

Olena Chorna

Vinnitsia Mykhailo Kotsiubynskyi State Pedagogical University Ukraine

Candidate of Psychological Sciences

elenachorna77@ukr.net

<https://orcid.org/0000-0002-7067-3695>

GENDER DIFFERENCES IN THE DEVELOPMENT OF IMAGINATION OF YOUNGER SCHOOLCHILDREN

У статті наголошується на необхідності розвитку фантазії молодших школярів як важливого чинника становлення їх творчої особистості. Підкреслюється, що молодший шкільний вік є сензитивним періодом для розвитку фантазії, а тому завданням сучасної початкової школи є використання сприятливого для розвитку цієї психічної функції періоду.

У статті подано теоретичне обґрунтування та емпіричне дослідження гендерних відмінностей у розвитку фантазії молодших школярів. Зазначено, що проблема гендерних відмінностей творчого потенціалу особистості не має однозначного вирішення. Погляди науковців щодо гендерних відмінностей в творчості розходяться. Одні заперечують відмінності між особами чоловічої та жіночої статі, інші виявляють перевагу осіб різної статі за різними критеріями творчості, а деякі знаходять за критеріями творчості між протилежними статями більше спільного, ніж відмінного.

Аналіз наукових джерел з проблеми гендерних відмінностей показує, що на розвиток творчості впливає багато факторів, як біологічні, так і соціокультурні. У порівняльних дослідженнях творчості хлопчиків і дівчаток можуть бути виділені три основні напрями: психометричні дослідження відмінностей у розвитку фантазії залежно від статі; можливі біологічні детермінанти цих відмінностей; опис соціально-психологічних механізмів, пов'язаних з гендерною соціалізацією, впливом гендерних стереотипів, засвоєнням гендерних ролей, що впливають на відмінності у розвитку фантазії хлопчиків і дівчаток.

На основі емпіричного дослідження виявлено вплив статі на розвиток фантазії у молодших школярів. Встановлено статистично значущі відмінності між показниками критеріїв вербальної фантазії в хлопчиків і дівчаток. Усі вони виявилися вищими в хлопчиків, зокрема за критерієм продуктивності 2,20 проти 2,01 ($p \leq 0,05$), за критерієм гнучкості 1,62 проти 1,32 ($p \leq 0,01$) та за інтегральним показником фантазії 7,71 проти 7,00 ($p \leq 0,05$). Констатовано, що в хлопчиків початкової школи вербальна фантазія розвинена дещо краще, ніж у дівчаток. Водночас, показники критеріїв невербальної фантазії виявилися вищими у дівчаток, хоча відмінності й не є статистично значущими.

Разом із тим, виявлено гендерні відмінності у створенні образів фантазії молодшими школярами. З'ясовано, що на зміст малюнків і казок, характер їх зображення і створення впливає стать дитини.

Ключові слова: творчість, молодші школярі, гендерні відмінності, творча особистість, вербальна і невербальна фантазія, розвиток фантазії.

The article emphasizes the need to develop the imagination of younger schoolchildren as an important factor in the formation of their creative personality. It is emphasized that primary school age is a sensitive period for the development of imagination, and therefore the task of a modern primary school is to use a period favorable for the development of this mental function.

The article presents a theoretical justification and an empirical study of gender differences in the development of the imagination of younger schoolchildren. It is noted that the problem of gender differences in the creative potential of an individual does not have an unambiguous solution. The views of scientists regarding gender differences in creativity differ. Some deny the differences between men and women, others show the superiority of people of different sexes according to different criteria of creativity, and some find, according to the criteria of creativity, between the opposite sexes more in common than different.

The analysis of scientific sources on the problem of gender differences shows that the development of creativity is influenced by many factors, both biological and sociocultural. In comparative studies of the creativity of boys and girls, three main directions can be distinguished: psychometric studies of differences in the development of fantasy depending on gender; possible biological determinants of these differences; description of socio-psychological mechanisms related to gender socialization, the influence of gender stereotypes, the assimilation of gender roles, which affect the differences in the development of the fantasy of boys and girls.

On the basis of empirical research, the influence of gender on the development of fantasy in younger schoolchildren was revealed. Statistically significant differences were established between indicators of verbal fantasy criteria in boys and girls. All of them were higher in boys, in particular, according to the criterion of productivity 2,20 versus 2,01 ($p \leq 0,05$), according to the criterion of flexibility 1,62 versus 1,32 ($p \leq 0,01$) and according to the integral index of fantasy 7,71 versus 7,00 ($p \leq 0,05$). It was found that elementary school boys have a slightly better developed verbal imagination than girls. At the same time, indicators of criteria of non-verbal fantasy turned out to be higher in girls, although the differences are not statistically significant.

At the same time, gender differences were found in the creation of fantasy images by younger schoolchildren. It was found that the content of drawings and fairy tales, the nature of their depiction and creation is influenced by the gender of the child.

Key words: creativity, younger schoolchildren, gender differences, creative personality, verbal and non-verbal fantasy, fantasy development.

Formulation of the problem. In the context of the development of independent statehood and Ukraine's accession to the European Community, the problem of developing a creative personality, capable of independent thinking, generating original ideas, making bold, non-standard decisions and being responsible for their implementation, becomes particularly relevant. Especially the problem of forming a creative person concerns the younger generation, on whom the future of our country largely depends.

One of the strategic tasks of education reform in Ukraine, proclaimed in a number of normative and legal educational documents, in particular the Laws of Ukraine «On Education», «On General Secondary Education», the Concept «New Ukrainian School», the State Standard of Primary Education is to ensure the most favorable conditions for personality development and creative self-realization of the younger generation.

Implementation of this task in elementary school can be carried out under the condition of productive use in educational activities of those psychological assets of preschool age, which form internal resources for further personal development of children of primary school age. One of these key neoplasms of preschool children is fantasy, which is the main characteristic of a creative personality and its activity (V. Klymenko, G. Kostyuk, O. Kulchytska, V. Molyako, V. Rybalka, V. Romenets).

A sensitive period for the development of fantasy, according to the definition of psychologists (H. Kostyuk, V. Molyako, V. Rybalka, V. Romenets), is preschool and junior school age. Therefore, the task of the modern primary school is to use the period favorable for the development of this mental function.

The value of fantasy for the formation of a creative personality is equally great for children of both sexes, but the development of this mental function in boys and girls occurs differently. Therefore, when conducting modern psychological and pedagogical research in the field of children's creativity, scientists take into account not only age, describing the age-related features of the development of fantasy, but also gender, investigating gender differences in the development of fantasy.

The problem of gender-related differences in the development of the imagination of younger schoolchildren is currently poorly studied. At the same time, the implementation of a gender approach to the study of the development of students' fantasy allows to interpret the influence of various factors, both sociocultural and biological, on fantasy.

The purpose of the article is the theoretical substantiation and empirical study of gender differences in the development of the imagination of younger schoolchildren.

The analysis of the latest research and publications proves that at the current stage psychologists pay attention to the study of certain aspects of the outlined problem, in particular the formation of fantasy in the early stages of ontogenesis, the psychological mechanisms of its functioning (O. Golyuk, I. Gruzynska, V. Ivanova, N. Matsko, N. Pakhalchuk, L. Podolyak), the development of the imagination of gifted children of preschool and primary school age (I. Karabaeva, M. Konovalchuk, T. Yatsenko), the development of the imagination of children with special needs (K. Rechytska, K. Soshina), the development

of imagination as the component of forming the subjectivity of younger schoolchildren (I. Titov), technologies of fantasy development in younger schoolchildren (I. Bartashnikova, O. Bartashnikov, S. Gin, L. Makridina, O. Teterina, L. Tkach, L. Shragina).

Despite the numerous studies of scientists devoted to the problem of the development of the imagination of younger schoolchildren as the main component of the formation of their creative personality, the issue of gender differences in the development of the imagination of younger schoolchildren remains little studied today. At the same time, scientists paid attention to the study of gender differences in the development of creativity of preschool (I. Zozulya), adolescent and youth (Y. Vasylykevich, T. Dutkevich, O. Makogonchuk, T. Yarushyna) age.

Presenting main material. The introduction of the concept of «gender» in psychology was intended to complement the biological approach to «sex» and to emphasize the importance of culture and society. When studying intelligence and creativity, the differences between the concepts of "gender" and «sex» converge significantly, since the peculiarities of both intelligence and creativity in some aspects can be determined biologically, in others – socioculturally.

The analysis of scientific sources on the problem of gender differences shows that the development of creativity is influenced by many factors, both biological and sociocultural. In comparative studies of the creativity of boys and girls, three main directions can be distinguished: psychometric studies of differences in the development of fantasy depending on gender; possible biological determinants of these differences; description of socio-psychological mechanisms related to gender socialization, the influence of gender stereotypes, the assimilation of gender roles, which affect the differences in the development of the fantasy of boys and girls.

The implementation of a gender approach to the study of the imagination of younger schoolchildren allows to interpret the influence on the development of children's creativity of such factors as gender socialization (the process of assigning the child social rules, norms, characteristics of behavior, attitudes according to its gender), gender stereotypes (traditional ideas about the normative behavior of persons of different gender), gender roles (a set of expected patterns (norms) of behavior for individuals according to gender).

The type of gender behavior of an individual depends mainly on social factors (society, culture) and family upbringing. After all, «it is the family that reproduces a new generation of men and women not only by the fact of the birth of boys and girls, but also by the transformation of biological sex into a mental, social one through the transmission to children of a certain amount of knowledge about the relationship between the sexes, their purpose in various spheres of human existence» [6].

Society and culture strictly regulate the social statuses of women and men. Rigid gender role attitudes and expectations accompany the entire process of socialization of the individual throughout life, which are different for women and men, and thus create unequal conditions for the development and realization of creative potential. The rigid distribution of gender roles is an obstacle to the development of creativity of individuals of both sexes. Changes in gender stereotypes, improvement of psychological culture in the field of theory and technologies of creativity can to some extent compensate for socially determined gender differences in the structure of creativity.

J. Baer singled out three groups of theories, the subject of which is gender and creativity: biological, developmental, and sociocultural theories. Biological theories emphasize the genetic origin of gender differences in creativity. Theories of development pay attention to the role of ontogenesis: in some stages of development, gender differences intensify, in others, on the contrary, they are smoothed out. Sociocultural theories explain the contribution of gender to creativity by cultural values and social roles, which lead to the differentiation of women and men in the field of creativity [12].

So, regarding gender differences in creativity, the views of scientists differ. Some deny the differences between male and female persons (J. Guilford [13], E. Torrance [15], J. Hyde [14]), others show the superiority of persons of different sexes according to different criteria of creativity (Y. Vasylykevich [1], [2], T. Dutkevich [3], V. Pavlyukh [7], T. Yarushyna [11]), and some find, according to the criteria of creativity, between the opposite sexes more in common than different (I. Zozulya [5]).

The purpose of our study was to study gender differences in the development of imagination of younger schoolchildren.

252 people participated in the study (52 students of 1st grades, 50 students of 2nd grades, 52 students of 3rd grades, 50 students of 4th grades) of the communal institution «Educational complex: comprehensive school of grades I-III – gymnasium № 30 named after Taras Shevchenko of the Vinnytsia City Council», communal institution «Specialized comprehensive school of the 1st degree with in-depth

study of foreign languages № 25 of the Vinnytsia City Council», Tulchyna comprehensive school of the 1st and 3rd degrees № 2 of the Tulchyna District Council of the Vinnytsia region.

In order to investigate gender differences in the development of non-verbal and verbal fantasy in younger schoolchildren, we used the following methods: «Short test of creative thinking» by E. Torrance (in particular, the second subtest of the figure battery of the test – «Completion of figures») [8] and «Verbal fantasy» R. Neymov [8].

In the subtest «Completion of figures» by E. Torrance, the stimulus material is 10 unfinished figures, each of which the subject must finish in such a way that the result is interesting objects or story pictures. As is known from Gestalt psychology, unfinished figures cause a desire to complete them in the simplest and easiest way. Thus, in order to give an original answer, it is necessary to control this desire and inhibit its satisfaction. It is also necessary to sign each drawing, coming up with a name for it.

All characteristics of fantasy are stimulated in this technique. Productivity is stimulated by the instruction to invent as many objects or story pictures as possible, flexibility – to make them as diverse as possible, originality – to be able to come up with such pictures that no one could come up with, elaboration – to give as many ideas as possible in each picture, supplement them so that they become more understandable and interesting.

In the «Verbal fantasy» test, students must come up with a fairy tale on any topic (of their own choice) and present it orally within 5 minutes. Up to 1 minute is allotted for creating the theme and plot of the fairy tale, after which the child begins to tell. In the course of the story, children's fantasy is evaluated according to the following parameters:

- 1) The speed of coming up with the theme and plot of a fairy tale.
- 2) Flexibility, or variety of images used.
- 3) Originality of images.
- 4) Elaboration, detailed images.

Productivity can be determined by the total number of proposed answers, flexibility is assessed as the ease of switching from one class of objects to another in the process of finding answers, originality is assessed as the minimum frequency of offering a given answer, and development is assessed by the depth and detail of the proposed ideas and images. The use of the Student's t-test made it possible to reveal the influence of gender on the development of fantasy in younger schoolchildren (Table 1).

Statistically significant differences between indicators of verbal fantasy criteria in boys and girls were revealed. All of them were higher in boys, in particular, according to the criterion of productivity 2,20 versus 2,01 ($p \leq 0,05$), according to the criterion of flexibility 1,62 versus 1,32 ($p \leq 0,01$) and according to the integral index of fantasy 7,71 versus 7,00 ($p \leq 0,05$). It was found that elementary school boys have a slightly better developed verbal imagination than girls. At the same time, indicators of criteria of non-verbal fantasy turned out to be higher in girls, although the differences are not statistically significant.

We explain the higher level of development of verbal imagination in boys, compared to girls, by their ability to quickly produce new verbal images that are flexible and original. Boys are characterized to a greater extent by research and search activity, which is manifested in greater productivity and variability, that is, the flexibility of the images created. Boys are more focused on searching, on finding the answer in their own way. They think out of the box, schematically, they often prefer to make maps, sketches, and the simplest drawings. Boys are more able not to adhere to stereotypes and "remain open" for a long time to a variety of information that comes when solving problems. Girls, on the contrary, think more stereotypically, they prefer to perform tasks according to a given pattern.

In addition, boys are bolder, and therefore are not afraid to offer non-standard, original images, which, however, are rather schematic, poorly designed. Girls, on the contrary, think more stereotypically, the images created are templated, often repeated, but, at the same time, well developed and detailed. The study proved that girls are better able to develop ideas, supplement them with a large number of details, which, in turn, indicates that girls are more diligent than boys. Girls are distinguished by a pronounced tendency to develop ideas in detail (complement, complete ideas that have arisen, expand their boundaries). So, in fairy tales, girls use many similes, epithets, and metaphors.

Analyzing the drawings and fairy tales of students, created as a result of their performance of the tests «Completion of figures» by E. Torrance, «Verbal fantasy» by R. Neymov, we found that the content of drawings and fairy tales, the nature of their depiction and creation is influenced by the gender of the child. So, the girls' drawings are dominated by images of various plants and animals, accessories (bracelet, crown, pin, necklace, umbrella, handbag), cosmetics (lipstick, nail polish), various outfits decorated with bows, ruffles, buttons, stationery and school supplies, tools for sewing and needlework, household items, various

types of abstract images, ornaments, patterns, fantastic creatures (mermaid, fairy), as well as images of girls, princesses and dolls. At the same time, the boys' drawings are dominated by various types of land, water and air transport and their parts, buildings and construction materials, tools, mechanisms and devices, roads and road systems, various sports and sports equipment, military equipment and weapons, as well as various horrors (monsters, ghosts, dragons, vampires, skeletons).

Table 1

Analysis of the significance of differences in indicators of non-verbal and verbal fantasy in students of different genders (Student's t-test for independence of mean values)

Fantasy criteria	Sex	N	Arithmetic mean	Standard deviation	Standard error of the mean	Student's t-test	Significance
«Completion of shapes» (test) Productivity	жін.	105	9,32	1,131	0,110	1,556	0,121
	чол.	99	9,06	1,284	0,129	1,550	0,123
Flexibility	жін.	105	7,96	1,285	0,125	0,887	0,376
	чол.	99	7,79	1,514	0,152	0,883	0,379
Originality	жін.	105	10,70	3,226	0,315	- 0,409	0,683
	чол.	99	10,87	2,798	0,281	- 0,411	0,682
Elaboration	жін.	105	33,99	12,876	1,257	1,079	0,282
	чол.	99	31,96	14,001	1,407	1,077	0,283
Non-verbal fantasy	жін.	105	61,97	14,787	1,443	1,061	0,290
	чол.	99	59,68	16,114	1,620	1,058	0,291
«Verbal fantasy» (test) Productivity	жін.	105	2,01	0,546	0,053	- 2,171	0,031
	чол.	99	2,20	0,714	0,072	- 2,154	0,033
Flexibility	жін.	105	1,32	0,509	0,050	-3,308	0,001
	чол.	99	1,62	0,738	0,074	-3,273	0,001
Originality	жін.	105	1,98	0,772	0,075	-1,650	0,100
	чол.	99	2,16	0,792	0,080	-1,649	0,101
Elaboration	жін.	105	1,69	0,625	0,061	-0,465	0,643
	чол.	99	1,73	0,652	0,066	-0,464	0,643
Verbal fantasy	жін.	105	7,00	1,664	0,162	-2,489	0,014
	чол.	99	7,71	2,353	0,236	-2,465	0,015
Integral indicator of fantasy	жін.	105	68,97	15,053	1,469	0,713	0,477
	чол.	99	67,38	16,759	1,684	0,710	0,478

Note: the significance of differences in the levels of manifestation of indicators is marked in bold.

As for the images of scarecrows, which are quite a lot in the drawings of boys, in our opinion, by drawing them, boys somewhat join their strength and power, because if they depict them, then they do not feel fear of them, but, on the contrary, admire them by force. Also, it is worth noting that static drawings are characteristic for girls, and dynamic for boys.

So, characterizing the differences between the drawings of girls and boys, we can observe the influence of gender socialization of children. After all, adults consciously or unconsciously orient the child to a female or male role: they encourage activity, initiative, courage in boys, they are more tolerant of their aggressiveness; girls are expected to be sensitive, caring, and emotional. As a result of the transmission of gender stereotypes, adults instill in boys and girls almost opposite personal qualities, talk about the need to

adhere to almost opposite behavioral standards and social roles, insist on the existence of almost opposite life trajectories, in particular, professional trajectories and goals. By imposing such a «stencil» on a child, adults significantly narrow its life activity and development, which actually nullifies the humanistic, child-oriented and person-centered approach to education (in favor of gender roles). The general focus on identification with one's gender gives a certain content to children's drawings: boys, especially sensitive to male roles, create purely «male» drawings, both in content, character, and execution technique, and, accordingly, girls, sensitive to female roles, create «feminine» drawings.

The results of our research are consistent with the results of the research of other scientists, in particular O. Zavhorodnaya [4], V. Romenets [9]. Thus, O. Zavhorodnaya pointed out that «houses and cars are found more often in boys' drawings than in girls' drawings, and animals and flowers are much more common in girls' drawings. For girls, the use of smooth lines and oval shapes is more typical. Boys use straight lines and rectangular shapes more often than girls» [4, p. 147].

V. Romenets noted that from the first steps of a child's artistic activity, the influence of gender on the choice of object and the nature of the reproduction of this object in the picture is noticeable. According to him, «flowers and clothes are the first object of image for girls. Technology and, first of all, military, panoramas of grandiose battles, in which all types of military equipment take part, are the most favorite subject of creativity among boys. Of course, peaceful plots «break into» the battle themes, but they also have significant technical equipment» [9, p. 58]. As for the boys, V. Romenets talks about the predominance of «technical vision» in their drawings. Fascination with the technical side of life is their characteristic feature. According to V. Romenets, boys subconsciously look for images that show physical strength and dexterity, while girls look for images that invariably indicate the birth and flowering of life. Thus, characterizing the drawings of children who drew at the same time on the same table, he noted that «the girl draws flowers reaching for the sun, and the boy – a large number of cannon nozzles shooting huge projectiles directly into the sky and spew forth pillars of flame. This is how the connection between heaven and earth is established in girls and boys» [9, p. 61-62].

At the same time, among children's drawings there are also those that are difficult to say who drew them – a boy or a girl. In some cases, we observe in children a tendency towards value orientations of the other sex, when suddenly boys begin to be interested in creating drawings with a girlish theme, and girls draw battle scenes. This identification with the other sex is normally caused by the child's choice of their idol among representatives of the other sex and unconscious imitation of all its manifestations (most often it is an older brother or sister). Although, as a rule, over time, the dominant influence of the idol gives way to stereotypical societal expectations.

The characters of the fairy tales created by the students were often images borrowed from the fairy tales, poems, stories, cartoons and movies they knew. The images of princesses, sorceresses, and fairies prevail in the fairy tales of girls, and the images of knights, heroes, Cossacks, soldiers, pirates, and robbers prevail in the fairy tales of boys. Boys like to create adventure stories, in which the main characters are usually male, because they believe that only men are capable of brave deeds.

Conclusions. Gender differences in the development of imagination of younger schoolchildren have been revealed. In particular, statistically significant differences were established between the indicators of verbal fantasy criteria in boys and girls. All of them were higher in boys, in particular, according to the criterion of productivity 2,20 versus 2,01 ($p \leq 0.05$), according to the criterion of flexibility 1,62 versus 1,32 ($p \leq 0.01$) and according to the integral index of fantasy 7,71 versus 7,00 ($p \leq 0.05$). It was found that elementary school boys have a slightly better developed verbal imagination than girls. At the same time, indicators of criteria of non-verbal fantasy turned out to be higher in girls, although the differences are not statistically significant.

At the same time, gender differences were found in the creation of fantasy images by younger schoolchildren. It was found that the content of drawings and fairy tales, the nature of their depiction and creation is influenced by the gender of the child.

Prospects for further exploration in this direction. Questions related to the study of age and gender characteristics of the development of fantasy at other age stages require further study.

References:

[1] Vasylykevych Ya. Z. Genderni osoblyvosti rozvytku tvorchoho potentsialu shkolariv. Genderni doslidzhennia: prykladni aspekty: monohrafiia / [V. P. Kravets, T. V. Hovorun, O. M. Kikinezhdi ta in.]; za nauk. red. V. P. Kravtsia. Ternopil: Navchalna knyha – Bohdan, 2013. S. 262-271.

- [2] Vasylykevych Ya. Z. Proivav hendernykh vidminnosti u strukturi kreatyvnosti shkoliariv. *Zbirnyk naukovykh prats K-PNU imeni Ivana Ohienka, Instytutu psykholohii imeni H.S.Kostiuka NAPN Ukrainy. Problemy suchasnoi psykholohii*. 2015. Vypusk 30. S. 100-109.
- [3] Dutkevych T. Henderni osoblyvosti sotsialnoi kreatyvnosti maibutnykh mahistriv pedahohichnykh spetsialnosti. *Naukovyi chasopys Natsionalnoho pedahohichnoho universytetu imeni M.P. Drahomanova. Seriiia 12. Psykholohichni nauky. Vypusk 15 (60)*. <http://enpuir.npu.edu.ua/handle/123456789/35798>
- [4] Zavorodnia O. Psykholohiia khudozhno obdarovanoi osobystosti: hendernyi aspekt. Kyiv: Naukova dumka, 2007. 264 s.
- [5] Zozulia I. Henderni vidminnosti v strukturi kreatyvnosti ditei doshkilnoho viku. *Humanitarium*. 2018. Tom 41, Vyp. 1. S. 89-98.
- [6] Kravets V. P., Hovorun T. V., Kikinezhdi O. M. Henderna sotsializatsiia molodshykh shkoliariv: navch. posib. Ternopil: Navchalna knyha. Bohdan, 2011. 192 s.
- [7] Pavliukh V. V. Rozvytok kreatyvnosti v uchniv riznoho viku: navch.-metod. posib. KZ «KOIPPO imeni Vasylia Sukhomlynskoho». 2023. 72 s.
- [8] Psykholohichna diahnostyka intelektu, myslennia, kreatyvnosti dytyny / Uporiadnyky: S. Maksymenko, L. Kondratenko, O. Hlavnyk. Kyiv: Mikros-SVS, 2003. 112 s.
- [9] Romenets V. A. Psykholohiia tvorchosti: navch. posib. 2-he vyd., dop. Kyiv: Lybid, 2001. 288 s.
- [10] Chorna O. M. Psykholohichni zasady rozvytku fantazii u molodshykh shkoliariv. Dys. kand. psykol. nauk: 19.00.07 – pedahohichna ta vikova psykholohiia. Instytut pedahohichnoi osvity i osvity doroslykh imeni Ivana Ziaziuna NAPN Ukrainy. Kyiv, 2020. 370 s. http://ipood.com.ua/data/avtoreferaty_i_dysertatsii/2020/CHORNA_diser_pas.pdf
- [11] Yarushyna T. A. Vikovi ta statevi osoblyvosti kreatyvnosti u pidlitkovomu vitsi. *Visnyk Dnipropetrovskoho universytetu imeni Alfreda Nobelia. Seriiia «Pedahohika i psykholohiia»*. 2011. № 2 (2) S. 160-165. <https://pedpsy.duan.edu.ua/images/PDF/2011/2/31.pdf>
- [12] Baer J. Gender differences. *Encyclopedia of creativity* / M. A. Runco, S. R. Pritzker (Eds). San Diego et al.: Academic Press, 1999. Vol. 1. P. 753-758.
- [13] Guilford J. P. *Intelligence, creativity and their educational implications*. San Diego, Calif., Knapp., 1968. 229 p.
- [14] Hyde J. Sh. The gender similarities hypothesis. *American Psychologist*. 2005. № 60. P. 581-592.
- [15] Torrance E. P. The nature of creativity as manifest in its testing. Ed. R. J. Sternberg. *The nature of creativity*. New-York: Cambridge University Press, 1988. P. 43-75.

Review received 26.01.2024