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CREATIVE WORK AS A METHOD OF CORRECTION OF THE PSYCHOEMOTIONAL STATE IN PUPILS OF HIGH SCHOOL

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A preliminary report is given on the comparative study of the level of psychoemotional state of students studying at the "Quant" gymnasium and the State College of Fine Arts in different educational environments. The comparative analysis of the obtained data shows that creative work has a relaxing effect on mental tension, allows the individual to better adapt to life, allows for self-knowledge.

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Introduction. As a result of reforms in the field of education, the number of "school factors" affecting the health of pupils has increased, intensive learning, which is characterized by a qualitative and quantitative increase in information, an increase in weekly workload, the introduction of computer training, etc. In recent decades, the number of educational institutions (gymnasium, college), intensively working in the Republic of Armenia, has increased significantly. The adaptation of students to schooling is a complex socio-psychological process and is accompanied by a significant load on the compensatory-adaptive systems of the body [1, 2].

In gymnasiums, where students mostly study with a heavy workload, little time is devoted to creative work and physical education. Frequent contact with art has a healing effect on students, as it helps reduce psychological stress. It develops the student's communication skills, helps to express agitation and anxiety and present them in a specific structure, get rid of them or report them, expressing his/her attitude to the world. Thus, self-belief and self-confidence are strengthened [3, 4]. Art is one of the important means of psychotherapy for a person and saves him/her from a number of mental disorders.

Research Methods. With psycho-diagnostic purposes and in order to identify the personality traits of students, they were offered a test [5, 6], which was chosen by a psychologist. A preliminary analysis of the health status of the subjects was carried out. Pupils without psychophysiological aberrations were selected. The Eysenck Personality Questionnaire (EPQ) was used to assess the personality traits

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of the subjects. It consisted of 57 questions that the respondent should answer in the affirmative or negative only. The questionnaire made it possible to assess the sociopsychological and personal characteristics of a person, and determine if he/she belong to a group of extroverts or introverts, as well as the level of neuroticism.

The study was conducted at the "Quant" gymnasium in Yerevan, were intensive teaching formats were practised, and where children were enrolled according to the results of the interview, and at the State College of Fine Arts named after Panos Terlemezyan, where children were admitted according to the results of examinations in professional subjects. Sixty students were examined being grouped as follows:

- 1. 30 students studying at the "Quant" gymnasium (experimental group);
- 2. 30 students studying at State College of Fine Arts (control group).

The aim of the presented work was to study the level of psychological indicators of students studying in different colleges with different educational environments.

Results and Discussion. Students testing on the Eysenck questionnaire showed that most of them of the gymnasium (70%) belonged to the introvert type. The experimental group introverts were mostly phlegmatic (57% phlegmatic vs. 43% melancholic). The percentage of extroverts was high in the control group (80%). They were mainly choleric (69% choleric vs. 31% sanguine) (Fig. 1).

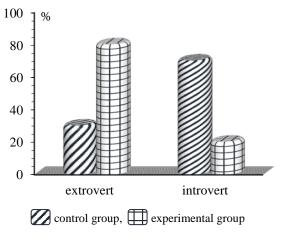


Fig. 1. Belonging of students studying in different educational institutions to extrovert and introvert groups.

Extraversion is the state of obtaining satisfaction from outside oneself. Extraverts tend to take pleasure in human interactions and to be enthusiastic, talkative, assertive, and gregarious. They also tend to work well in groups.

Conversely, introversion is the state of being predominantly interested in one's own mental self. Introverts are characteristically thought of as more reserved or reflective. They are characterized as people whose energy tends to expand through reflection and dwindle during interaction. They prefer solitary activities over working in groups.

Sanguines are naturally people-oriented. Sanguine personality type is described primarily as being highly talkative, enthusiastic, active, outgoing, and social. Sanguines tend to be more extroverted and enjoy being part of large social gatherings [7].

Cholerics are naturally result-oriented. Cholerics tend to be more extroverted. They are characterized as self-confident, self-sufficient, very independent minded, decisive, goal-oriented, and ambitious. They are quickly aroused, but quickly calmed.

Melancholies tend to be analytical and detail-oriented, and they are deep thinkers and feelers. They are introverted. They are thoughtful, reserved, and often anxious. Melancholies are skeptical about almost everything, but they are creative and capable people. They fear taking risks, making wrong decisions, and being viewed as incompetent.

Phlegmatics are naturally service-oriented. They are introverted, calm, unemotional, easygoing, indecisive, patient, and agreeable. They avoid getting too involved with people, and life in general, preferring a private, low-key life-style, centered around home and family.

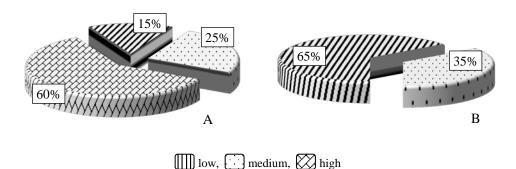


Fig. 2. Distribution of students of experimental (A) and control (B) groups studying in different educational institutions, according to the level of neuroticism.

In the experimental group, 60% of students had a high level of neuroticism (low emotional stability: over 15 points), 25% had a moderate level, and 15% had a low level of neuroticism (high emotional stability). While 65% of the subjects in the control group had low levels of neuroticism (high emotional stability: less than 7 points), and 35% had moderate levels (9–13 points) (Fig. 2).

According to tests on the Eysenck questionnaire, it turned out that most of the subjects in the control group were extrovert-choleric, and most of the schoolchildren from the gymnasium were introvert-phlegmatic. Most of the college students were characterized by a low level of neuroticism, while the gymnasium students mainly had a low or moderate level of neuroticism.

"Neuroticism" means that a person is not satisfied with one's ability to solve pressing problems and achieve the desired results, he/she is very worried about even the most insignificant problems, highly sensitive to danger, inclined to rely on the majority opinion, skeptical even of a very well done job.

Students in the control group, unlike students in the experimental group, were mostly more balanced, restrained, self-confident, sociable and courageous.

Available literature suggests that student health in new types of schools is also more vulnerable [8, 9].

Conclusion. Thus, the obtained results allow us to conclude that painting has a relaxing effect on mental stress, allows a person to better adapt to life, allows for self-knowledge. It strengthens self-belief and self-confidence. Based on the results of this study, it can be recommended to create art classes for students in order to reduce psychological stress in schools with intensive instruction.

A more complete description of the research will be published elsewhere.

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REFERENCES

- 1. Ag-ool E.M. Examining the Physical Development of Schoolchildren in the Republic of Tyva. Hygiene & Sanitation (2008), no. 1, 67–70. PMID: 18368710
- 2. Antropova M.V., Kuznetsova L.M., Borodkina G.V. Changes in the Psychophysiological and Autonomic Indices of Upper-Grade Students During Differentiated Instruction. Human Physiology 17 (1991), 116–124. PMID: 1685716
- 3. Burno, M.E. Therapy with creative expression (4th ed.). Moscow, Akademicheskii proekt, Alma Mater (2012), 487 p. (in Russian).
- 4. Shevchenko Yu.S., Levkovskaya O.B. The Creative Therapy by M. Burno in the Psychotherapy of Adolescents. S.S. Korsakov Journal of Neurology and Psychiatry (2016), no. 4, 57-61. https://doi.org/10.17116/jnevro20161163257-61
- 5. Batarashev A.V. Testing: The Main Toolbox of a Practical Psychologist (3rd ed.). Moscow, Delo (2003), 240 p. (in Russian).
- 6. Sato T. The Eysenck Personality Questionnaire Brief Version: Factor Structure and Reliability. J. Psychol. 139 (2005), 545-552. https://doi.org/10.3200/jrlp.139.6.545-552
- 7. Merenda P.F. Toward a Four-Factor Theory of Temperament and/or Personality. J. Pers. Assess. **51** (1987), 367–374. https://doi.org/10.1207/s15327752jpa5103 4
- 8. Bezgodov V.N., Gubaidulina T.K., Kalibernyĭ V.V. Impact of Nontraditional Teaching Forms on Children's Health. Hygiene & Sanitation (1996), no. 5, 20–22. PMID: 8974925
- 9. Burkhanov A.I., Khorosheva T.A. The Health Status of Pupils from Different-Profile Schools. Hygiene & Sanitation (2006), no. 3, 58-61. PMID: 16808409

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ՍՏԵՂԾԱԳՈՐԾԱԿԱՆ ԱՇԽԱՏԱՆՔԸ ՈՐՊԵՍ ԱՎԱԳ ԴՊՐՈՅԻ ԱՇԱԿԵՐՏԵՐԻ ՀՈԳԵՀՈԻՉԱԿԱՆ ՎԻՃԱԿԻ ՇՏԿՄԱՆ ՄԵԹՈԴ

Տրված է նախնական հաղորդագրություն «Քվանտ» վարժարանում և գեղարվեստի պետական քոլեջում տարբեր ուսումնական ծանրաբեռվածության պայմաններում սովորող աշակերտների հոգեբանական ցուցանիշների մակարդակի համեմատական ուսումնասիրության վերաբերյալ։ Ստացված տվյալների համեմատական վերլուծությունը վկայում է, որ ստեղծագործական աշխատանքը ունի հոգեկան լարվածությունը թուլացնող ազդեցություն, անհատին թույլ է տալիս առավել լավ հարմարվել կյանքին, հնարավորություն է տալիս ինքնաճանաչման։

Л. Э. ГУКАСЯН, Э. С. ГЕВОРГЯН

ТВОРЧЕСКАЯ РАБОТА КАК МЕТОД КОРРЕКЦИИ ПСИХОЭМОЦИОНАЛЬНОГО СОСТОЯНИЯ У УЧАЩИХСЯ СТАРШЕЙ ШКОЛЫ

Дан предварительный отчет о сравнительном изучении уровня психоэмоционального состояния учащихся, обучающихся в гимназии «Квант» и Государственном колледже изобразительных искусств в разных образовательных средах. Сравнительный анализ полученных данных показывает, что творческая работа оказывает расслабляющее воздействие на психическое напряжение, позволяет человеку лучше адаптироваться к жизни, способствует самопознанию.