. 2021).

The name Duzhin is a semantic mythologeme (GEVORGYAN, S. & others) that expresses fortitude as a property of volitional effort in terms of its severity, that is, the presence and severity of willpower (Vardanyan, K. 2022). The method of application consists in providing the subject(s) with a ball connected on both sides by a strong string, with a proposal to show

their strength - to stretch the connecting string with the fingers of both hands so that the two halves, which are connected, spread in opposite directions between themselves by magnetic attraction, constitute a whole sphere, or figuratively - "tear the sphere into parts". This proposal is most often perceived by the examinees as unattainable, impossible to fulfil, causes surprise, disbelief in the reality of the task, as an obvious exaggeration or a joke by everyone, except for people who have symptoms of autism, all types of schizophrenia, F - 73 "Profound mental retardation", F - 72 "Severe mental retardation" and partially - F - 71 "Moderate mental retardation" and some other similar chronic mental diseases.

After the first separation of the ball into two parts, the examinee is convinced of the attainability and ease of completing the task, which causes everyone a pleasant emotional uplift of varying degrees of expression, which is an incentive for further performance of work that requires willpower. In this way, the emotional exertion caused by the initial feeling of achieving the impossible, that is, what seemed and was imagined as unattainable, ensures the further use of this emotional energy to implement the cycle of volitional efforts.

PSYCHOPHYSIOLOGICAL PARAMETERS

The determination of the basic ability to emotional-volitional self-regulation consists in the task of unfolding the ball 100 times in such a way that after each unfolding it refolds and becomes whole. The examinee calls aloud the serial number of each successful return of the ball to its original position from one to one hundred times.

The total distance between the red marks is 6 cm. The initial position of the ball is set in the centre between two red nodes at a distance of 3 cm each from the central section of the ball.

A distance of 3 cm to the central cross-section of the sphere from each of the red marks is standard when examining adults, teenagers, and school-age children, however, when examining preschool children, usually 3-6 years old, the entire space and beyond the red marks are used as follows in such a way that the child is able to unfold and assemble the ball in a convenient way from both sides at a distance of his choice.

If, for certain reasons, the examinee cannot do this due to the lack of counting skills up to 100 (underdeveloped counting skills, mental retardation, other psychophysical disabilities), the counting is performed aloud by a clinical psychologist.

For example, in the case of F - 71 "Moderate mental retardation" together with the examinee's inability to keep numbers, the help of a clinical psychologist in creating a motor image of the action that should be reproduced, eliminating excessive psychomotor tension, is of great importance.

At the same time, the clinical psychologist counts the cases when the two particles of the

ball did not return to their original position and the examinee is forced to fold them by touching them. The number of cases of such touches is added, and their sum is subtracted from 100, if the test is carried out in full.

Formulas for determining results

Thus, during the performance of 100 opening and folding of the ball, the number of touches to the halves of the ball is counted to return it to its integral shape.

The formula determines the coefficient of emotional-volitional regulation:

K=100 – D, where (1)

D is the number of touches to the halves of the ball to return it to its original shape.

For example, if out of 100 opening and folding halves of the ball, the examinee had to return them to their original position 12 times, the coefficient of emotional-volitional regulation will be 88%:

K=100 – 12=88% (2)

In the case of failure of the examinee at any of the stages of performing 100 openings and folding of the ball, the coefficient of emotional-volitional regulation will actually be the number of performed opening and folding, except for touching the halves of the ball in order to return it to its original shape.

For example, if the examinee performed 47 unfolding and additions, of which in 8 cases he used touching the halves of the ball to return them to their original position, the coefficient of emotional-volitional regulation is determined as follows:

K=8:47• 100 =17.02%, where (3)

17.02 is an indicator of failure to achieve the desired regulation of psychomotor actions, a numerical expression of the number of motor errors. Incomplete volitional regulation is also evidenced by the cessation of further actions, refusal to reach the previously established norm of 100 syllables. Based on this, 47 performed actions, regardless of the result, are 47% of volitional efforts made, that is, 47% of the revealed ability to volitional regulation compared to the social-psychological population norm of 100%, inherent or such that should be inherent as a psychological norm of vital activities for everyone in the human population. Compared to this population norm, individual success is 47%, from which the achieved individual indicator of the quality of performed actions does not take into account and therefore removes 17.02% of errors:

47 – 17.02 = 29.98, where (4)

29.98 ≈ 30% is the general coefficient of emotional-volitional regulation as a revealed ability.

Here is another example:

Of the proposed 100 actions, 52 have been implemented, which is 52% of their total volume. 10 of these 52 actions were successful, and therefore the calculation of individual success and, accordingly, the determination of the individual coefficient of emotional-volitional regulation is carried out as follows:

10:52·100=19.2%;

52 – 19.2% = 32.8% (5)

Thus, the coefficient of the revealed ability to emotional and volitional regulation is 32.8% of the general norm.

The results

Periodic measurement by a clinical psychologist of the coefficient of emotional-volitional regulation using the psychological device "Duzhin" allows:

1. To establish the individual dynamics and development of emotional-volitional regulation caused by the development of primary impulse control – psychomotor processes of cerebral self-control of one's own activity by periodically determining the variability of its coefficients.

2. To develop the ability for emotional-volitional self-regulation, which consists in the development of psychomotor processes of brain self-control of one's own activity of the periodically examined person, to focus the volitional function of the psyche on conscious management of one's actions and regulation of one's own behaviour, to carry out psychological correction of impulsive behaviour caused by a violation of impulse control.

Table 1 is used to save data in the process of examination using the psychological device "Duzhin" and the subsequent establishment of individual dynamics of the variability of emotional-volitional regulation.

K=100 – D, where (1)

Table 1

The results of the examination using a psychological device Dujin

Examination No	Full name	Date	Number of touches/total number of unfolds and folds performed	Coefficient of emotional and volitional regulation
1	2	3	4	5
1	Ko - co Maxim	06/21/2021	6/100	94%
2	Kl – co Volodya	06/21/2021	7/100	93%
3	Shm - ko Natalia	06/23/2021	7/100	93%
4	St – ii Dmytro	06/28/2021	27/100	73%

5	L – ur Yevhen	06/28/2021	10/52	32,8%

As can be seen from Table 1, examinations are numbered, and examinees are constantly added, and the same examinees can be repeated an unlimited number of times as much as is necessary both for their emotional and volitional regulation, and for their perceived need to monitor their own ability to emotional and volitional self-regulation. On the basis of these data, the average value of the coefficient of emotional-volitional regulation of each examinee can be established for a certain time period: a week, 10 days, and a comparison of the dynamics for the required period can also be performed.

Psychological exercises with the Duzhin device contribute to the development of psychomotor thinking and imagination of subjects at any age. The installation of two additional balls to prevent spontaneous emotional urges to direct corrections of the two hemispheres of the central ball creates additional opportunities for operating them and at the same time is a psychological means of focusing attention and regulating psychomotor impulsivity:

Additional possibilities of operating the psychological system Duzhin contribute to the transformation of psychomotor impulsivity of hyperactive examinees into self-discovered individual ways of successfully performing a series of proposed psychomotor exercises.

Psychomotor impulsivity, characteristic of hyperactive examinees, turns into manifestations of psychomotor imagination, which contributes to the general development of thinking.

DISCUSSION

An important feature of the application of the psychological device Duzhin is the possibility of preventing the subject's fatigue, which, with a norm of 100 units, can and should be completed at the initiative of the subject within his capabilities, which is expressed in satisfaction from the successful completion of the necessary part of it.

The semantic methodology of Pyatry contains a practical approach proposed and theoretically substantiated by Volodymyr Roments, at the end of the 20th century. Pyatra is the Ukrainian name for special places, usually five shelves, in which the potter places or inserts a ready, freshly made clay product. Nowadays, it can be argued that the Pyatra denoted the usual quantitative norm of pottery production. The process of transferring from the potter's machine to the drying place of the pottery is a psychomotor exercise that requires appropriate psychophysical abilities and a psychophysiological state appropriate for this psychomotor operation.

The psychological structure of Pyatra reflects these five conditional places, into which a

rod is inserted, originally glass, which was repeatedly broken in the process of practice and also repeatedly glued together. Therefore, we replaced it with duralumin, which reproduces the main outlines of the clay product in its shape. That is, a certain analogy. The potter needs attentiveness and coordinated movements so as not to break the finished clay product, and we have a duralumin rod as an analogue, which, unlike a slippery and fragile jug just removed from the potter's wheel, does not break or break.

The first examined patient was delighted with the very appearance of Pyatra. He was excited but barely managed the norm set before him: five times to place the larger end and five times the smaller end. Only 10, but barely with great effort. For more and more complexe is incapable, which he himself admitted. This is the recreational, habilitation and rehabilitation use of Pyatra as a method of formation or recovery by practicing the fine motility of the fingers of the left and right hands, and their motor coordination.

Confirmed capabilities

The Ukrainian psychological system Pyatra has five main levels of complexity, the mastery of which brings people the happiness of restored psychomotor functions of life. In the process of mastering the basic levels, patients often show psychomotor creativity, trying to go beyond the proposed task or randomly try their version of the exercise. Regardless of the extent to which such attempts are successful, this indicates their interest in mastering the system, and therefore contributes to the habilitation and rehabilitation process, strengthens its individualization, and therefore its significance for the individual.

The clinical psychologist can choose one option of complicating or simplifying the task according to the examinee's capabilities. Of particular importance are the first two levels, which form a sense of confidence in one's psychomotor abilities to cope with the next, more difficult ones, and, therefore should be accompanied by instructions for future success.

Along with this, the psychological device Pyatra manufactured by the Kyiv enterprise of medical and sanitary and hygienic equipment Telekom-pneumatic contains a subtest for measuring the psychomotor praxis of thinking Rin, the name of which comes from the designation of a spherical pebble carved by the rapid flow of a raging river. This subtest is especially good in terms of attractiveness for the patient, the possibility of quick execution and accuracy in distinguishing indicators of mental development from F-70-73: severe, severe, moderate and mild mental retardation, in particular, as a result of severe craniocerebral injuries, determining the mental norm and special mental ability.

Indicators of the psychological system Rin according to the scale of psychomotor thinking praxis are recorded in the psychological examination protocol, presented in the form of Table 2.

Table 2

Indicators of mental development (IQ) according to the Rin psychological system scale

№	Diagnostic value	David Wechsler scale (Wechsler Adult Intelligence Scale, WAIS)	Rin scale (reduced measurement units)	
1.	F – 73 Profound mental retardation (PMR)	19 and less	9 and less	Less than 5
2.	F – 72 Severe mental retardation (SMR)	20 – 34	10 – 14	5
3.	F – 71 Moderate mental retardation (ModMR)	35 – 49	15 – 19	6
4.	F – 70 Mild mental retardation (MilMR)	50 – 60	20 – 24	7 – 9
5.	Adequacy of intellectual development	70 – 84	25	10
6.	High mental ability	85 - 115	26 – 30	More than 10
7.	Especially high mental ability	No limit	31 and over	No limit

According to the indicators of mental development presented in Table 2, a psychological examination of representatives of various groups of young people with different health conditions, which determines their social status, was conducted. The results of the distribution of indicators of mental development are presented in Table 3.

Table 3

Indicators of mental development, recorded in the protocol of psychological examination according to the scale of psychomotor thinking praxis "Rin"

Number of units	%	Diagnostic value	Previously established diagnoses of the examined persons (indicated in accordance with the accompanying medical documents) or the status of a person	Distribution of the examined by diagnostic

				values
1	4	F – 73		
2	8	F – 73		
3	12	F – 73		
4	16	F – 73		
5	20	F – 73		
6	24	F – 73		
7	28	F – 73		
8	32	F – 73		
9	**36**	**F – 73**		
10	40	F – 72		
11	44	F – 72		
12	48	F – 72	Imbecility	3
13	52	F – 72	Imbecility	5
14	**56**	**F – 72**	Down syndrome	8
15	60	F – 71	Down syndrome, moderate mental retardation	10
16	64	F – 71	Down syndrome, moderate mental retardation	7
17	68	F – 71	Down syndrome, moderate mental retardation	5
18	72	F – 71	Moderate mental retardation (F-71), mild mental retardation (F-70), Down syndrome	11
19	**76**	**F – 71**	Moderate mental retardation	13
20	80	F – 70	Mild mental retardation (F-70), Down syndrome, X-fragile chromosome syndrome, F-70.0; F-70	21
21	84	F – 70	F-70	8
22	88	F – 70	Oligophrenia	10
23	92	F – 70	F-70	13
24	**96**	**F – 70**	F-70, F-70,0	17
25	**100**	**Related intellectual**	F-70.1, F-70, chronic mental disorder, F-72, 317, F-70, F-72, logoneurosis, F-	

		functioning (RIF)	71,0	32
26	104	High mental ability(HMA)	X-fragile chromosome syndrome, craniocerebral injuries	7
27	108	High mental ability(HMA)	Craniocerebral injuries	5
28	112	High mental ability(HMA)	Craniocerebral injuries	2
29	116	High mental ability(HMA)	Craniocerebral injuries	9
30	**120**	**High mental ability (HMA)**	Students of the Pedagogical University, clinically healthy	14
31	124	Especially high mental ability (EHMA)	Students of the Pedagogical University, clinically healthy	11
32	128	Especially high mental ability (EHMA) OBP3	Medical university students, clinically healthy	12
33	132	Especially high mental ability (EHMA)	Medical university students, clinically healthy	7
34	136	Especially high mental ability (EHMA)	First-year university students, clinically healthy	4
35	140	**Especially high mental**	First-year university student, 8-year-old child, psychophysiologist	3

		ability (EHMA)		
		Total:		237

As can be seen from Table 3, the results of measurements using the Rin psychological device confirm the established diagnoses, and in many cases clarify the scope of mental capabilities. In this regard, in our opinion, it is appropriate to expand the generally accepted definition of mental retardation by introducing the concept of mental capabilities into psychological circulation. The psychological definition of the concept of mental capabilities proposed by us is intended to combine the degrees of mental retardation as certain limited abilities of mental actions with the sufficiency of mental abilities, high mental abilities and especially high mental abilities. In a separate research paper, we will consider in more detail the urgent need to transform the psychological view of deep, severe, moderate and mild mental retardation into the definition of the different amount of mental abilities of a person, which determine the quality of his life and at the same time are sufficient for its implementation under certain favourable conditions.

The procedure of the Rin subtest sometimes seems too complicated: when everything is rolling, and therefore there is no clear gradation of achievements, the examinees can get confused, find themselves in a state of disorganization of their current consciousness, and therefore it is important to complete these efforts by defining what has been achieved and setting them for future success.

CONCLUSIONS

The psychophysiological foundations of wellness recreation include the determination of objective psychomotor health indicators, the validity of which is based on common methodological principles. This community includes everyone and does not exclude anyone from the human population commensurate with the possibilities of their own psychophysical development.

The tempering of youth is based on the identification of a young person in his own self-awareness, his formation, the construction of an individual life status, his arrangement, creation and habituation. Such a basis is the individual-psychological reflection of one's own uniqueness in the psychophysiological parameters of the psychological systems Duzhin, Pyatra, Rin and others, which are distinguished by the uniqueness of both the idea and the technical implementation.

REFERENCE LIST

Boltivets, S., Karapetyan, V., & Kobylyanska, I. M. (2022). THE CREATION OF THE PSYCHOLOGICAL EQUIPMENT IN UKRAINE AND ARMENIA BY YEVHEN MILERYAN. *Психологія і Суспільство*, *1*(2022), 163–178. https://doi.org/10.35774/pis2022.01.163

Gevorgyan, S., Karapetyan, V., Ispiryan, M., & Dallakyan, A. M. (2022). THE EXPRESSION OF DISPOSITIONAL BEHAVIOUR AND PSYCHOLOGICAL ATTITUDES IN THE CONTEXT OF SOCIAL RISK. *Wisdom*, *23*(3), 38–46. https://doi.org/10.24234/wisdom.v23i3.812

Karapetyan, V. (2021). FUNCTIONS OF ALGORITHMIC THINKING IN THE PROCESS OF DEMONSTRATING CHESS SKILLS. *Problems of Psychology in the 21st Century*, *15*(2), 48–52. https://doi.org/10.33225/ppc/21.15.48

Ramezanpour, S., Vardanyan, K., & Avanesyan, H. M. (2016). INVESTIGATION OF THE RELATIONSHIP BETWEEN ENTREPRENEURSHIP BEHAVIOUR WITH HUMAN CAPITAL AND NEED FOR ACHIEVEMENT IN IRANIAN ENTREPRENEURS, *Tehran. Psychology, Educational and Behavioural Sciences, 12(13), 255-264.*

Vardanyan, K. (2022). THE CHARACTERISTICS OF SUICIDAL AND NON-SUICIDAL SELF-INJURIOUS BEHAVIOURS IN CHILDREN AND ADOLESCENTS. *Modern Psychology Scientific Bulletin, 2(11), 75–87.*

Vardanyan, K. (2022). THE DECISIVE ROLE OF PRIMARY PSYCHOLOGICAL SERVICES IN DETECTION AND PREVENTION OF STUDENT AUTO-DESTRUCTIVE BEHAVIOUR. *Mankavarzhut'yan Ev Hogebanut'yan Himnakhndirner*, *21*(1), 52–58. https://doi.org/10.24234/miopap.v21i1.432

The article submitted and sent to review: 25/10/2022
Accepted for publication: 09/02/2023

SECTION 2.

PEDAGOGY

(EDUCATIONAL SCIENCES)

SOCIO-PEDAGOGIC CONDITIONS OF DESIGN ORIGINATION

DOI: 10.24234/miopap.v10i1.455

Gor MELIKSETYAN, *Khachatur Abovian Armenian State Pedagogical University, Faculty of Art Education, MA student,*
E-mail: gor-meliksetyan@mail.ru

ABSTRACT

The article discusses the emergence of design as a profession for the sake of Art and Craft connection. As a means of artistic activity, special schools were guided by teaching methods of design and produced the first graduates. Along with its development, design has not only turned into a separate professional activity, but has also begun to have an influence on the art and design culture altogether. Design, being one of the most important areas of national culture, has always been connected with the aesthetic thought development of the given era. The aforementioned directions of art, creativity, and design, as well as their elements, could not be formed and developed outside the given aesthetic system. Such a high level required an appropriate environment, both in one's own country and in countries connected by certain political and socio-pedagogic ties. Both in the entire cultural and aesthetic system, as well as in design, the successes have been very great when the entire aesthetic and artistic thought has been weighed against already recognized problems. It was only about developing a creative approach to work among students, because for a designer who has to create new drawings almost every day, this is simply necessary (Itten I., Iskusstvo formy, 2004, p. 138). In the content of modern artistic education, a large place is given to the profession of designer, which was the main purpose of this article. Intellectually - constructive thinking, planning is only a "cart" that delivers us to the doors of a new reality (Itten I., Iskusstvo cveta, 2004, p. 58).

Keywords: *design, project, artistic, industrial, models, theoretical, engineer, technology, design.*

INTRODUCTION

Design, as a type of unique art and design activity, emerged at the end of the 20th century. The term "Design" means to project, to draw, to conceive, as well as a project, a drawing that indicates new ways of designing the object world (Romanicheva E. T., Yacyuk O.G., 2002, p. 18). Its origination is connected with the manufacturing revolution, mass machine production, as a result of which the division of labour in production took place. Along with the industrial

revolution and in parallel with the increase in products, manufacturers began to pay more attention to the outward form and attractive structure of the produced items, not forgetting to ensure consumer quality and convenient transportation conditions. "It turns out that things should not be only really useful, but also correspond to our ideas, correspond to our aesthetic perfection." (Shugurov M.V., 2001, p. 52). As a result, there was a need for qualifying specialists who would not only give the products an attractive appearance, but also master the technologies and structures of mechanized production.

As experience has shown, it is possible to create/ release a competitive product only by solving engineering-technological and artistic issues. The entire history of industrial design is related to the history of technology development. Such discoveries as the internal combustion engine, the electric engine, and the aviation not only implied the creation of new directions in mechanical engineering, but were also considered the preliminary stages of design development. After all, “Nonetheless, design is the mirror of its time” (“Arvest” (“Art”), vol 11, 1989).

The *novelty* and *significance* of the study is that it presents the history of design in a new fashion. Researches in this direction are almost absent in Armenian professional circles. This work can also contribute to the development of the history of industrial design. The *actuality* of the study is conditioned by the reforms of distinct professional activities carried out in the field of design in the Republic of Armenia, which significantly affect the development of the principles, functions, methods, and styles of Art and Design Culture.

Methodology: During the study of the topic, several methods, that reveal socio-pedagogic conditions, were used: analytical, comparative, and technological. References are made to studies of domestic and foreign designers.

Design Transformations as Technological Development

The 20th century was an era of spectacular progress. One technological miracle was replaced by another. An era that began with duck feathers and stagecoaches ended with cars and the creation of typewriters. The telegraph was followed by the invention of the telephone and later by the wireless telegraph-radio. People found a way to create naturalistic images without the help of an artist, to record and preserve the human voice for centuries; made the first attempt to make a flight with an equipment heavier than air; invented moving images-cinema. The work of the craftsman and the process of creating the shape of the object were undoubtedly connected with its actual making. With the Industrial Age, product prototypes which were later produced in many samples already by other specialists through mechanization, began to be created through design, models, and tried-and-tested examples.

In this way, at the beginning of the century there was a division of labour in production; design was presented as a separate type of pictural-artistic activity; hence a new profession was formed: designer (Belov A., 1996, p. 19). Design as a profession has been practiced for 100 years. This calculation is carried out from the end of the 19th century, with the start of the famous Arts and Crafts Movement in England, which was led by the prominent painter of object art and activist William Morris. It was at that time that the artistic principles and theoretical directions of design were developed, which influenced the design schools and design movements created in the following years. Its ultimate goal is to achieve artistic expressiveness of the form (Ustin V.B., 2009, p. 7).

The emergence of design as a profession is sometimes associated with the beginning of the 20th century, when artists took leading positions in manufacturing industries and were given the opportunity to develop the corporate style of organizations, thereby influencing the appearance and design of products released by factories. For example, the brand styles of the German electrical engineering manufacturer AEG and the American car manufacturer Ford Motors are mentioned. There is an opinion according to which one can talk about design as a profession only when the schools practicing design teaching methods were formed, and the first qualified specialists graduated. It was the 20s of our millennium, when the first design schools were opened - Bauhaus in Germany and Vkhutemas in Russia. After 1917, the entire system of art education in the country was also reorganized. In many cities, educational institutions of a new type were created - Free State Art Workshops. Each student was given the right to study in the workshop of his chosen instructor (Mikhailov S., Kuleeva L., 1999, p. 248). There is another point of view, according to which the origination of design is associated with the period of the Great Depression of 1929. It (design) is described, first of all, as an American phenomenon. And indeed, until the Great Depression, European design remained a local phenomenon and had no influence on manufacturing processes. Only at the beginning of the crisis did American design become a real commercial force, gaining a mass profile over time, and a professional *design industrial* sector emerged.

At the beginning of the century, the stylistic direction of “functionalism” formed in the USA and a number of European countries became a theoretical basis for the development of design principles. Its leaders, who saw the beauty of artistic forms in their integrity, were also behind the creation of machine structures for design. Among them are such famous names as Louis Sullivan, who was one of the founders of the Chicago School of Architecture and is known for his buildings of the *Machine Age*; Frank Lloyd Wright, one of the forefathers of American engineering and design; Peter Behrens, a German engineer and artist whose name is connected to a whole period of design development and especially the emergence of *brand*

design; Mies van der Rohe, one of the leaders of the famous Deutscher Werkbund production union, who was also one of the founders of rationalist engineering and design in Germany; Walter Gropius, the founder of the Bauhaus global modern engineering design school; and Gerrit Thomas Rietveld, a Dutch engineer, whose Red and Blue Chair became a design symbol of sculptural nature. It was believed that design is aimed at the future by the nature of things, because “design” just means “plan”, “intention” (Serov S.I., 2003, p. 50).

In fact, in Western countries, it is not possible to find such a sphere of public life, where the activity of artists-designers is not considered as a necessary prerequisite for the organization of the given sphere (Gideon 3., 1984, p. 319).

Among the preachers of design were also engineers and modernist artists who migrated to the manufacturing sector. The representatives of modernism tried to find a way out of cul-de-sac, which, according to them, was to rely on the styles of the past, which in their turn excluded eclecticism, criticized ornamentation and decoration of things. Modernists looked for ways to incorporate rational-geometric forms into design and paid special attention to the beauty of ultimate outcome and its revelation. In fact, these views were unique steps in the emergence of industrial structures (Kazemnikov A., 1991). Among those with such views were Henri Van de Velde, one of the geniuses of the modernism; Michael Thonet and his famous Vienna Chair; Charles Mackintosh, a Scottish engineer, the author of the Art-Nouveau style, whose design is considered one of the heights of fashion and whose furniture is still in production; Raymond Loewy, one of the founders of American professional design, who is often called the founder of industrial design; Camillo Olivetti, Erwin and Arthur Brown, whose names are associated with complete stylistic directions in the history of design; Giovanni Ponti - Italian engineer, the founder of the most famous design magazine Demus; Alvar Aalto - the founder of Finnish modern engineering and design. Among them are also the forefathers of Soviet design: Malevich, Rodchenko, Tatlin, and Lissitzky.

In the Soviet Union, instead of the term *design*, the terms *artistic structuralism*, *technical aesthetics*, and *industrial art* were used. According A. Tarski, almost all virtualists are associated with a radical change in the fundamental topology of space, which is incorporated into the theoretical foundations of all modern conceptual constructions (Akchurin I.A., 2003, p. 30). A professional designer was called an *artist-constructor*. Modern industrial production cannot be non-technological, otherwise it will conflict with the laws of machine production and the market. The questions of technology occupy a primary place even in decorative-applied art, the creations of which are unique and are produced in limited quantities. The creation of glass art objects becomes possible only with the knowledge of the art of blowing, fine edge decoration imaging, and glass pressing. The same thing can be connected with the creation of

precious jewellery; the creation of things in this field becomes possible only if you master the art of processing precious stones and non-ferrous metals.

Stylistic Solutions of Design as Art and Design Culture

In the case of creation of mass mechanized products and formalized products/ items, the questions related to the role of technology become paramount for the designer. Along with its development, design has not only turned into a separate professional activity, but has also begun to influence the Art and Design Culture as a whole (Kantor K., 1967, p. 87-88).

In the 1970s, a whole stylistic movement emerged: *High-Tech*. This direction was first mentioned in 1978 in the book of the same name by Kron and Slesin. This style is based on unique games with technology and equipment. In engineering, the Pompidou Centre of Arts in Paris is presented as a historical example of this style. In order to ensure maximum flexibility, the structural buildings are not fenced, thus, creating the illusion of artificial forests. Vertical communication of engineering equipment is installed in the front part. Their brightly colored parts create the illusion of buildings.

High-Tech furniture is created from standard metal elements for separating dressing rooms in hospitals, which are produced in operational warehouses and factories. Among the furniture elements, bus, airplane, and dental chairs began to be included; laboratory glass began to be used to make pottery and tableware. In the creation of lamps for houses, factories, and medical facilities, the emergence of sharp effects was the result of the use of non-traditional forms and lighting. The production of things from new, sometimes not long-term tested raw materials of organic chemistry and artificial metals brings forward the issues of hygiene and ensuring the safety of their transportation by humans. Nowadays, the compliance of this or that raw product or material with the international standards of hygiene and ecology/ environmental protection is confirmed by a special *Grune Punkt* license symbol on things, products. According to the greatest philosopher of the 20th century M. Heidegger “By thinking about an object as an object, we become capable of listening to it. In that case, in the deepest sense of the word, we are its listeners” (Heidegger M., 1993).

The application of these standards is especially important when producing children’s products. Thus, as a result of research conducted by the specialists of the German *Stiftung Warentest* Institute, which provides information on consumer quality, a number of raw materials used in the production of items of such well-known organizations as *Chico, Primo, and Milupa*, that release products for children, were excluded from the production process.

In practice, there are cases when entire products have been withdrawn from production because of their harmful effects, such as a British company's rubber “screaming” toys, which were intended for small children, but caused allergic reactions.

It is important to meet the new international safety requirements in residential areas, and especially in areas used for medical purposes, where people spend most of their time. Wall paints, materials intended for interior decoration of the apartment, ceiling structures, construction products intended for the floor surface, and furniture should be safe.

In modern conditions, unfortunately, it is very difficult to meet ecological requirements. It is related to a number of economic and technical issues. Natural, ecologically clean raw materials are expensive compared to artificial ones. In some conditions, they are inferior to artificial raw materials in their flexibility and safe transportation indicators, while in others, for example, in the production of special moisture repellent shoes and clothes, they are not applicable at all.

In design practice, there is a differentiated approach to material selection. For example, *linoleum* installed in the children's area of a residential house can cause more harm to a child's health than a toy made of poor quality materials. The same linoleum, however, is more suitable for use in areas intended for the provision of medical services, firstly, because it is cheaper, and secondly, due to its waterproof property, it allows to carry out the wet cleaning that is considered essential for such facilities.

It is more hygienic to install furniture made of natural, clean raw materials in the apartment, while it is more convenient to use furniture made of relatively cheap raw materials in outdoor cafes and holiday homes.

The inclusion of single-use items created and produced as a result of the non-durability of a number of objects created by designers puts the issues of using/ recycling things past their storage life in the forefront of people's daily lives. The problem has become particularly acute in recent years due to the use of organic chemistry elements and new artificial materials in production, as they are generally non-combustible and do not undergo fragmentation/ degradation. In design works, the attractiveness of the object depends more on the colour solutions of the product, interior, and exterior and its correspondence with the content and form of the object (Margulis, 2001).

CONCLUSION AND DISCUSION

Thus, as a result of the research carried out within the limits of the article, it can be concluded that:

1. The emergence of design mainly fits with the civilizational development course of society and is a factor of human interests and demands.

2. The prerequisites for the formation and development of design are consistent with the world perception and lifestyle of a person, from where comes the need to include it in the educational system by developing relevant socio-pedagogic conditions.

3. Design education is a necessity for the society in the 21st century. It forms an artistic taste, a beautiful lifestyle, and an aesthetic worldview in general.

REFERENCE LIST

Akchurin, I. A. (2003). NOVAYA FUNDAMENTALNAYA ONTOLOGIYA I VIRTUALISTIKA [NEW FUNDAMENTAL ONTOLOGY AND VIRTUALISTICS]. *Voprosy Filosofii, (9), 30-38.*

Arvest (Art). (1989). *The Union was created, the design is waiting (editorial). Yerevan, November, (11), 6.*

Belov A. A., Gvozdev E. M. (1996). ISTORIYA DIZAYNA [HISTORY OF DESIGN] *SPB: Russian State Pedagogical University named after A. I. Herzen, 76.*

Giedion Z. (1984). PROSTRANSTVO, VREMYA, ARKHITEKTURA [SPACE, TIME, ARCHITECTURE], *Moscow: Stroyizdat, 319*.

Heidegger M. (1993). VREMYA I BITIE; STATYI I VISTUPLENIYA [TIME AND BEING; ARTICLES AND SPEECHES]: *translate from German, Moscow: Respublika, 325*.

Itten I. (2004) ISKUSSTVO CVETA [THE ART OF COLOR]. *Moscow: Publ.: D. Mironov, 58.*

Itten I. (2004) ISKUSSTVO FORMY [THE ART OF FORM]. *Moscow: Publ.: D. Aronov, 138.*

Kazemnikov A. N. (1991). KOMPOZITSIYA V PROPEDEVTICHESKOM KURSE DIZAYNA [COMPOSITION IN THE PROPAEDEUTIC DESIGN COURSE]: *Moscow: Prometheus, 402.*

Kantor K. M. (1967). KRASOTA I POLZA [BEAUTY AND BENEFITS]: *Sociological issues of material and artistic culture. Moscow: Isskustyvo (Art): 87-88.*

Margulis (2001). PHOTOSHOP FOR PROFESSIONALS: THE CLASSIC GUIDE TO COLOR SCIENCE. *Moscow: RTV-Media, 98.*

Mikhailov S, Kuleeva L. (1999) OSNOVY DIZAJNA [FUNDAMENTALS OF DESIGN], *Moscow: Soyuz Disaynerov, 240.*

Romanicheva E. T., Yacyuk O.G. (2002) DIZAJN I REKLAMA. KOMPYUTERNYE TEHNOLOGII: SPRAVOCHNOE I PRAKTICHESKOE RUKOVODSTVO [DESIGN AND ADVERTISING. COMPUTER TECHNOLOGY: A REFERENCE AND PRACTICAL GUIDE]. *Moscow: DMK Press, 432.*

Serov S. I. (2003) GARMONIJA KLASSICHESKOJ TIPOGRAFIKI [EXPERIENCE OF THE HIGHER ACADEMIC ACHOOL OF ARAPHIC DESIGN], *Moscow: 3(17), 50-63.*

Shugurov, M. V. (2001). VIRTUALNAYA GERMENEVTIKA [VIRTUAL HERMENEUTICS]. *Trudy laboratorii virtualistiki, (13), 69.*

Ustin, V. B. (2009). UCHEBNIK DIZAINA: KOMPOZITSIYA, METODIKA, PRAKTIKA [DESIGN TEXTBOOK: COMPOSITION, METHODOLOGY, PRACTICE]. *Moscow: AST: Astrel.*

The article submitted and sent to review: 14/01/2023
Accepted for publication: 11/04/2023

REVOLUTIONARY CHANGES IN HIGHER EDUCATION WITH ARTIFICIAL INTELLIGENCE

DOI: 10.24234/miopap.v10i1.454

Hovhannes ABGARYAN, *Master's 2nd grade. Faculty of Computer Engineering, National polytechnic University of Armenia*

E-mail: *abgaryanhov@gmail.com*

Artur MATEVOSYAN, *Master's 2nd grade. Faculty of Electronic Design Automation, National Polytechnic University of Armenia*

E-mail: *artur.matevosyan99@gmail.com*

Samvel ASATRYAN, *PhD in Pedagogy, associate professor, Head of Department for Educational Processes Management and Reforms, Khachatur Abovian Armenian State Pedagogical University*

E-mail: *asatryansamvel06@aspu.am*

ABSTRACT

One of the main requirements for organising the educational process is the individual approach to each student. This requirement cannot be met through traditional forms of education. Artificial Intelligence (AI) is coming to offer a quality help in this. AI has been a buzzword in the tech industry for years, and its application has gone through a wide range of industries embracing the technology. One of these industries is higher education. So far, AI has been changing the way we learn, making it more efficient, personalized, and effective. This article is dedicated to the possible implementations of AI technologies in the field of higher education, i.e., its benefits, and the challenges, research and analyses of changes in the higher education environment; as a consequence, introducing modern digital and automated technologies in the higher education system. The perspective directions of using AI in the field of higher education are considered and analysed as well.

Keywords: *learning, knowledge, educational process, higher education system, teaching methods, problems of robotization of the educational process, machine learning, deep learning, artificial intelligence.*

INTRODUCTION

Education is one of the main preconditions for sustainable development of every society for the sake of the preservation and reproduction of human potential. The field of education is one of the most complex areas of human activities, constantly needing improvement. On the

other hand, one of the most discussed topics today is the use of Artificial Intelligence (AI) in various areas of human activity, as it has become an integral part of modern life, affecting almost all the aspects of social realm – from personal use to military purposes. The development of AI is increasingly integrated into economic life, which is an inevitable trend of the future. AI solves such problems as identity fraud detection, customer retention, diagnostics, various predictions (among others, those related to population growth or advertising popularity), different types of forecasting (for example, weather or market), and recommendations/guidance in preferences (for instance, YouTube, Amazon, etc.). In addition to those listed, AI is also used in solving complex problems such as real-time decisions, robot navigation, real-time threat detection, military offense and defence systems, and learning tasks. Education is also inseparable from the support of science and technology. It is an obvious fact that the penetration of AI into the educational system is inevitable, therefore, it is necessary to start researching the possibilities of its application in the educational system as soon as possible in order to increase the effectiveness of the learning process.

The **purpose** of this research is to study and analyze the possibilities of using AI in the higher education system.

This **theoretical** analysis highlights the main strengths and benefits of using AI in education. However, we can safely say that it is still a new direction, not fully researched, therefore it is difficult to draw concrete conclusions about the application of AI in education.

LITERATURE REVIEW

The potential amplification of students' learning outcomes and motivation can be attained through AI integrated in education, as substantiated by the plethora of corresponding research literature. The thorough acknowledgement and resolution of obstacles entailing data confidentiality, prejudice, and ethical deliberations hold significant weight in the actualization of AI's advantages in the educational domain. A comprehensive analysis of scholarly literature, pertaining to the application of AI in educational contexts, has uncovered various significant insights and recurring patterns in the subject-matter research. One prominent phenomenon in contemporary education is the employment of AI to individualize instructional strategies. The literature has corroborated the fact that AI-powered systems have the capability to adapt to the distinctive requirements and competencies of each scholar, providing tailored feedback and assistance (Koedinger et al., 2017; Penuel et al., 2016). An illustration of the utility of AI-based tutoring systems is their potential to tailor their content delivery and feedback methodology to the individual learning pace of students, as well as provide them with customized and precise instruction, as noted in the study by Rose et al. (2012).

One rising trend is the utilization of AI to augment student engagement and motivation in educational contexts. The empirical studies in the field seem to have proved the efficacy of AI-infused games and simulations to enhance students' motivation and engagement, specifically concerning science, technology, engineering, and mathematics (STEM) subjects. Notably, scholarly works published by Barab et al. (2009) and Wang et al. (2013) validate the aforementioned proposition. AI-based systems possess the capability of furnishing immediate feedback and rewards to learners which can augment their levels of motivation (Kirschner et al., 2013). In recent times, there has been a growing interest in AI-based assessment systems owing to their capacity to provide assessment methods that are more precise, effective and economical (Kulkarni et al., 2017; Chen et al., 2016). The inclusion of AI within the education ecosystem presents a promising prospect of transforming the discipline by providing tailored learning experiences, amplifying student involvement and drive, and introducing groundbreaking approaches to evaluating student performance. Notwithstanding, it is crucial to observe that in order to obtain comprehension of the enduring consequences of AI in education and to institute optimal methodologies for implementation, additional research is essential.

A nascent trend in the realm of AI integration within the educational domain pertains to the utilization of natural language processing (NLP) and machine learning (ML) techniques for analyzing the written and spoken statements of students. Natural Language Processing (NLP) and Machine Learning (ML) technologies have demonstrated the capacity for automated evaluation of student writing and furnishing feedback on diverse aspects including grammar, vocabulary, and style (Crossley et al., 2016; Heilman et al., 2016). Furthermore, the application of Natural Language Processing (NLP) and Machine Learning (ML) techniques facilitates the examination of students' oral expression for evaluation of their enunciation and fluency, as demonstrated in the works of Liu et al. (2018) and Xiong et al. (2020).

Moreover, AI is currently employed in generating virtual and augmented reality (VR/AR) settings aimed at fostering educational outcomes. The aforementioned technological innovations appear to be able to furnish learners with captivating educational encounters, which are both interactive and immersive in nature, thereby facilitating a more authentic and stimulating engagement with digital pedagogical resources (Haldrup et al., 2018; Klimmt et al., 2019). Within the adaptive learning domain, AI-guided systems are additionally utilized to construct customized educational trajectories tailored to individual students. Adaptive learning systems employ the performance data of students to modify the complexity and substance of educational material, thereby facilitating a customized pedagogical experience (de Freitas et al., 2017; Koedinger et al., 2017).

It is noteworthy to acknowledge that, notwithstanding the potential advantages of AI in the realm of education, there also exist apprehensions and obstacles that necessitate attention and resolution. A prominent apprehension pertains to the capacity of AI-driven systems to perpetuate biases and discriminatory practices, as contended by Bers and Schmidt (2019) and Edwards et al. (2020). Furthermore, there are apprehensions regarding the inadequate transparency and comprehensibility of AI-driven systems, inferring challenges for educators and education policymakers to understand the decision-making processes of such systems (Domingos, 2015). AI in education is expanding at an accelerated pace and holds the promise of enhancing both student knowledge acquisition and captivation. However, it is pertinent to examine and deal with the apprehensions and obstacles that one may encounter in implementing AI for educational purposes. Recent scholarly investigations have explored the utilization of AI technology in developing intelligent agents or digital assistants designed to facilitate and enhance students' learning. According to Chen et al. (2018) and Kim et al. (2019), these agents possess the capacity to offer individualized assistance and direction to learners, as well as to oversee their academic advancements and provide evaluations.

What is artificial intelligence? AI is the intelligence displayed by a machine, as opposed to the "natural" intelligence – specific to humans and animals. It is a branch of Computer Science that focuses on the development of intelligent machines that can "think" and "learn" like humans. In Computer Science, AI research is defined as the study of an "intelligent agent", any device that perceives its environment and takes actions that maximize its chances of successfully achieving a goal. It involves using algorithms and data to simulate human intelligence, such as reasoning, learning, perception, and problem-solving. Broadly speaking, the term "artificial intelligence" is applied when a machine performs "cognitive" functions such as "learning" and "problem-solving"(Norvig, 2021).

AI systems can be classified into 3 types:

1. *narrow or weak AI* - this type of AI is designed to perform narrow and specific tasks, such as knowledge representation, automated planning, Machine Learning (ML), Natural Language Processing (NLP), machine perception, object motion recognition and interaction, etc.,

2. *general or strong AI* (Artificial General Intelligence (AGI)) - AGI will be able to perform any intellectual task that a human can, that is, simultaneous analysis and solution of various problems. According to some experts, it is among the long-term goals of the sector's development,

3. *Artificial Super Intelligence* (ASI) - ASI refers to an AI that will surpass human intelligence and be able to solve problems beyond our comprehension.

There is a wide range of tools used in the field of AI: search and mathematical optimization, Artificial Neural Networks (ANN, Fig. 1), and methods based on statistics and probability theory. ANNs draw, compose poetry, write music, and even replace faces in videos.

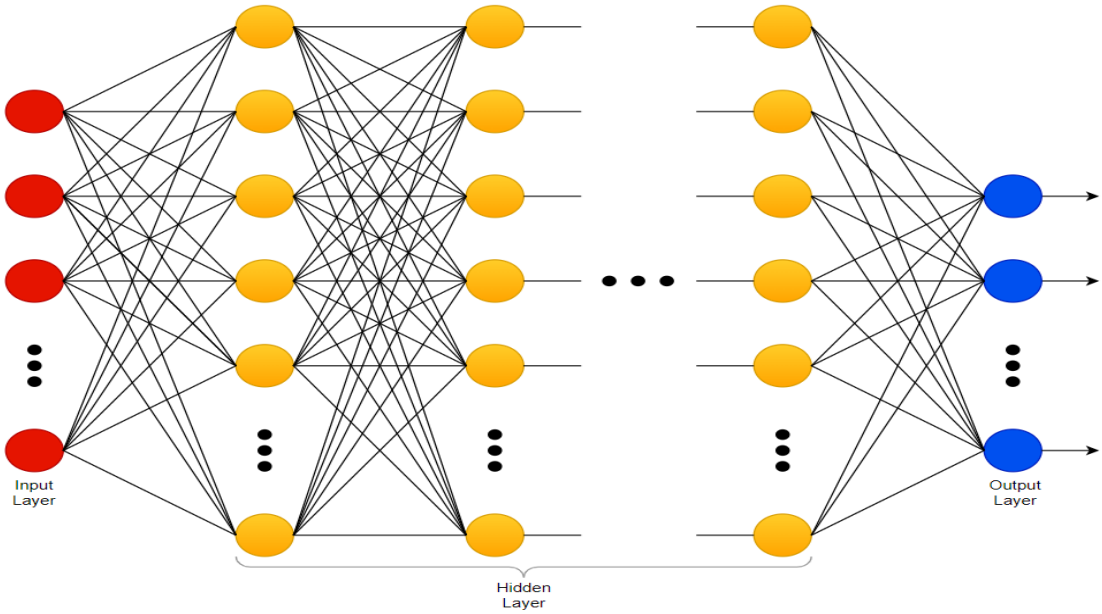


Fig. 1 Artificial Neural Network

AI development is based on computer science, mathematics, linguistics, psychology, philosophy, logic, game theory, and many other scientific fields. The continuous progress of modern information technologies is strictly connected with the presence of implemented AI techniques. For over 60 years of development, several AI-based approaches have appeared in almost all sectors of modern life. Therefore, one can talk about the new generation of AI, including the potential power of the current solutions and the variety of applied techniques. The crucial components of such an understanding of AI 3.0 are presented in Figure 2.

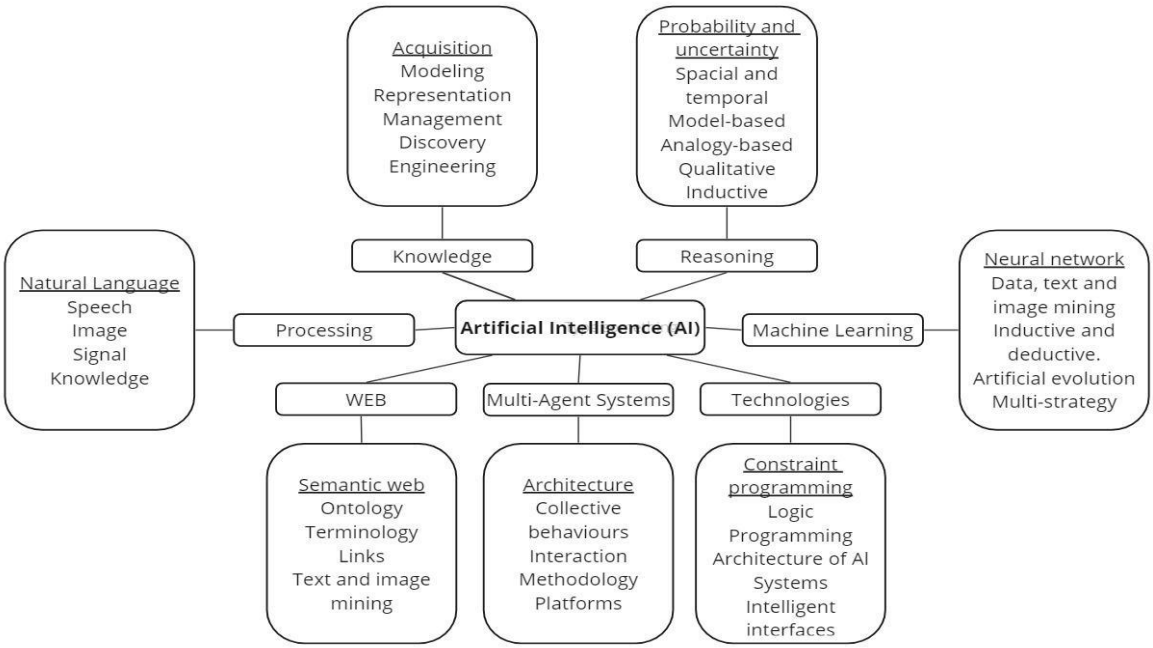


Fig. 2 The crucial components of AI

Here are some case studies that can be considered in the context of magical intelligence and revolutionary changes in higher education.

The main question raised is on *how AI can be used in higher education*.

Universities are not only carriers of academic traditions and system-wide efficiency but they also have an incredible potential for innovation and inventive initiatives. This awareness enables to realise the potential for transformations that the higher education system (Zawacki-Richter et al., 2019) is expected to offer. The use of AI technologies within universities facilitates the process of providing educational services and quality improvement. AI in higher education can also contribute to the work of all stakeholders involved: students, professors, as well as the administrative staff (for instance, in monitoring students' attendance). But, like any innovation, the introduction of AI in higher education assumes both advantages and disadvantages (Popenici & Kerr, 2017).

BENEFITS OF AI IN HIGHER EDUCATION

Considering the main recurrent issues in education, first of all, let us look at what solutions and opportunities AI could provide, referring to some promising areas AI application (Chatterjee & Bhattacharjee, 2020). The use of AI in higher education offers numerous benefits:

1. **Adaptive and Personalized Learning**

One of the most significant areas where AI can make an impact is adaptive and

personalized learning. It involves the selection of the necessary educational content for the needs of each student with different levels of progress, with the ability to track progress. AI allows the creation of an individual educational trajectory for each student for successful study at a university and further professional growth. AI can collect and analyse student data, such as their learning style, interests, and performance, to create a personalized learning experience for each student. This approach ensures that each student is taught in a way that is best suited to their needs, resulting in better learning outcomes and a more engaging educational experience.

2. **Improved Efficiency**

AI tools can also automate tasks such as grading/scoring and instructive content creation, better time and effort management. They can analyse and categorise large volumes of educational content, such as textbooks, research papers, and lectures, to create personalized content that is tailored to the needs of each student. This approach can save time and effort for educators, as well as enhance the quality of the educational content, ensuring that it is up-to-date and relevant.

3. **Enhanced Student Engagement**

AI can also be used to improve student engagement. AI-powered chatbots and virtual assistants can provide students with instant support and guidance, answering their questions and helping them to stay engaged and motivated, as well as overcome any challenges they may face. AI-powered virtual assistants can also help students to manage their time and stay on top of their workload.

4. **Improved Assessment**

Another area where AI can be used in higher education is student assessment. AI-powered assessment tools can analyse student responses to assessments and provide immediate feedback on student performance, enabling students to learn from their mistakes and improve their performance. AI can also grade student work, such as essays and assignments, saving educators time and effort.

5. **Predictive Analytics**

AI can analyse student data to predict their future academic performance, allowing educators to provide targeted support and guidance to help them succeed.

6. **Cost Reduction**

AI-powered tools are able to reduce the cost of higher education by automating tasks and enhancing efficiency. This approach can make higher education more affordable and accessible to a wider range of students.

CHALLENGES OF AI IN HIGHER EDUCATION

Students, schoolchildren and all who study and teach receive tools that can change the entire field of education. Nevertheless, the rapid development of technology, at its depth, is inevitably accompanied by numerous risks and complexities, which are far more frequent than the discussions on political regulation and the necessary regulatory framework. There are some problems that need to be solved before AI can be fully integrated into the higher education system, where comprehensive research from various points of view (social, economic, ethical, legal) on the implementation of AI technologies in education is of particular relevance. While the benefits of AI in higher education are significant, there are also challenges that need to be addressed. Some of these challenges include:

1. **Cost**

The implementation of AI in higher education requires significant investment in technology and infrastructure. Educational institutions may not have the financial resources to invest in AI systems and tools, which can limit their ability to take advantage of the benefits of AI.

2. **Data Privacy and Security**

The use of AI systems in higher education involves collecting and analysing large amounts of student data, including personal information, academic performance, and learning preferences, raising concerns about data privacy and security. This data must be protected from unauthorized access and theft, which can pose a challenge for educational institutions that may not have the necessary resources and expertise to ensure data privacy and security. Institutions must ensure that student data is protected and AI systems are secure.

3. **Bias and Fairness**

AI systems are only as good as the data they are trained on. If the data used to train an AI system is biased, the system may produce biased results, which can perpetuate existing inequalities and discrimination in higher education.

4. **Ethical Considerations**

AI systems may raise ethical concerns, such as using facial recognition technology and the potential for surveillance in the classroom. Educational institutions must ensure that the use of AI systems is in line with such ethical principles and values, as fairness, transparency, accountability, etc.

5. **Lack of Expertise**

AI technology is complex and requires expertise in computer science, data analysis, and Machine Learning. Educational institutions may not have the necessary expertise to develop and implement AI systems, which can limit their ability to take advantage of the benefits of AI.

6. Human Touch

While AI systems can enhance the efficiency and effectiveness of education, they cannot replace the human touch in education. Students still require interaction with teachers and peers to develop critical thinking, communication, and problem-solving skills, which are essential for success in the workforce.

DISCUSSIONS AND CONCLUSIONS

In summary, the advent of AI has resulted in significant paradigm shifts in the realm of higher education, effectively redefining the ways in which pedagogical practices and academic pursuits are executed. The utilization of AI technologies such as machine learning, natural language processing, and data analytics presents an opportunity to amplify different facets of higher education. These encompass personalized learning, student assistance, curriculum design, and administrative operations. The technologies possess the potential to enhance the availability, impartiality, and effectiveness of tertiary education, thereby rendering it more reachable and encompassing for varied communities of learners.

The influence of AI on higher education has been profound, attributable to the implementation of AI-powered tools and platforms that facilitate personalized and adaptive learning outcomes for students. Modern technologies have enabled the analysis of vast quantities of data to detect individual learning requirements, furnish personalized feedback, and tailor educational trajectories for students, resulting in improved academic outcomes. AI may offer the capacity to advance student support services, namely virtual advising and tutoring, fortifying student engagement and retention in the process.

Moreover, AI possesses the potential to innovate the process of curriculum development through the examination of student performance data, learning inclinations, and labour market tendencies, culminating in the formation of a pertinent and current curriculum. The implementation of this practice may serve as a means to assure that tertiary education establishments are adequately equipping their learners with the requisite competencies and expertise essential to adapt to the dynamic exigencies of the occupational landscape. Additionally, the implementation of AI-based administrative tools has the ability to optimize administrative activities such as enrolment management, scheduling, and grading, accordingly mitigating administrative workload and granting faculty additional time to prioritize their pedagogical and scholarly pursuits.

Notwithstanding the potential benefits of incorporating A in higher education, the utilization of this technology also entails moral and social deliberations. The issues encompassing data privacy, algorithmic bias, equity and fair distribution, as well as influence

on the workforce for individuals involved in the field of education constitute noteworthy concerns in the realm of technology. Higher education institutions must undertake conscientious consideration of these concerns and actively resolve them to guarantee the conscientious and ethical application of AI within the educational sector.

REFERENCES LIST

Barab, S., Thomas, M., Dodge, T., Carteaux, R., & Tuzun, H. (2009). Making learning fun: Quest Atlantis, a game without guns. Educational Technology Research and Development, 57(1), 1-22.

Bers, M. U., & Schmidt, D. (2019). Ethical and social implications of AI in education. Journal of Educational Technology Development and Exchange, 1(1), 1-22.

Chatterjee, S., & Bhattacharjee, K. S. (2020). Adoption of artificial intelligence in higher education: a quantitative analysis using structural equation modelling. Education and Information Technologies, 25(5), 3443–3463. https://doi.org/10.1007/s10639-020-10159-7

Chen, L., Li, Y., & Chen, Y. (2018). An intelligent agent for adaptive learning support. Journal of Educational Technology Development and Exchange, 1(1), 1-11.

Crossley, S. A., Lu, X., & McNamara, D. S. (2016). Automated writing evaluation: The case for a hybrid approach. Journal of Writing Research, 8(2), 179-200.

de Freitas, S., Oliver, M., & Conole, G. (2017). Personalising learning with technology. Routledge.

Domingos, P. (2015). A few useful things to know about machine learning. Communications of the ACM, 58(7), 78-87.

Edwards, T., Kiesmueller, A., & Lu, Y. (2020). Ethical considerations for artificial intelligence in education. Journal of Educational Technology Development and Exchange, 3(1), 1- 11.

Haldrup, M., Skov, M. B., & Lindberg, J. (2018). Virtual and augmented reality in education: A systematic review. Journal of Computer Assisted Learning, 34(5), 411-436.

Heilman, T., Smith, N. A., & Mitchell, J. (2016). Automated writing evaluation and the criterion online writing evaluation service. Journal of Writing Research, 8(2), 201-219.

Kim, Y., & Koedinger, K. (2019). Intelligent tutoring systems

Kirschner, P. A., Strijbos, J. W., Kreijns, K., & Beers, P. J. (2013). The social side of gaming in education. Educational Media International, 50(4), 257-272

Klimmt, C., Hefner, D., & Schramm-Klein, H. (2019). The role of virtual and augmented reality

in education: A meta-analysis. Journal of Computer Assisted Learning, 35(1), 1-26.

Koedinger, K. R., Corbett, A. T., & Perfetti, C. (2017). Intelligent tutoring systems. In Handbook of Educational Data Mining (pp. 1-15). Springer

Koedinger, K. R., Baker, R. S., Cunningham, K., Skogsholm, A., Leber, B., & Stamper, J. (2010). A data repository for the EDM community: The PSLC DataShop. Handbook of Educational Data Mining, 43, 43–56.

Kulkarni, C., Chen, Z., & Rosé, C. P. (2017). Automated essay scoring: A cross-disciplinary perspective. Cambridge University Press.

Liu, X., Chen, W., & Liang, Y. (2018). Automatic speech assessment in language education: A review. Journal of Computer Assisted Learning, 34(6), 453-471.

Norvig, P. R. (2021). ARTIFICIAL INTELLIGENCE: A Modern Approach, Global Edition.

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2016). Personalized learning through adaptive instruction: A study of student achievement in high school science. Journal of Educational Psychology, 108(3), 405-421.

Popenici, S., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. Research and Practice in Technology Enhanced Learning, 12(1). https://doi.org/10.1186/s41039-017-0062-8

Rose, C. P., Myers, K., & Cowles, S. (2012). Intelligent tutoring systems. In Handbook of Human-Computer Interaction (pp. 571-589). Springer

Wang, Q., Chen, W., & Liang, Y. (2013). A review of research on game-based learning. Educational Technology Research and Development, 61(1), 227-287.

Xiong, L., Ritter, S., & Chen, W. (2019). AI-supported personalized learning. Journal of Educational Technology Development and Exchange, 2(3), 1-17.

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? International Journal of Educational Technology in Higher Education, 16(1). https://doi.org/10.1186/s41239-019-0171-0

The article submitted and sent to review: 03/09/2022
Accepted for publication: 11/02/2023

MAIN COMPONENTS OF SCHOOL MANAGEMENT MODEL USING INFORMATION AND COMMUNICATIONS TECHNOLOGIES

DOI: 10.24234/miopap.v10i1.460

Lilit ANTONYAN, *PhD student Khachatur Abovian Armenian State Pedagogical University. Director of the school number 125 named after Smbat Byurat*
E-mail: antonyanlilit5@gmail.com
Narek ARAKELYAN, *Bachelor degree student at University of Massachusetts Lowell, USA*

ABSTRACT

This article is an attempt to cover the main components of ICTs'-based school management model, with special reference to the respective principles, styles, strategies, competencies, as well as their implementation and application mechanisms. An attempt is made to show how the content and functional characteristics of the mentioned components change during and as a result of the use of ICTs. The use of ICT in schools has become increasingly prevalent, and effective school management requires a comprehensive approach that integrates these tools into all aspects of operations. The article identifies the key components of this model, including communication systems, information management systems, learning management systems, and administrative management systems. The authors explore the benefits and challenges of implementing such a model and provide examples of successful applications. The efficiency of the proposed model is substantiated from the point of view of ensuring the organic connections of its components.

The purpose of the article *is to present analytically the main components of the school management model using ICTs.*

Methodology: *The methodological and theoretical framework derives from the management technology research (B.N. Gerasimov), educational information technology explorations (H.A. Gerbekov, S.K. Baichorova, M.S. Laipanova), school management system analyses (A. M. Moiseyev), innovative management technology research (A. S. Khasanova, A.A. Remnev, A.A. Tumabekova, Yu.V. Sorokopud, L.N. Kharchenko, A.H. Chalaeva), media education model research (A. . Fedorova, Chlisheva), and the identification of features of management models and styles (T. Bush, J. Quinn).*

The novelty of the article *is that it shows the content and functional changes of the components of the school management model that occur as a result of the use of ICTs. The main components of the school management model with the use of ICTs have been studied, their progress, which occurs as a result of the introduction and use of ICTs, has been revealed.*

Its results can be used by people involved in school management, teachers and students teaching at the pedagogic university.

Keywords: *organizational mechanism, strategic planning, diagnosis, forecasting, control function, organizational function, information environment, multimedia principle.*

INTRODUCTION

As known from Educational Sciences, the organizational forms of school management imply such relationships between management subjects (formal and informal, traditional and novel, direct and indirect), which are organized by the principles of interaction and equality, requiring consistency and stability, that are aimed at the fulfilment of specified goals.

The proposed model is dynamic because any individual organizational form has a number of key variables: composition of participants, time and place of holding, frequency and duration, purpose and objectives, expected results, types and methods of activities, distribution of roles, nature of interaction and communication flow of participants, norms and standards of interaction, conditions of education, etc.

The school management model using ICTs has a rather complex structure, because when creating it, both classic and alternative general management models, as well as school management models and those models in which ICTs are an important component / informational, communicative, were taken into account as much as possible, technologies/. It is obvious that management technologies are an important component of any management model.

THE AIM

The research aims to analyse the main components of the school management model based on ICTs, their content and functional characteristics, pursuing the genesis of school management theories from the ICT-in-the-field-application standpoints.

THE RESEARCH OBJECTIVES:

1. to compare traditional and alternative school management theories
2. to justify the importance of applying ICT in school management system,
3. to analyse the main components of proposed school management model from the standpoint of applying ICT.

THE METHODS APPLIED

The research has been conducted through historical-comparative, extrapolation, content and functional analysis methods.

THE HYPOTHESIS SET FORTH

The introduction and use of ICTs in the school management system will create more favourable conditions not only for management, organization of work of various departments, control, monitoring of educational work, if the persons in charge of the school management process try to invest ICTs equally in the processes of management and teaching, as well as education. ensuring not only horizontal but also vertical connections of management subjects and objects.

DISCUSSION

To manage, - wrote Fayol, - means to lead the enterprise to the goal, trying to make the best use of its resources, to ensure the correct progress in the implementation of the six main functions (forecasting, planning, organizing, managing, coordinating and controlling)" (Fajol, 1992).

The school management model through ICTs can be based on Bush's classification of management models, according to which educational organizations are divided into six subgroups or clusters: formal, collegial, political, subjective, ambiguous and cultural. Bush aligns the mentioned models with nine leadership styles (Bush, 2011, pp. 17-18). Accordingly, the nine management styles are managerial, participative, transformational, distributive, transactional, postmodern, emotional, contingent, and moral" (Bush, 2011, pp40-42). According to Bush, the formal model is hierarchical. In other words, the reputation of the head of the given institution is paramount. He is responsible for the implementation of all decisions of the institution.

A participative leadership style can facilitate the implementation of ICTs, as cooperation and a collegial decision-making approach are brought to the fore. The collegial model is also characterized by the style of division or equal distribution of power, which can also contribute to the implementation of ICTs. The implementation and application of ICTs can also be facilitated by the transactional style, since those managers who prefer this style are involved in unique constructive activities, cooperate with staff, and teachers, exchange their experience and tools.

Later, many authors repeatedly revised and supplemented this list of functions, including such functions as coordination, research, forecasting, accounting, analyses, motivation, decision-making, and coordination, etc.

In classical managerial approach, any management process includes six technologies:

1. - management by results,

2. - management based on needs and interests,
3. - management based on staff activation,
4. - management in exceptional/extraordinary/out-of-routine cases,
5. - management through constant checks and instructions,
6. - management based on "artificial intelligence" (Gerasimov, 2006, pp. 29-39).

MEDIA EDUCATION MODELS

From the point of view ICT implementation, the media education models are brought to the fore, which allow modelling the information space in educational activities (Fedorova A., Chlisheva, 2004, 34-40).

. The integration of educational technologies and ICTs includes the creation of an interactive mode in educational processes, enabling learners to act as independent subjects, and teachers – as consultants, partners, facilitators and/or supporters. The use of ICT in the field of school management can increase the quality of students' knowledge and the speed of assimilation of information. ICTs are successfully embedded with other traditional and alternative technologies in education.

They can help the school management staff to ensure the objectivity and completeness of the information fed, the consistency of its application, processing this information and identifying the deficiencies in management, as well as outlining the ways to correct them. ICTs might be helpful in developing the educational institution’s work strategy, correctly choosing the appropriate methods for solving managerial problems, effectively using resources (human, material, technical, financial), evaluating the achievements of educational theory and practice as objectively as possible, with particular focus on final results of the educational institution’s mission and activities (quality in the "result"). At the same time, they might also be used for optimising achievements and studying the dynamics of development at institutional level (Slastjenin, Isajev, Mischenko, 2002).

For strategic school management, many types of organizational structures known in science and practice are used in various combinations: linear, functional, headquarters, departmental, programmatic, project, and matrix.

The school management model through ICTs stems from the idea that the organizational forms of school management are likely to change functionally and substantively.

The organizational mechanism of school management: The organizational mechanism of management in the school management model via ICTs is a priority highlighted since it refers to the most important component in school management system: it determines the procedures for performing school management functions. The content analysis of school

management's organisational mechanisms allows getting a clear idea of specific entities within school management, the scope of their activities, their interaction content, the organizational structure, and clarifying the methods, means, forms, and management resources to be used both in school management and educational work.

If the real process of school management can be understood as the reproduction, implementation and deployment of the appropriate organizational mechanism, as a working mechanism, then the organizational mechanism itself can be legitimately considered as an internal logic, an idea of this process, which leads to the establishment of an organic connection of the components of the management system.

At the same time, different organizational mechanisms of school management differ significantly from each other in their potential and results, and the overall effectiveness and quality of such a management system are determined primarily by the quality of implemented organizational mechanisms.

The organizational mechanism, to some extent, depends on the personal characteristics of those involved in its development and implementation; however, it is formed and constitutes the basis of a real process, acquiring a suprapersonal nature.

The general organizational mechanism can be understood as a set of separate elements of the logical structure of the management process, private mechanisms for the implementation of its individual functions. Of greatest importance to understanding the organizational mechanism is the actual decision-making mechanism in the school.

The organizational mechanism can be realized and perceived by management subjects using it to different degrees. at a low level of awareness, it functions as spontaneously formed patterns and procedures of actions, at the highest level, it is a special result, the design and justification of a system with the possibility of further correction.

In the absence of system design and control system development, the organizational mechanism is shaped as a consolidation of current operation order, following the hierarchically imposed tradition and recommendations and, most likely, the mixed action of all the aforementioned possibilities.

As already mentioned above, ICTs contribute to the rapid formation of a cooperative, transparent school management environment.

The environment of the school management system implies the set of circumstances in a certain situational context that affects it and its activity (Moiseyev, 2019, pp.1-16).

Main functions of school management: It is known that the essence of management is revealed in its functions: analysis, planning, control, correction, diagnosis, forecasting. The basis of optimal control is pedagogical analysis, the content and orientation of which are

determined by specific goals and problems, which allows us to talk about different types of analysis: final, thematic, based on the results of the educational process, retrospective, parametric.

Implementation of in-school control is also an important condition for optimization of management activities. It is no coincidence that in popular models of school management, the control function comes to the fore.

It is noteworthy that the control function is characteristic of authoritarian, democratic, liberal, and educational school management models. Another question is how effectively the introduction of ICTs is carried out in schools managed by the mentioned models, because the introduction of the mentioned technologies accelerates first of all in schools that have chosen a democratic style of management. No one can deny that innovation is faster and more effective in a collaborative or management environment.

Especially important is the organizational function in the model of school management using ICTs, the essence of which is to support the creative initiative of teachers, provide them with support and create conditions for the development and implementation of adapted, modified or copyrighted programs, modern educational technologies. The head of the school, performing his organizational function, should have appropriate information competence" (Gubanikhina, 2016, pp.288-291).

The goal of providing comprehensive assistance to teachers in the sustainable improvement of professional skills is the methodological function of supervision.

The continuous clarification of the individual educational tracs of the students implies the constant correction of the goal, content and management methods of education, the clarification of the functions of the subjects involved in the management process, ensuring the continuous growth of the cognitive motivation of the students, and the constant improvement of the cooperative atmosphere.

The use of ICT creates a basis for clarifying the work of the school staff, the functions of the headmaster and his deputies. The headmaster, as presented above, can use ICT to control the educational process or the execution of his orders. Educational and financial informants collect and import data about students and employees of the institution into the database, present various reports, prepare draft orders, plan the educational process, make class assignments, etc. The latest ICT technologies help them analyze the educational course, certify teachers.

Creating the information environment of the school:

As already mentioned above, the creation of a modern information environment is a necessary condition for school management. "It includes the information centre, which includes

the library, the audio library, the video library, which perform the function of distributing information streams and connecting to the Internet for students and teachers, as well as parents" (Remnjev 2002, pp. 443-446).

At the organizational and managerial levels, the school management model ensures the implementation of the functions of the content and technologies of educational activities, the educational process (class list, occupancy of educational spaces, class allocation), personnel, and logistics management. The functions of this model include the use of information technology for diagnosis, the quality of education and the evaluation of the effectiveness of educational work.

It is fundamentally important for every leader to be able to predict the results of his leadership, to develop a strategy for further activities. At the current stage, it is difficult to imagine school management without developing an appropriate strategy. Moreover, it is also possible to develop a development concept of any educational institution based on the vision of future activities. It is necessary to develop several "working" scenarios. Simulation of scenarios can also be done quickly using ICT. According to L.A. Regush: "Pedagogical prediction is a multidimensional phenomenon. One represents the research process. The other is cognitive activity, which under certain conditions is oriented towards the future. In other words, cognition is based on description, explanation, diagnosis and, in the next stage, prediction" (Regush, 2003).

Main functions of school management:

It is known that the essence of management is revealed in its functions: analysis, planning, control, correction, diagnosis, forecasting. The basis of optimal control is pedagogical analysis, the content and orientation of which are determined by specific goals and problems, which allows us to talk about different types of analysis: final, thematic, based on the results of the educational process, retrospective, parametric (Gubanikhina, 2016, pp. 288-291).

Especially important is the organizational function in the model of school management using ICTs, the essence of which is to support the creative initiative of teachers, provide them with support and create conditions for the development and implementation of adapted, modified or copyrighted programs, modern educational technologies. The director of the school, performing his organizational function, should have appropriate information competence" (Gubanikhina, 2016, pp. 288-291).

The goal of providing comprehensive assistance to teachers in the sustainable improvement of professional skills is the methodological function of supervision.

The continuous clarification of the individual educational trajectory of the students implies the constant correction of the goal, content and management methods of education, the

clarification of the functions of the subjects involved in the management process, ensuring the continuous growth of the cognitive motivation of the students, and the constant improvement of the cooperative atmosphere.

The use of ICT creates a basis for clarifying the work of the school staff, the functions of the director and his deputies. The director, as presented above, can use ICT to control the educational process or the execution of his orders. Educational, educational, and financial informants collect and import data about students and employees of the institution into the database, present various reports, prepare draft orders, plan the educational process, make class assignments, etc. The latest ICT technologies help them analyse the educational course, certify teachers.

Creating the information environment of the school:

As already mentioned above, the creation of a modern information environment is a necessary condition for school management. "It includes the information centre, which includes the library, the audio library, the video library, which perform the function of distributing information streams and connecting to the Internet for students and teachers, as well as parents" (Remnjev, 2002, pp. 443-446).

At the organizational and managerial levels, the school management model ensures the implementation of the functions of the content and technologies of educational activities, the educational process (class list, occupancy of educational spaces, class allocation), personnel, and logistics management. The functions of this model include the use of information technology for diagnosis, the quality of education and the evaluation of the effectiveness of educational work.

It is fundamentally important for every leader to be able to predict the results of his leadership, to develop a strategy for further activities. At the current stage, it is difficult to imagine school management without developing an appropriate strategy. Moreover, it is also possible to develop a development concept of any educational institution based on the vision of future activities. It is necessary to develop several "working" scenarios. Simulation of scenarios can also be done quickly using ICT. According to L.A. Regush: "Pedagogical prediction is a multidimensional phenomenon. One represents the research process. The other is cognitive activity, which under certain conditions is oriented towards the future. In other words, cognition is based on description, explanation, diagnosis and, in the next stage, prediction" (Реруш , 2003).

"Technological innovations have a significant impact on the development of educational systems at all levels. Online courses, tutorials, educational programs, social media tools, and other new technologies are disrupting the traditional classroom environment. Understanding

the impact of technological innovations on students, teachers, and schools is essential to being a technologist in education

Strategies and competencies to implement and apply ICTs:

The school principal should develop an appropriate strategy for introducing and using school ICTs. For that, he must have a sufficient level of professional, reflexive, managerial, communicative, as well as technological competences. It is important that reflexive-professional, management-communicative competences are interconnected. It is not possible to achieve high results in the fields of professional activity and management, if the reflexive and communicative competences of the school principal and staff are not sufficiently formed and developed.

The solution to the problem of the continuous development of the IT competence of the school staff and teachers is also a difficulty.

"UNESCO pays special attention to the development of teachers' ICT skills. In 2011, UNESCO developed a framework of recommendations for ICT competence building for teachers, the so-called competences for lecturers or teachers. They are developed for all countries of the world. Work is currently underway to localize these recommendations for each country. The new generation of children, the inhabitants of the digital society, UNESCO attaches special importance to the work aimed at the formation of ICT competence of teachers" (Tokareva, 2019, pp.519-521).

Thus, by including ICT in educational work, learners are formed

- moral competences, which implies living according to traditional moral laws,
- communicative competences, which implies the ability to engage in dialogue, to listen,
- information competences, which implies knowledge of information technologies,
- autonomy competencies, which implies the ability to self-determine and self-educate, competitiveness,
- social competences, which implies the ability to act in society, taking into account the goals of other people" (Gerbekov, Bajcharova, Lajpanova, 2017, pp.233-238).

Thus, it can be concluded that ICTs are used insufficiently in the process of school management. The reasons are different. Sometimes the number of modern computers is not enough. Sometimes software issues are not resolved in time. In many cases, the principal, vice-principals, and teachers do not provide a sufficient level of IT competence.

It should be noted that the professional competence of the head of the educational institution and ICT competence are directly interrelated. It follows from what has been said that the ability to use ICT technologies is at the core of the professional competence of the school director.

CONCLUSIONS

An important component of school management with the use of ICTs are management styles: managerial, participative, transformative, distributive, transactional, postmodern, emotional, casual and moral, as well as classical management technologies.

From the point of view of ICTs, especially media education models are brought to the fore. ICTs help to develop the educational institution's work strategy, correctly choose the appropriate methods for solving management problems, effectively use resources. The organizational mechanism of management in the school management model with the use of ICTs is highlighted, the essence of which is revealed in its functions: analysis, planning, control, correction, diagnosis, prognosis.

In general, the optimal model of school management through ICTs includes modern principles of education management, traditional and modern innovative technologies of school management, school management styles, strategies, professional, communicative, reflexive, as well as information technology competencies of the persons organizing school management, various school control mechanisms of units, monitoring processes.

The principles of rational combination of centralization and decentralization, collegiality and administration, multimedia, personalization, feedback, inspection are also important components.

An important component of the modern school management model is the personal reflexive-professional, management-communicative, as well as moral, communicative, informative, autonomy, social competencies of the students involved in its management.

REFERENCE LIST

Bush, T. (2011). THEORIES OF EDUCATIONAL LEADERSHIP AND MANAGEMENT. *Sage*

Fayol, H. (1924). ADMINISTRATION INDUSTRIELLE ET GÉNÉRALE [GENERAL AND INDUSTRIAL MANAGEMENT] (A. BERTRAND, TRANS). *Dunod. (Original work published 1916).*

Fedorova, A., & Chlisheva, I. (2004). MEDIAOBRAZOVANIE V SOVREMMENNOJ ROSSII: OSNOVNIE MODELI [MEDIA EDUCATION IN MODERN RUSSIA: MAIN MODELS]. *Visshee obrazovanie s Rossii, (8), 34-40.*

Filina, A. G. (2019). SODERZHANIE I STRUKTURA INFORMATSIONNOY KOMPETENTNOSTI RUKOVODITELEY OBRAZOVATELNYKH ORGANIZATSIY [THE CONTENT AND STRUCTURE OF INFORMATION

COMPETENCE OF EDUCATIONAL ORGANIZATION LEADERS]. *Molodoj uchenij, (20), 519-521.*

Gerasimov, B. N. (2006). TECHNOLOGII UPRAVLENIA: KLASSIFIKACIA, PROEKTIROVANIE, TREZULTATI [MANAGEMENT TECHNOLOGIES: CLASSIFICATION, DESIGN, RESULTS]. *Vest. Mir, vip,ch.1, 29-39.*

Gerbekov, Kh. A., Bajcharova, S. K., & Lajpanova, M. S. (2017). INFORMATSIONNYE TEKHNOLOGII V OBUCHENII [INFORMATION TECHNOLOGIES IN EDUCATION]. *Vestnik RUDN. Seria: Informatizatsiya obrazovaniya, 14(2), 233-238.*

Gubanikhina, E. B. (2016). SPECIFIKA DEJATELNOSTI RUKOVODITELJA V SISTEME UPRAVLENIA SOVREMENNOJ OBRAZOVATELXNOJ ORGANIZACIEJ [SPECIFICITY OF THE ACTIVITIES OF A MANAGER IN THE SYSTEM OF MANAGEMENT OF A MODERN EDUCATIONAL ORGANIZATION]. *Molodoj uchenij, (20), 288-291.*

Khasanova, A. S. (2021). PEDAGOGICHESKIE INNOVATSIONNYE TEKHNOLOGII V OBRAZOVATEL'NOM UCHREZHDENII (SHKOLA) [PEDAGOGICAL INNOVATIVE TECHNOLOGIES IN AN EDUCATIONAL INSTITUTION (SCHOOL)]. *Molodoi uchenyi, 2(344), 207-209. Retrieved from https://moluch.ru/archive/344/77324/ (Accessed October 29, 2022).*

Moiseyev, A. M. (2019). KOMPONENTY SISTEMY UPRAVLENIYA SHKOLOJ [COMPONENTS OF SCHOOL MANAGEMENT SYSTEM]. *Pedagogika: Istoriya, perspektivy, 2(5), 1-16.*

Quinn, J. (1980). MANAGING CHANGE (EDS.). *Buckingham, UK: Open University Press.*

Regush, L. A. (2003). PSIKHOLOGIA PROGNOZIROVANIA [PSYCHOLOGY OF FORECASTING]. *Saint Petersburg: Rech.*

Remnjev, A.A. & Tumabekova, A.A. (2002). INOVATSIONNYY PODKHOD K UPRAVLENIYU SHKOLOY V SOVREMENNYKH USLOVIYAKH [INNOVATIVE APPROACH TO SCHOOL MANAGEMENT IN MODERN CONDITIONS]. *Materialy Vserossiyskoy nauchno-prakticheskoy konferentsii "Organizatsionnye innovatsii v upravlenii integrirvannymi obrazovatel'nyimi uchrezhdeniyami" [Proceedings of the All-Russian scientific-practical conference "Organizational innovations in management of integrated educational institutions"], (2), 443-446.*

Slastenin, V. A., Isayev, I. F., & Mishchenko, E. (2002). PEDAGOGIKA [PEDAGOGY]. *Moscow: Izdatelskiy tsentr "Akademiya".*

Tokareva, N. G. (2012). NEKOTORYE REZULTATY PROEKTA IITO JUNESKO «IKT V DOSHKOLNOM OBRAZOVANII» [SOME RESULTS OF THE UNESCO IITE PROJECT "ICT IN PRESCHOOL EDUCATION"]. *Sbornik materialov Ezhegodnoi mezhdunarodnoi nauchno-prakticheskoi konferentsii «Vospitanie i obuchenie detei mladshego vozrasta», (1). URL: https://cyberleninka.ru/article/n/nekotorye-rezultaty-proekta-iito-yunesko-ikt-v-doshkolnom-obrazovanii (accessed on: 13.09.2020).*

The article submitted and sent to review: 24/10/2022
Accepted for publication: 11/02/2023

ORGANIZATIONAL CULTURE AND ITS IMPORTANCE FOR THE EFFECTIVENESS OF EDUCATIONAL ORGANIZATION AND THE PSYCHOLOGICAL WELL-BEING OF STUDENTS

DOI: 10.24234/miopap.v10i1.461

Nadezhda KLYUEVA, *Doctor of Psychological Sciences, Professor, Head of the Department of Counselling Psychology, P.G. Demidov Yaroslavl State University*
E-mail: nadejda@uniyar.ac.ru
Galina ULANOVA, *Vice-Rector of the Institute for the Development of Education for Educational Activities at the State Autonomous Institution of Additional Professional Education of the Yaroslavl Region*
E-mail: ulanova@iro.yar.ru

ABSTRACT

The article is devoted to the influence of the organizational culture of an educational organization on the objective indicators of its effectiveness and the psychological well-being of students in the example of schools in the city of Yaroslavl. A comparative analysis of the effectiveness of educational organizations with a predominance of types of personality and power cultures is presented. The conclusion is made about the existing potential for the formation of the psychological well-being of students in all the presented types of organizational cultures.

In the context of these cultures, the authors consider such components of the psychological well-being of students as self-esteem, anxiety, motivation, success and academic success. Differences in the level of satisfaction with the education received among students were revealed depending on the objective indicators of the effectiveness of schools and the prevailing type of organizational culture. The possibilities of positive psychology and resource approach for the formation of psychological well-being at school are indicated.

Keywords*: organizational culture, psychological well-being, the effectiveness of the educational organization, adaptability, learning culture, student engagement.*

One of the main value orientations of modern education is the formation of a personality capable and motivated for self-education and self-development.

Achieving this goal is possible only when creating an environment in educational organizations that will contribute to a sense of psychological comfort, and increase the psychological well-being of students.

At the same time, if conditions for psychological comfort are not created in the educational environment, then students experience a decrease in educational motivation, and an increase in anxiety, which affects educational results, as well as the development of the individual as a whole (Petrova, G. M. (2015). In addition, the results of previous studies indicate the importance of maintaining the psychological well-being of the teacher, as the subject of the educational process, which has the greatest impact on the development of students (Laktionova, E. B., Baeva, I. A., Orlova, A. V., Kondakova, I. V., & Tuzova, A. S., 2020).

Any educational organization is, first of all, an organization with its own unique and inimitable type of organizational culture (hereinafter referred to as OK), which also acts as one of the factors that form the psychological well-being of students.

An empirical study of the state of OK in the schools of Yaroslavl was based on R. Harrison's typology (power culture ("orders"), role culture, task culture and personality culture).

The obtained results indicate that all four types are present in the urban education system with a predominance of personality culture.

The research is aimed at showing the OK educational organizations' influence on some aspects of schoolchildren's psychological well-being (Skvortsov, V. N., & Avdienko, G. Y. 2018), (Ulanova, G. A., 2015), (Ulanova, G. A., 2017).

Let us present some of the results of the study on specific examples of city schools in Yaroslavl. In MOU "Secondary School No. 55" the culture of personality prevails. In MOU "Secondary School No. 87" - a culture of power.

The main features of the first organization are the lack of stable formal and informal, professional communications between the employees of the organization, great variability in the levels of personal and professional achievements, and the highest value is the teacher's autonomy.

Comments of teachers: "the educational process is aimed at the comprehensive development of the personality of students", "the main task of the teaching staff is to prepare an independent, inventive graduate adapted to the adult life", "the teachers' primary task is to teach students to set specific goals and achieve them."

The second organization is characterized by the formal power of the leader and informal authority.

Teachers' comments: "the administration and teachers are guided by the needs and requirements of students in choosing education priorities", "the teaching staff will like a teacher with a higher education only", and "much will change for the worse if the director leaves the school", "the high authority of the director – a decisive condition for effective work".

When considering the issue of the effectiveness of an educational organization, it is

necessary to take into account objective performance indicators.

The objective indicators of the effectiveness of the school are the results of students obtained during the passage of the state final certification in grades 9 (hereinafter referred to as the MSE) and 11 (USE), All-Russian testing works (hereinafter referred to as RTW) and participation in school-subject-based quizzes and competitions. The safety of the contingent and the reliability of the results during independent verification work are also considered. Based on these data, the overall integral indicator is calculated. On its basis, the overall rank of the educational organization is built.

Table 1

Objective indicators of school performance

Place	Culture type	USE	MSE	RTW	Contingent Security	Olympiads	Reliability	General Integral Index	RANK
1	Power culture	80	173	160	67	43	93,33	53,90	140
2	Personality culture	146	170	13	84	101	151,83	46,47	235

According to the presented data, the rank of the school where the culture of power prevails is higher than that of the school with the prevailing culture of personality. At the same time, the percentage of students who are satisfied with their education in the culture of the "order" is higher than in the culture of the individual (87.06% and 42.11%, respectively).

Table 2

Satisfaction with education (subjective assessment of students)

Place	Culture type	Percentage of students satisfied with the education
1	Power culture	87,06
2	Personality Culture	42,11

The purpose of the study is to identify the relationship between the psychological well-being of students and objective indicators of the effectiveness of educational organizations, depending on the type of organizational culture.

At the moment, the question of the relationship between the culture (environment) of an educational organization and objective indicators of its effectiveness remains little studied.

Previously, experts considered only some of the personal characteristics of students in the context of a particular educational culture.

The most studied, in our opinion, is the question of the relationship between objective performance indicators of the organization and the level of anxiety of students. V. I. Lobacheva considers the average level of anxiety as a positive factor influencing the successful preparation of students for USE, and high and low levels as negative factors preventing the successful passing of final exams (Kuznetsova, N. V., & Sherstyankina, N. P., 2016).

According to the results of the study of the psychological well-being of students of the schools we named five components: self-esteem, anxiety, motivation, success and educational success, it can be seen that the values of self-esteem and motivation are almost the same (Fig. 1). Differences were found in the indicator "anxiety".

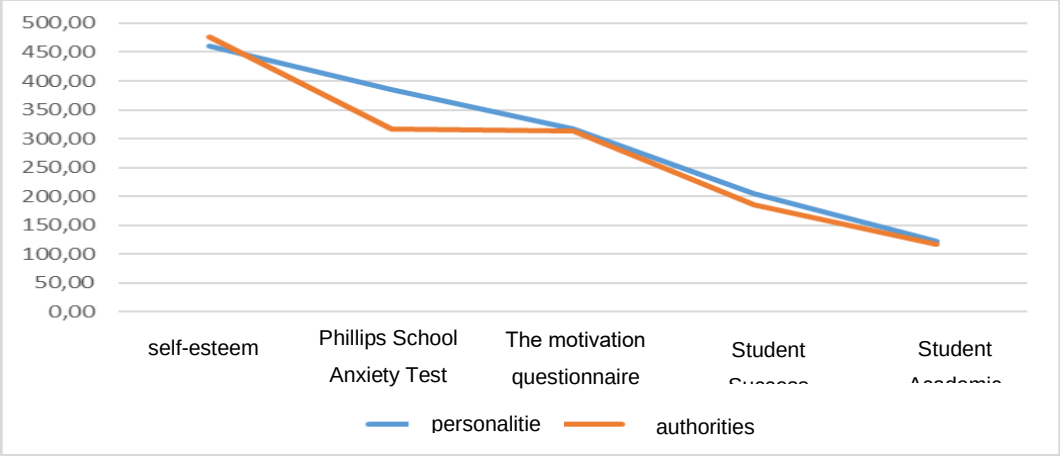


Figure 1. Indicators of the psychological well-being of students

The value of the Phillips test of school anxiety in a school where the type of OK "personality culture" is expressed is 385.27, and in a school with a predominant culture of power - 316.55.

Thus, the results obtained in our study related to the manifestation of anxiety at school correlate with the results of the study by V.I. Lobacheva.

M. N. Shvetsova and E. O. Barysheva conclude the relationship between student self-esteem and the level of exam anxiety (Usoltsev, A. N., Shamalo, T. N., & Antipova, E. A. 2020). Based on their results, it can be assumed that there is a relationship between the characteristics of self-esteem, the level of anxiety and the effectiveness of exam tasks. Based on their results, it can be assumed that there is a relationship between the characteristics of self-esteem, the level of anxiety and the effectiveness of exam tasks.

Despite the diagnostic value of objective indicators of the effectiveness of an educational

organization, we would also like to emphasize the importance of subjective indicators, namely, the level of satisfaction with education.

The results obtained indicate that in a school with a predominance of the "order" culture, there are higher objective indicators of the effectiveness of training, and students of this educational organization are more satisfied with education.

The data obtained may be related to one of the characteristic features of the “order” culture, in which the administration of the institution and teachers are guided by the needs and requirements of students in choosing education priorities, which is directly related to satisfaction with the process of education of students.

There is a need for additional research for a more detailed study of this phenomenon.

A significant task is the practical use of the results of our empirical study. When creating an educational environment that ensures the formation of the psychological well-being of students, we rely on the ideas of positive psychology and the resource approach.

It is in positive psychology that much attention is paid not only to the achievement of educational results and socialization but also to the psychological well-being of students, the development of their virtues, resilience, the skills to establish positive interpersonal relationships and internal motivation.

Russian psychology presents different points of view on the concept of "resources". Coping resources are characterized as opportunities and means of coping with stress (V.A. Bodrov, T.L. Kryukova, R. Lazarus, E.A. Petrova, S.A. Khazova, S. Hobfall). There is a point of view on resources as a special organization of mental properties and the structure of their connections (V.N. Druzhinin, D.A. Leontiev, M.A. Kholodnaya, S.A. Khazova, etc.).

A relationship has been established between personal resources and the psychological well-being of the individual (E.V. Drapak, T.Yu. Ivanova, N.V. Klyueva, E.G. Runovskaya, etc.). Personal resources are considered by us as flexible personality traits that have a lifetime genesis and are amenable to correction and development. (Ulanova, G. A., Klyueva, N. V., & Nazarova, I. G., 2019)

The attention of the school psychologist, first of all, is concentrated on the following resources of students: the ability for personal identification; formation of a positive life scenario, significant life goals, internal locus of control; students learning flexible and diverse behavioural strategies

To form the psychological well-being of students, a psychologist needs to solve a set of tasks:

- the creation of a psychologically safe environment, a network of social support, values of acceptance, and respect in an educational organization. The solution to this problem

involves the use of organizational development technologies and management consulting by psychologists (Klyueva, N. V. (Ed.), 2003).

- raising awareness of the leaders of the educational organization, and teachers about the signs of the psychological well-being of students, and ways to respond to stressful crises that manifest themselves in the lives of schoolchildren. The solution to this problem involves the use by a psychologist of methods of active socio-psychological training (various types of training, interactive lectures and seminars, group and individual coaching) and mastery of methods of moderation and facilitation (Klyueva, 1985).

- development by students of methods of actualization and management of personal resources. To solve this problem, it is possible to use practices that contribute to the development of neuroplasticity of the brain (neurotics), conduct psychological marathons, and individual and group consultations on topics that are significant for students.

The methods used by the psychologist can be considered as an opportunity for dialogue with the leaders of the educational organization, teachers and students, for a unique emotional and personal contact with him. “The main thing is not to turn a living person into a soulless “test subject”(Bratchenko, S. L., 1997).

REFERENCE LIST

Bratchenko, S. L. (1997). DIAGNOSTIKA LICHNOSTNO-RAZVIVAYUSHCHEGO POTENTSIALA: METODICHESKOE POSOBIE DLYA SHKOL'NYKH PSIKHOLOGOV [ASSESSMENT OF PERSONALITY-DEVELOPMENTAL POTENTIAL: METHODOLOGICAL MANUAL FOR SCHOOL PSYCHOLOGISTS]. *Pskov, Russia: n.p.*

Klyueva, N. V. (1985). Tekhnologiya raboty psihologa s uchitelem [Technology of work of a psychologist with a teacher]. *Sphera*.

Kuznetsova, N. V., & Sherstyankina, N. P. (2016). KRITERII OTSENKI I DINAMIKA CHISLENNOSTI VYSOKOKVALIFITSIROVANNYKH KADROV V ROSSII [CRITERIA FOR EVALUATING AND DYNAMICS OF THE NUMBER OF HIGHLY QUALIFIED PERSONNEL IN RUSSIA]. *Upravlenets, (1), 37.*

Laktionova, E. B., Baeva, I. A., Orlova, A. V., Kondakova, I. V., & Tuzova, A. S. (2020). ROL' OBRAZOVATEL'NOY SREDY V PSIKHOLOGICHESKOM BLAGOPOLUCHII UCHASCHIKHSYA SPETSIALIZIROVANNYKH I OBSHCHEOBRAZOVATEL'NYKH SHKOL [THE ROLE OF THE

EDUCATIONAL ENVIRONMENT IN THE PSYCHOLOGICAL WELL-BEING OF STUDENTS IN SPECIALIZED AND GENERAL EDUCATION SCHOOLS]. *Izvestiya Rossiyskogo gosudarstvennogo pedagogicheskogo universiteta im. A.I. Gertsena, (197), 31-41.*

Petrova, G. M. (2015). UPRAVLENIE RAZVITIEM ORGANIZATSIONNOY KUL'TURY SHKOLY [MANAGING THE DEVELOPMENT OF THE ORGANIZATIONAL CULTURE OF A SCHOOL]. *Municipal'noe obrazovanie: innovatsii i eksperiment, (2), 9-13.*

Klyueva, N. V. (Ed.). (2003). PEDAGOGICHESKAYA PSIKHOLOGIYA: UCHEB. DLYA STUD. VUZOV [EDUCATIONAL PSYCHOLOGY: TEXTBOOK FOR UNIVERSITY STUDENTS]. *Moscow: Izd-vo VLADOS-PRESS.*

Skvortsov, V. N., & Avdienko, G. Y. (2018). SOCIALNO-PSIKHOLOGICHESKAYA KOMFORTNOST' OBRAZOVATEL'NOY SREDY VUZA KAK ODIN IZ KRITERIEV OTSENKI KACHESTVA OBRAZOVANIYA [SOCIAL AND PSYCHOLOGICAL COMFORT OF THE EDUCATIONAL ENVIRONMENT OF THE UNIVERSITY AS ONE OF THE CRITERIA FOR ASSESSING THE QUALITY OF EDUCATION]. *Psychology of Education and Educational Psychology: Theory and Methodology, 5-13.*

Ulanova, G. A. (2015). O VZAIMOSVYAZI ORGANIZATSIONNOY KULTURY AFEKTIVNOGO KOMPONENTA PSIKHOLOGICHESKOGO BLAGOPOLUCHIYA UCHASHCHIKHSYA (NA PRIMERE DETEY MLADSHEGO SHKOLNOGO VOZRASTA) [ON THE RELATIONSHIP BETWEEN ORGANIZATIONAL CULTURE AND THE AFFECTIVE COMPONENT OF THE PSYCHOLOGICAL WELL-BEING OF STUDENTS (USING THE EXAMPLE OF YOUNGER SCHOOL-AGE CHILDREN)]. *Prioritety mirovoy nauki: eksperiment i nauchnaya diskussiya. Materialy VIII mezhdunarodnoy nauchnoy konferentsii, 183-187. Nauchno-izdatelskiy tsentr «Otkrytie».*

Ulanova, G. A. (2017). ORGANIZATSIONNAYA KULTURA OBRAZOVATEL'NOY ORGANIZATSII KAK FAKTOR PSIKHOLOGICHESKOGO BLAGOPOLUCHIYA UCHASHCHIKHSYA [ORGANIZATIONAL CULTURE OF THE EDUCATIONAL ORGANIZATION AS A FACTOR OF PSYCHOLOGICAL WELL-BEING OF STUDENTS]. *Obrazovanie lichnosti, (4), 53-58.*

Ulanova, G. A., Klyueva, N. V., & Nazarova, I. G. (2019). SOTSIAL'NO-

PSIKHOLOGICHESKOE I ORGANIZATSIONNO-UPRAVLENCHESKOE SOPROVOZHDENIE PSIKHOLOGICHESKOGO BLAGOPOLUCHIYA OBUCHAYUSHCHIKHSYA SHKOL [SOCIAL-PSYCHOLOGICAL AND ORGANIZATIONAL-MANAGEMENT SUPPORT OF STUDENTS' PSYCHOLOGICAL WELL-BEING IN SCHOOLS]. *Vestnik Kostromskogo gosudarstvennogo universiteta. Seriya: Pedagogika. Psikhologiya. Sotsiokinetika, (3), 66-71.*

Usoltsev, A. N., Shamalo, T. N., & Antipova, E. A. (2020). DIAGNOSTIC PURPOSES OF EDUCATION: PROBLEMS, STRATEGIES AND SOLUTIONS. *Education I Science. https://doi.org/10.17853/1994-5639-2020-8-11-40*

The article submitted and sent to review: 01/11/2022
Accepted for publication: 14/03/2023

THE STATES OF DISTANCE TRAINING IN THE UNIVERSITY EDUCATION SYSTEM

DOI: 10.24234/miopap.v10i1.462

Susanna SISYAN, *PhD of Pedagogical Sciences, Associate Professor, Lecturer. Chair of Pedagogy, Armenian State Pedagogical University after Kh. Abovian. Yerevan, Republic of Armenia*

E-mail: sisyansusanna40@aspu.am

Greta HAKOBYAN, *PhD of Pedagogical Sciences, Associate Professor, Lecturer. Chair of Pedagogy Armenian State Pedagogical University after Kh. Abovian, Yerevan, Republic of Armenia*

E-mail: hakobyangreta49@aspu.am

Arusyak HOVHANNISYAN, *PhD of Pedagogical Sciences, Associate Professor, Lecturer. Chair of Pedagogy, Armenian State Pedagogical University after Kh. Abovian, Yerevan, Republic of Armenia*

E-mail: hovhannisyanarusyak40@aspu.am

Izabella BABAYAN, *PhD of Pedagogical Sciences, Associate Professor, Lecturer. Chair of Pedagogy, Armenian State Pedagogical University after Kh. Abovian, Yerevan, Republic of Armenia*

E-mail: babayanizabella40@aspu.am

ABSTRACT

Today's education faces modern challenges in the context of profound methodological and content changes in the world. Global realities have a fundamental impact on education processes, research and projected outcomes. As a result of the COVID-19 pandemic and thanks to the development of information technologies, the learning process of higher education is currently organized in a hybrid manner, with combination of face-to-face and distance learning modalities. We were somewhat prepared for it, because yet in 2010, the Government of Armenia had adopted a decision to approve the procedure for distance learning of Higher, Postgraduate and Vocational education specialties (Government of the RA – Hayastani Hanrapetutyun karavarutyan voroshumy. 2010).

In order to understand the current issues of distance education and aiming to help to improve the process in the context of hybrid education, we conducted research and explored the process of organization of distance learning from different perspectives, tested its effectiveness and identified various problems at Khachatur Abovian Armenian State Pedagogical University.

Keywords: *education challenges, research, distance learning, hybrid education, advantages of distance education, disadvantages of distance education, conceptual approach, e-course, media platform, e-learning technologies.*

INTRODUCTION

The objective of our current research was to study the state of distance learning in the context of hybrid education at higher educational system and particularly:

- to determine the positive or negative phenomena recorded during the distance learning;
- to identify the main difficulties faced by the teachers and students;
- to identify the problems that arise during the online classes;
- to evaluate the opportunities of the media platform operating today;
- to determine in which cases, it may be preferable to live meetings;
- to point out sensible ways of organizing online learning and media tools;
- to develop practical suggestions.

We were also interested in the views of the research participants on the effectiveness of education due to distance work.

LITERATURE REVIEW

Now there are various theoretical and conceptual approaches discussing distance learning, its challenges and opportunities. Some of the most pressing issues in online education were published back in 2008 in the collection of essays, edited by Terry Anderson "The Theory of Practice for Online Education". *In the essay* "Understanding e-Learning Technologies-in-Practice through Philosophies-in-Practice" *Heather Kanuka*, the academic director of the University Teaching Services at the University of Alberta, lists a number of issues related to the effectiveness of distance education. E-learning technologies can effectively respond to accelerating global competition (Daniel, 2000), increase the quality of learning experiences remove situational barriers and be more cost effective (Twigg, 2003). Based on these investigations, commonly cited advantages of e-learning technologies include an ability to provide just-in-time learning; increased access; elimination of time constrains, locational and situational barriers; cost effectiveness; greater accountability; increased interaction; provision of future employment skills for students and effective support for lifelong learning (Garrison, D. R., 2003).

D. Garrison's comprehensive research "E-learning in the 21st Century" (2003) provides practical models for educators to use the full potential of e-learning (Simpson O. 2003). A unique feature of the book is that the authors focus less on the ever-evolving technologies and

more on the search for an understanding of these technologies from an educational perspective. In Pascal Roubides's research, a broader view of distance learning is offered, allowing perspectives about distance learning, its potential, challenges, and specific outcomes of some distance learning implementation to be voiced (Roubides P., 2017). Ormond Simpson in his book “Student Retention in Online, Open and Distance Learning” reveals the organizational problems of distance education and outlines strategies for increasing student retention, providing useful case studies and examples to illustrate how these strategies can change institutional policy and practice (Sarkisyan, A.T., 2016).

In November 2015 Armenian State Pedagogical University after Kh. Abovian signed an agreement with Google to use the classroom platform of the “Google for Education” application in the e-learning courses for all educational programs. Today, thanks to the electronic platform, all students of the existing system of ASPU have the opportunity:

- to receive all educational materials in advance in electronic format.
- to communicate with the lecturer directly through e-mail.
- to complete part of the current tasks through the e-course.
- to have an unlimited amount of virtual space on google drive to store educational materials. 5. to receive interactive additional electronic materials about the lesson in the form of links, videos and slideshows.
- to have a personal email address on google mail platform in a common **aspu.am** domain,
- to participate in online social surveys in order to improve the quality of education. (Anderson T., 2008).

However, ASPU does not stop at these achievements and continues to work on ensuring the content and quality of course materials on the electronic platform. This innovative platform for e-courses provide students and professors of ASPU with new opportunities to make courses more interactive and accessible.

MATERIALS AND METHODS

With a view to explore the process of organization of distance learning from different perspectives, to test its effectiveness and to identify various problems, and to help improve the process in the context of hybrid education at the University, we conducted research, with using 2 types of methodological tools: focus group interview and questionnaire. We invited different representatives of the field of education to the Focus group interview: 7 lecturers teaching at different faculties of the ASPU, 2 educational experts and 3 teachers from different schools (12 specialists in total).

Following the Focus group interview, a questionnaire was developed consisting of 10 questions, to which 62 undergraduate and graduate students from 10 faculties of the university were asked to answer. The obtained data was analysed and its results were evaluated, generating constructive conclusions and recommendations. Now let's analyse and represent some interesting answers of the students:

The novelty of our research is the following: For the first time we have analysed and presented the experience of distance education in the university education system and as a result of the obtained research data, were revealed the achievements and gaps in the organization of that process. Improvement suggestions were also made.

All of the Focus group representatives, due to their work experience, knew the topic under discussion and could represent competent opinions, contributing to the implementation of the research and the solution of the given problem. We didn't seek to reach an agreement through this discussion, the aim was to get information from different respondents about the various aspects of distance education. The participants commented on the registered advantages and disadvantages of distance education. Their answers revealed to what extent the duration of the classes is sufficient to learn new educational material, and especially which methodological tools are making the classes more effective. The interview pointed out what is particularly harmful to the effectiveness of education due to distance learning, identified the main difficulties and problems that the teachers and students had faced during the online classes, assessed the opportunities of the media platforms operating in the ASPU and generally in the educational system of Armenia today.

Different opinions were raised regarding to cases, when distance learning may be preferred to face-to-face meetings. In order to organize online classes more effectively, the professors suggested organizing seminars, courses and trainings, inter-university thematic discussions for improving one's own knowledge in the field of mastering media tools, etc. In the concluding part of the focus group interview, education experts pointed out reasonable ways of organizing online learning and media tools, which we will represent you in our conclusions.

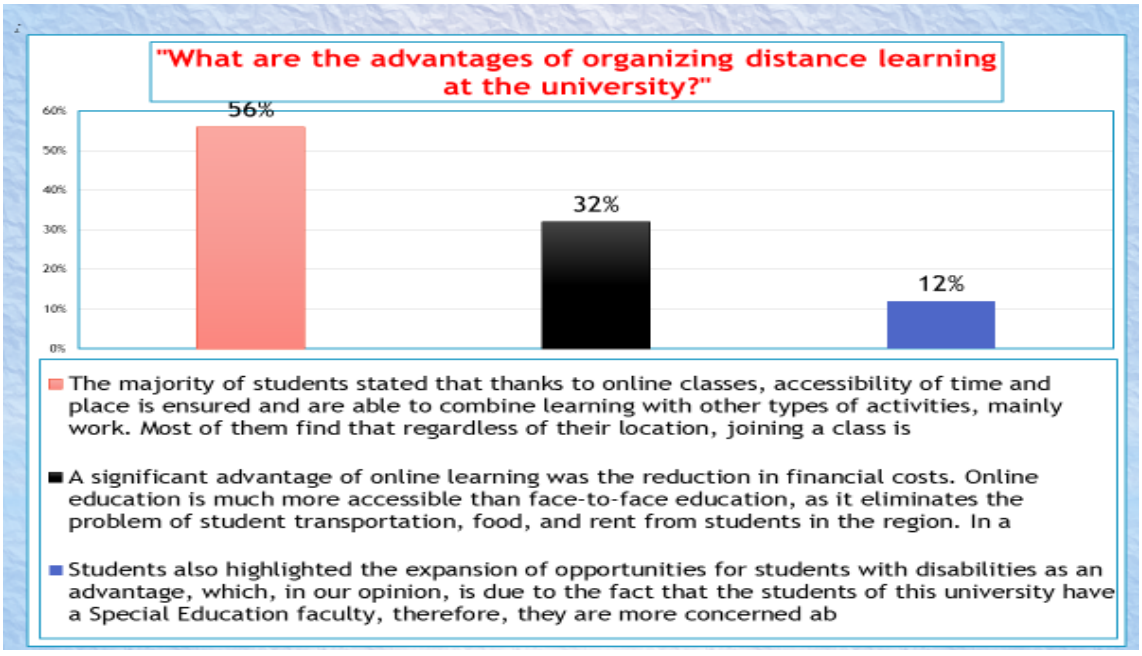
Following the focus group interview, a Questionnaire was developed consisting of 10 questions, to which 62 undergraduate and graduate students from 10 faculties of the university were asked to answer. The obtained data was analysed and its results were evaluated, generating constructive conclusions and recommendations. Now let's analyse and represent some interesting answers of the students:

To the 1-st question "What are the advantages of organizing distance learning at the university?", the majority of students (56 %) stated, that thanks to online classes,

accessibility of time and place is ensured and they are able to combine learning with other types of activities, mainly work. Most of them find that regardless of their location, joining a class is an advantage and it helps them to save time. However, our observations allow us to state that either work or education can suffer in this case.

As a significant advantage of online learning 32% of students pointed the reduction in financial costs. Online education is much more accessible than face-to-face education, as it eliminates the problem of student transportation, food and rent for students from the the regions. In addition to these, teachers send the study materials by e-mail, so there is no need to buy books or print them. 12 % of students highlighted the expansion of opportunities for students with disabilities as an advantage, which, in our opinion, is due to the fact that the students of this university have a Special Education faculty, therefore, they are more concerned about the problems of students with disabilities, realizing that distance education allows students with special needs to overcome a number of physical difficulties.

Figure 1



The 2-nd question was**: "According to you, what are the disadvantages of distance learning organization in the university and what were your main difficulties?"**

Since the students greatly value live contact with lecturers and classmates, 42% of them noted that distance education does not contribute to the formation of educational motivation, therefore, the activity of participation in the class decreases. In general, it can be concluded from the answers of the majority, that students consider the lack of live contact as one of the obvious disadvantages of the online learning method, and consider direct communication as a guarantee of increasing the effectiveness of educational activities. During the distance

learning, what is said "Eye to eye" contact is missing, that is, if in the classroom they could understand what the lecturer explained even from his movement, look and half a word, it is more difficult to establish contact in the online domain.

It is interesting that Lilit Endeman, who lives in USA and is currently studying online at the university's Faculty of Art Education, answered that while many might argue that online learning does not provide enough opportunity for student interaction, online learning actually invites in a variety of collaborative social opportunities: **«**From my own personal experience, I can to announce, that I've had more meaningful interaction through my online learning experience than I ever could do in face to face classroom settings. I know all of my classmates by name, we talked on several occasions, and provide support to one another when it was needed. Online learning provides a community atmosphere that adds a key social element into the learning experience**»**.

Another major problem of online classes 24 percent of students noted «the lack of internet access». Although it operates perfect mainly in the capital, it often causes problems in the regions due to power outages.

In some answers the difficulty of self-learning the theoretical material from the textbook and understanding the lecture explained by the teacher online, was mentioned as a disadvantage (18%).

We also found out that a small number of students (16%) do not agree with the grade they received during distance learning, as they noted the decrease in the objectivity of the grade as a drawback.

With the next question we asked the students to **suggest effective ways of organizing distance learning and media tools.**

A part of the students offered providing them with appropriate technical means, because a number of problems arise regularly due to their lack (15%).

It was also suggested using the wide range of opportunities provided by media tools, as to use Microsoft Word, Microsoft Power Point, Crossword Labs platforms and to do more group work so that everyone could be involved in the class process and to conduct the class process in groups of a maximum of 10-12 people (22 %).

Some students considered mastering the skills of using various ICT tools as a way to solve the problems, both by students and professors (23%).

It is worrisome the fact that many people found it difficult to make any suggestion, from which we can assume that students either do not know media tools or do not give them of necessary size importance (8%).

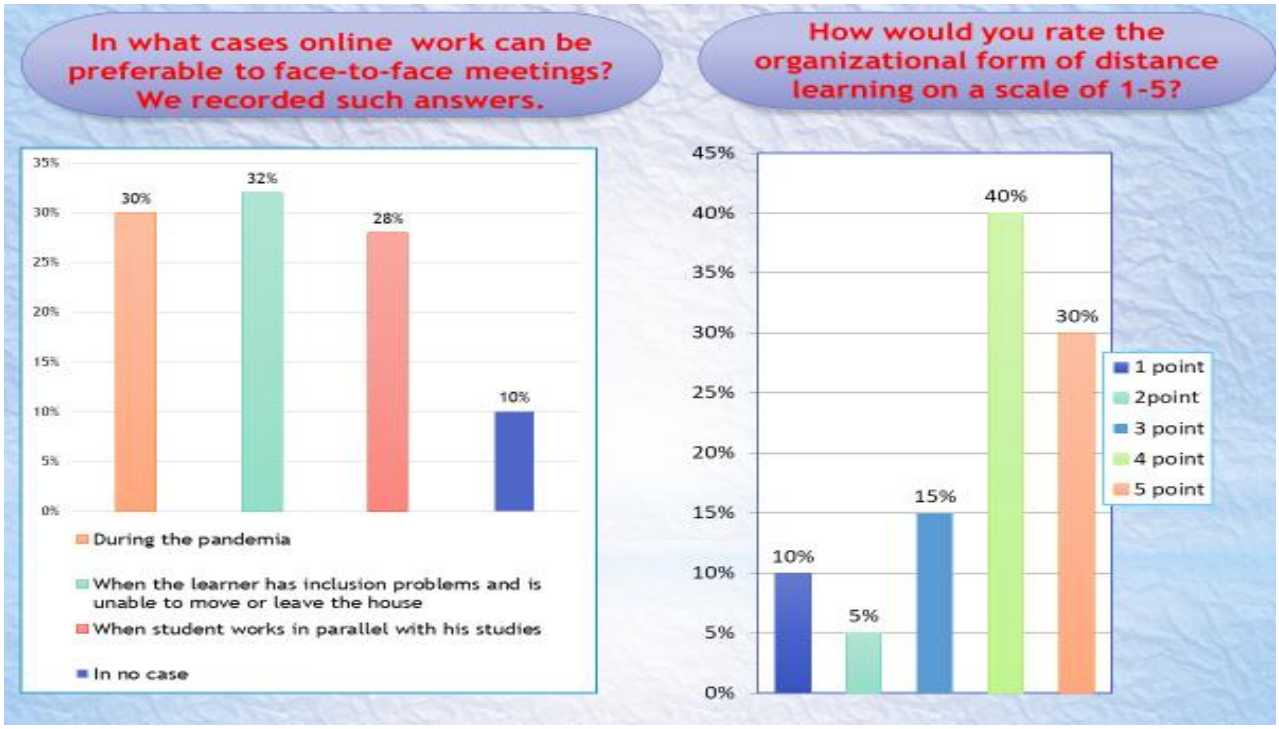
10 % of students are willing to participate in open discussions to find ways to solve

problems, which according to them, will create ways to solve some issues. It was also suggested that the cameras of both students and professors would be turned on (22%).

4. In what cases online work can be preferable to face-to-face meetings?

We recorded such answers.

Figure 2 **Figure 3**



- during the pandemic /30%/
- when the learner has inclusion problems and is unable to move or leave the house/32%/
- when student works in parallel with his studies /28%/
- in no case/10%/.

5. **The next question was: "How would you rate the organizational form of distance learning on a scale of 1-5 points".**

40% of survey participants rated 4 points, 30% rated 5 points,15% - 3 points, 10% - 1 point, 5% of participants - 2 points.

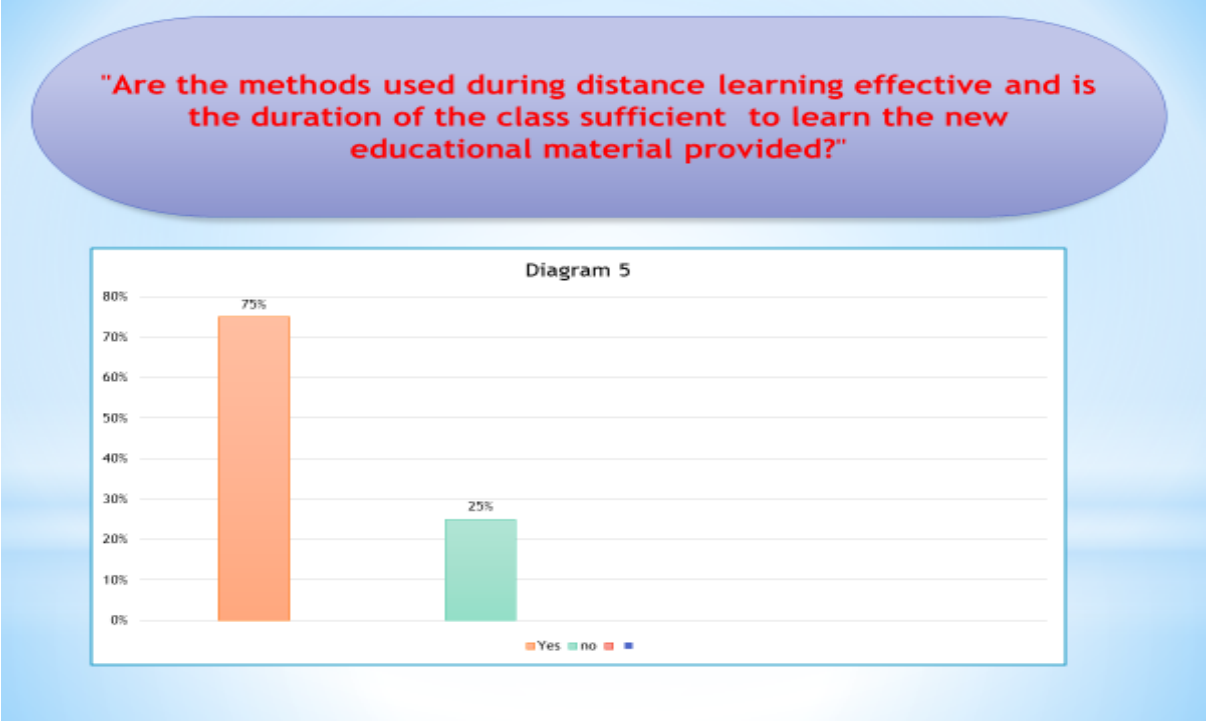
In general, it can be stated, that the effectiveness of distance learning is above average**.**

6. For the question "**Are the methods used during the distance learning effective and is the duration of the class sufficient to learn the new educational material provided?**" we offered 2 options:

75% of survey participants answered yes, 25% - no.

The results revealed that students are satisfied with the acquisition of knowledge through online learning.

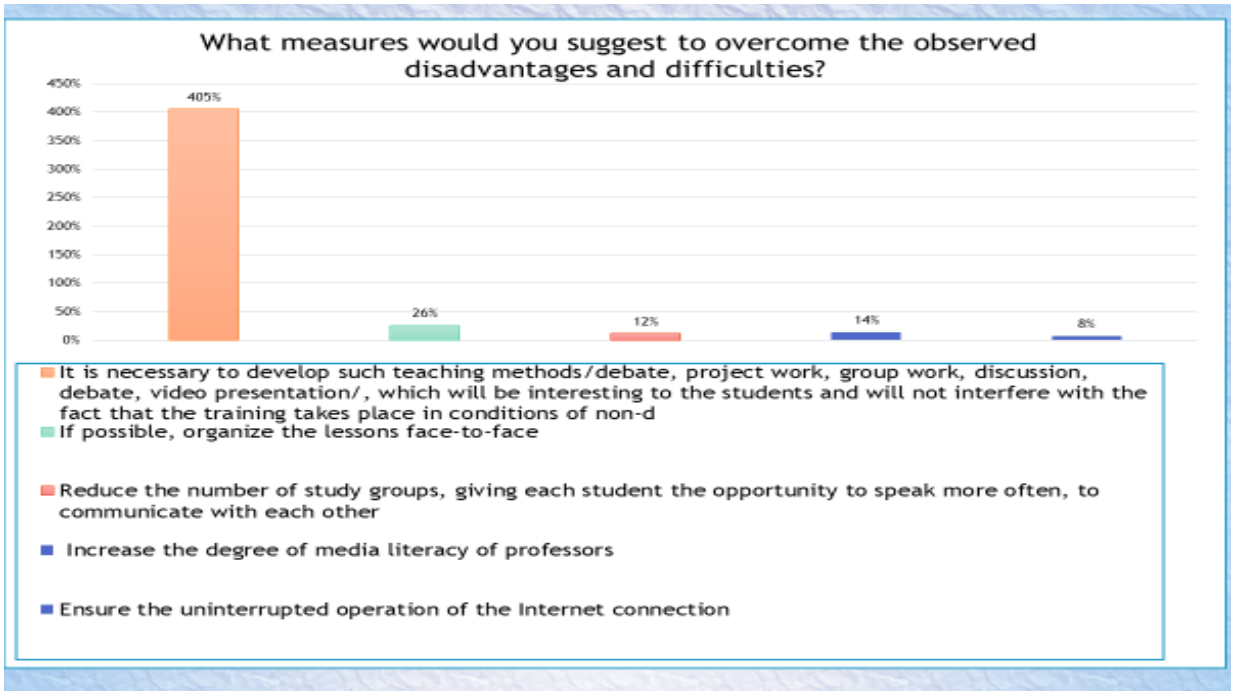
Figure 4



7. What measures would you suggest to overcome the observed disadvantages and difficulties?

The answers we got from this question are shown in the figure 5.

Figure 5



RESULTS AND DISCUSSION

The results of surveys on the research of distance training confirmed that the effectiveness of distance education is mainly conditioned by the development of lecturer-student cooperation, student-student interpersonal communication ethics, personal-professional value system and distance education culture.

It is a priority to develop students' subject-specific, personal, communicative, collaborative, cognitive, media literacy, critical thinking abilities and creative skills, which will help them work independently towards full self-realization in the conditions of distance learning during the University education. It was important for us that the respondents considered it sufficient the duration of the classes to perceive and master the new learning material and especially their views on which learning and methodological tools are making the classes more effective.

We consider it necessary to develop a concept and procedures for organization of distance education at the Universities, according to international Standards for Quality Assurance of Education, and ensure the normative regulation of distance education.

The research's discussion also confirms that currently Armenian universities mainly provide the social-cultural, material-technical, moral-psychological indispensable conditions, which contribute to the development of general and professional competencies necessary for the achievement of final educational results for a 21st century university graduate.

Developments in the field of distance learning create the need for continuous discussions by specialists of the educational community on various transformations of these processes and the joint development of methodological recommendations related to psychological, pedagogical, social, organizational-management, health and technological aspects.

CONCLUSIONS

The analysis of the survey data allows us to make the following conclusions:

At present, still there are some problems in this field of education, so higher education system officials need to do the following:

1. To carry out regular monitoring of hybrid and distance education, control of the results and provision of feedback through utilization of modern effective tools in accordance with the student-centred principles at universities.
2. To develop the media literacy of the teaching staff, the regular training of lecturers in accordance with the modern requirements of distance learning.
3. To study more deeply the necessity of students' social needs and the availability of necessary information and educational resources during the organization of distance education.

4. We consider it urgent to edit and complete the strategies for increasing student retention, providing useful case studies and examples to illustrate how these strategies can change institutional policy and practice.

REFERENCE LIST

Anderson, T. (2008). THE THEORY AND PRACTICE OF ONLINE LEARNING. *Athabasca University Press.*

Garrison, D. R. (2003). E-LEARNING IN THE 21ST CENTURY. *In Routledge eBooks. Informa. https://doi.org/10.4324/9780203166093*

Government of RA *- Hayastani Hanrapetutyun karavarutyan voroshumy. (2010). Bardzraguyne vhet'buakan masnagitakan krtut'yan masnagitutyunneri heravar (distancion) dzevov usucmank'argy hastatelumasin [Decision of the Government of the Republic of Armenia on Establishing the Procedure for Higher and Postgraduate Vocational Education Specialties]. Yerevan. Retrieved from https://www.arlis.am/DocumentView.aspx?DocID=56573*

Roubides, P. (2017). DISTANCE LEARNING: PERSPECTIVES, OUTCOMES AND CHALLENGES. *Nova Science Publishers.*

Sarkisyan, A. (2016). PREDPOSYLKI VNEDRENIYA NOVEYSHIKH TSIFROVYKH TEKHNOLOGIY V OBRAZOVATEL'NYY PROTSESS V ASPU [ON THE PRECONDITIONS OF INTRODUCTION OF DIGITAL TECHNOLOGIES PROCESS IN THE EDUCATIONAL PROCESS IN ASPU]. *Main Issues in Modern Russian Studies, 46-51. Yerevan. https://aspu.am/website/images/journal/rusagitutyun_2.pdf*

Simpson, O. (2003). STUDENT RETENTION IN ONLINE, OPEN, AND DISTANCE LEARNING. *Psychology Press.*

The article submitted and sent to review: 19/10/2022
Accepted for publication: 11/04/2023

GOLDEN PAGES

Philip Zimbardo is a renowned psychologist, author, and educator who has made significant contributions to the field of social psychology. His research and writings have helped to shed light on human behaviour, specifically the factors that influence people to act heroically or destructively. One of his most famous studies, the Stanford Prison Experiment, was a landmark experiment that provided valuable insight into the psychological dynamics of power and authority.

Born on March 23, 1933, in New York City, Zimbardo spent most of his early life in the South Bronx. He attended Brooklyn College where he earned a Bachelor of Arts degree in 1954, and then went on to receive his Master's degree and Ph.D. from Yale University. Zimbardo began his academic career at New York University, where he taught for seven years before joining the faculty at Stanford University in 1968.

The Stanford Prison Experiment, conducted in 1971, was one of Zimbardo's most famous and controversial studies. The experiment was designed to investigate the psychological effects of power and authority on both the prisoners and guards in a simulated prison environment. The participants were randomly assigned to play the roles of either prisoners or guards, and the study was supposed to last for two weeks.

However, the experiment was terminated after only six days due to the extreme behaviour exhibited by the guards towards the prisoners. The guards became abusive and authoritarian, while the prisoners became passive and helpless. The experiment demonstrated how easily people can be influenced by the power of authority and social roles.

The results of the study were shocking and controversial, and it raised serious ethical questions about the use of human subjects in psychological research. However, the Stanford Prison Experiment remains an important and influential study in the field of psychology, and it continues to be widely cited in textbooks and research papers.

After the Stanford Prison Experiment, Zimbardo went on to become a prominent figure in the study of heroism and positive psychology. He founded the Heroic Imagination Project, an educational non-profit that aims to teach people how to be more resilient, empathetic, and courageous in the face of adversity.

The Heroic Imagination Project draws on the latest research in psychology, neuroscience, and social science to provide training and resources to individuals and organizations seeking

to promote heroism and ethical behaviour. The project has developed a range of programs and resources that focus on cultivating traits such as empathy, resilience, and moral courage.

Zimbardo has also written extensively on the topic of heroism, including his book "The Lucifer Effect: Understanding How Good People Turn Evil". In this book, Zimbardo explores the psychological factors that contribute to unethical and destructive behaviour, and he offers insights into how individuals and organizations can prevent and intervene in such situations.

Zimbardo's work has had a profound impact on the field of psychology and on society as a whole. His research on the power of authority and social roles has helped to shed light on some of the darker aspects of human behaviour, while his work on heroism and positive psychology has inspired countless individuals and organizations to make a positive difference in the world.

In addition to his academic work, Zimbardo has also been involved in a number of high-profile legal cases. He served as an expert witness in the Abu Ghraib prison scandal, where he testified about the psychological factors that may have contributed to the abusive behaviour of the guards towards the prisoners.

Despite his many achievements and contributions, Zimbardo has also faced criticism and controversy throughout his career. Some have questioned the ethics and validity of the Stanford Prison Experiment, while others have criticized his approach to the study of heroism and positive psychology.

In addition to his work in psychology, Zimbardo has also become a prominent figure in the public eye, particularly in regards to his work on the Stanford prison experiment. The experiment was conducted in 1971 and aimed to study the psychological effects of power and authority on both prisoners and guards in a simulated prison environment. The study was meant to last two weeks but had to end after just six days due to the extreme conditions within the prison.

While the study was controversial, it highlighted the power of situational factors in shaping behaviour and has become a landmark experiment in the field of psychology. However, Zimbardo has faced criticism for ethical violations in the study and for not intervening sooner to stop the abuse that was occurring.

Despite this controversy, Zimbardo has continued to make significant contributions to the field of psychology, particularly in regards to the study of evil and heroism. In his book "The Lucifer Effect: Understanding How Good People Turn Evil," Zimbardo examines the role of situational factors in shaping behaviour and explores how ordinary people can be transformed into perpetrators of evil acts.

Zimbardo's work on heroism has also been ground-breaking, as he has emphasized the

importance of personal responsibility and moral courage in standing up to unjust systems and promoting positive change. In his book "The Time Paradox: The New Psychology of Time That Will Change Your Life," Zimbardo argues that our relationship with time can greatly impact our ability to act heroically, as individuals who view time as a limitless resource are more likely to take risks and pursue their goals.

In addition to his academic work, Zimbardo has also become involved in various social and political causes, particularly in regards to prison reform and promoting social justice. He has advocated for the rehabilitation of prisoners and has been an outspoken critic of the U.S. criminal justice system.

Overall, Philip Zimbardo is a prominent figure in the field of psychology, known for his groundbreaking research on the power of situational factors in shaping behaviour and his emphasis on personal responsibility and moral courage. While his work has been controversial at times, he has remained committed to promoting positive change and advocating for social justice.

NOTES TO POTENTIAL CONTRIBUTORS

MANUSCRIPTS MUST BE SUBMITTED:

- in English,
- both printed and electronic versions,
- in Microsoft-Office-Word (*.docx or *.doc) format,
- page size: A4,
- font parameters: Times New Roman, size for the main body: 12 pt., for footnotes: 10 pt.,
- footnotes should be provided at the bottom of the page; the references – at the end of the paper,
- spacing: 1.3, for the footnotes: 1, first line: 0.8 cm.

The Author is obliged to guarantee the compliance of the manuscript with the scope of content-based priorities of the periodical, thus, providing the final copyright version,

THE LENGTH:

The manuscript should not exceed 8000 words.

THE TITLE:

- should outline the general scope of the paper not exceeding 8 words,
- uppercase,
- font size: 12

AUTHORS' DATA:

- first name(s), last name(s), and CV(s),
- full name and postal address of each author's workplace, organization,
- position, rank, academic degree,
- e-mail and phone number,
- surnames and the initials of authors' names should be in uppercase.

ABSTRACT:

- should not exceed 200 words,
- should be informative, avoiding general words and phrases,
- should outline the research and results,
- should reflect the main content of the paper, taking into consideration the following viewpoints: *subject, purpose, research results, and conclusions*,
- should not duplicate the information in the title,
- should provide a good perspective on the final message of the article.

INTRODUCTION

- should reflect the contribution to the scope of philosophy and methodology of science,
- should reflect the current concerns in the area,
- should specify the research objectives.

CONCLUSIONS

- should be clearly formulated and formatted.

KEYWORDS:

- up to 10,
- separated with commas.

REFERENCES

- The manuscript should be submitted in line with the APA citation System. For instance: (Soros, 2001, p. 10) (Toulmin, 1958, pp. 56-57) (Hilbert & Bernays, 1934).

The Latin transliteration of all the non-Latin references should be included as well. *For instance:*

- Брутян, Г. А. (1992). Очерк теории аргументации. Ереван: Изд-во АН Армении.
- Brutian, G. A. (1992). *Ocherk teorii argumentatsii* (Outline of Argumentation Theory, in Russian). Yerevan: NAS RA Publication.

For a book by a single author:

Toulmin, S. E. (1958). The Uses of Argument (updated ed., 2003; reprint, 2006). New York: Cambridge University Press.

For a book by two or more authors:

Calfee, R. C., & Valencia, R. R. (1991). APA guide to preparing manuscripts for journal publication. Washington: American Psychological Association.

For a book by an editor:

Ayer, A. J. (Ed.). (1959). Logical Positivism. Glencoe, Illinois: The Free Press.

For an article in a journal:

- Jacoby, W. G. (1994). Public attitudes toward government spending. American Journal of Political Science, XXXVIII (2), 336-361.
- Djidjian, R. Z. (2016). Paradoxes of Human Cognition. *Wisdom, 7*(2), 49-58.

For a book section:

O' Neil, J. M., & Egan, J. (1992). Men's and women's gender role journeys: A metaphor for healing, transition, and transformation. In B. R. Wainrib (Ed.), Gender issues across the life cycle (pp. 107-123). New York: Springer.

If various works of the same author published in the same year are cited, it is necessary to apply to a letter differentiation method, i.e., a, b, c, etc. *E.g.,*

(Hovhannisyan, 2006a; Hovhannisyan, 2006b; Hovhannisyan, 2006c).

For a website publication:

Texts of articles submitted on a website usually vary from their printed versions. That is why in case of citing the website versions, it is necessary to indicate the appropriate electronic address. Moreover, the citation of the printed version is not accepted.

See the example below:

Djidjian, R. Z. (2015). Understanding Capacity as the Principal Difficulty in Building Artificial Intellect. *Wisdom, 4(1).* Retrieved May 26, 2016, from http://www.wisdomperiodical.com/index.php/wisdom/article/view/115

Djidjian, R. Z. (2016). Paradoxes of Human Cognition. *Wisdom, 7*(2), 49-58. doi:10.24234/ Wisdom. v2i7. 137

GRAPHS AND DIAGRAMS

If the manuscript contains nonalphabetic characters (e.g. logical formulae, diagrams), then:

- the PDF version of the text should be attached for verification,
- all the images (diagrams, line drawings and/or photographic images) should be numbered sequentially with Arabic numerals and submitted in electronic form,
- photo images should be of high quality,
- all the images should be attached as separate files,
- diagrams, line drawings, charts should be submitted in EXCEL or EPS format.

VARIOUS KIND OF MANUSCRIPT FORMATTING PECULIARITIES

Publication of Archive Materials and Translation Sources

- A complete description of archive or publication material, i.e. the original text sources, should be comprised in the manuscript.
- A brief (1-3-page-long, approximately 4000 characters) prologue under the title Publication Prologue may precede the publication. Long prologues are considered as articles, so they should be written under separate titles.
- If the publishing source contains references, they should be presented as a part of the body text – each numbered sequentially and preceding the body text-source.
- A publisher or translator may present references about the publishing source at the end of the body text.
- Via references, one may present in the source text, between square brackets, word translations, explanations of acronyms, abbreviations, etc.,
- It is advisable to choose up to 40.000 character-long sources for the materials submitted. In the case of an extensive source, it is necessary to shorten (select) for preparing

material for the periodical.

- Translations and archive sources should appear with comprehensive comments and complete referencing. Otherwise, they may not be considered as scientific publications and cannot be published.

Essays of various symposiums and scientific events

- Information about the symposium should be included in the essay.
- Symposium members' names, surnames, workplace and country should be mentioned in brackets, and in the case of international symposiums, the name of the city is also included.
- Essays should not coincide with the symposium projects or their final documents.

Reviews and bibliographical essays

- The length of a review should be from 5 to 10 pages (10.000-20.000 characters).
- Final information, name of a publication and number of pages of the book should precede the body text.
- References are not included in the review.

Argumentative notes, essays, records

Materials written in free style, beyond the requirements for scientific papers, are accepted for publication. Such papers may not be involved in reports about scientific works.

Attention! *All authors carry primary responsibility for the viewpoints introduced in their papers which may not always coincide with those of the Editorial Board. All articles pass single-blind review and are checked by https://www.quetext.com, https://text.ru/antiplagiat, https://www.antiplagiat.ru/ systems.*

The periodical is published by the decision of the Scientific Council of Khachatur Abovian Armenian State Pedagogical University.

According to the RA Higher Qualification Committee 05.02.2021 by order No. 56A, MIOPAP is included in the LIST OF PERIODIC SCIENTIFIC PUBLICATIONS ACCEPTABLE FOR PUBLICATION OF MAIN RESULTS AND PROVISIONS