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ARTÍCULO DE INVESTIGACIÓN

La influencia del dimorfismo sexual en el procesamiento cognitivo y la adaptación social

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Resumen. Este estudio examina el impacto del dimorfismo sexual en las capacidades cognitivas y la inteligencia social en adolescentes y estudiantes universitarios. La investigación emplea un enfoque de método mixto, integrando pruebas cognitivas (anagrama, generalización, autoevaluación) y evaluaciones de inteligencia social (labilidad intelectual, motivación para la autoevaluación). Los hallazgos revelan que mientras que los estudiantes varones demuestran una mayor adaptabilidad en las interacciones sociales, las estudiantes mujeres exhiben mayores niveles de iniciativa e inteligencia social autopercibida. La estabilidad emocional juega un papel crucial en el rendimiento cognitivo, ya que los estudiantes que experimentan malestar emocional muestran una menor eficiencia cognitiva. Estos resultados resaltan la necesidad de incorporar un entrenamiento cognitivo y de inteligencia social específico para cada género en los marcos educativos para fomentar un desarrollo personal y profesional equilibrado. Al comprender la interacción entre las habilidades cognitivas, la inteligencia social y el dimorfismo sexual, este estudio proporciona información valiosa para dar forma a las políticas educativas que apoyan tanto el crecimiento individual como el progreso social.

Palabras clave: dimorfismo sexual, cognición, inteligencia social, educación, diferencias de género.

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The influence of sexual dimorphism on cognitive processing and social adaptation

Abstract. This study examines the impact of sexual dimorphism on cognitive abilities and social intelligence in adolescents and university students. The research employs a mixed-method approach, integrating cognitive tests (anagram, generalization, self-assessment) and social intelligence evaluations (intellectual lability, motivation for self-assessment). The findings reveal that while male students demonstrate greater adaptability in social interactions, female students exhibit higher levels of initiative and self-perceived social intelligence. Emotional stability plays a crucial role in cognitive performance, with students experiencing emotional distress showing lower cognitive efficiency. These results highlight the need to incorporate gender-specific cognitive and social intelligence training into educational frameworks to foster balanced personal and professional development. By understanding the interplay between cognitive skills, social intelligence, and sexual dimorphism, this study provides valuable insights for shaping educational policies that support both individual growth and societal progress.

Key words: sexual dimorphism, cognition, social intelligence, education, gender differences.

INTRODUCTION

The article first of all mentions the justification of the manifestation of sexual dimorphism in the human species. It is clear that the problem was first proposed by Ch. Darwin. Later, in the research conducted in psychology, interest was shown whether the biological signs of sexual dimorphism are also present in the psyche. Freud (1998) (psychological gender), Miller (2000) (intelligence indicators), (psychological characteristics of personality), Fellmann, Redolfi (2017) (gender), and others addressed the problem. it is clarified by researchers in different directions.

Researches like Alizade (2009) Aliyev (2006), Kulakoğlu Dilek & Topaloğlu (2017), Obozov & Timoshenko (2008), Pashchenko (2003) justify the importance of taking into account the signs of gender differences in boys and girls in educational psychology. The manifestation of sexual dimorphism in behavior and functioning, more specifically in cognitive skills and social intelligence, is widely investigated. The cognitive nature of sexual dimorphism, Eysenck (1995), Guilford (1965) and others. was the subject of his research. Signs of sexual dimorphism in adolescents are clarified in the explanations of Craig & Baucum (2005), Saulina (2015) and Amrahli (2018). Goleman (2007) explains the psychological nature of social intelligence. Signs of dimorphism in students' social intelligence are explained by Fellmann & Redolfi (2017), Moshkina (2000), Poryadina (2007), Yermentayeva (2014).

If the qualities characteristic of cognition and socio-emotional intelligence, which are required of a modern personality by gender, and which occupy an important place in his psychological portrait, are determined, then a conceptual model of the development of those qualities in the educational system can be developed. Based on this model, taking into account the laws of sexual dimorphism in family relations and social activities, practical ways can be developed to prepare the young generation for family life and direct them to social activity.

METHODODOLOGY

In the study, the methods designed for the study of the cognitive field and social intelligence were used. They include: "Anagram" psychological test-2011. Form "A" (A-2009.A), "Generalization -2010. Form -A" (O-2010.A), "Identification of cognitive abilities" test, "Self-evaluation" test, E.I. Rogov's "Identification of the feeling of fear" survey, M. Lüsher's "Color test", "Man in the rain" projective test, " "Intellectual lability" test, "Diagnostics of motivation of self-assessment on the level of social intelligence in students". The research methodology includes theories, concepts and approaches about gender differences, cognitive, social-cognitive, social-emotional intelligence.

RESULTS AND DISCUSSION

Currently, human freedom is a priority issue, but there are a number of contradictions in this area. On the one hand, family relations are still treated with stereotypes and conservative thoughts, on the other hand, the laws of sexual dimorphism are not taken into account. A youth that does not come to terms with this reality, believes that it is capable of everything and is determined to protect its rights is being formed. As a result, the family institution is rapidly disintegrating in the world. A number of typical problems are manifested in business relations in labor collectives. In order to clarify all this, there is a need to investigate the problem comprehensively and in specific areas.

The concept of "sexual dimorphism" in ancient Greek (δι- two və μορφή- form) refers to the anatomical differences between males and females of the same species (sex). In this regard, the signs of sexual dimorphism can manifest different characteristics to varying degrees. For example, these signs include the weight of males and females, strength and shape of chest, leg, arm muscles, body skin, facial hair, skin thickness, color, etc. belongs to.

Gender differences do not end there. As the organism develops, it begins to show itself with more specific signs in its internal structure, as well as in its constitution. This is demonstrably noticeable in some species, especially during mating season (mountain goats, elephants, deer, tetras and peacocks, etc.). The first source that talks about the domorphism of sexual differences is Darwin's work "The Origin of Man" published in 1871 (The Descent of Man, 1871).

In this work, Darwin tries to apply the theory of evolution to the human species through sexual selection and selection. Focuses on how intelligence and moral abilities influence the choice of a sexual partner. In fact, at that time, Darwin wanted to develop the problem of relationships between different species by means of the newly formed anthropology. Therefore, he investigated the nature of sexual attraction in birds, insects, fish and mammals, and expressed his attitude to the cultures of sexual partnership in different human societies in this context. When explaining the characteristics of sexual dimorphism, Darwin was of the opinion that polygamous species have stronger sexual dimorphism.

Of course, both classical and modern researchers do not accept these ideas of Darwin. Oktay (2017) clarifies the attitude against Darwin's ideas as follows:

> "The fact that men have more wives than women in the human species is not explained only by the fact that men are 15% larger than women. At the same time, since men have a large number of spermatozoa, they have an instinct to fertilize more females and get quality offspring. Females are interested in looking for the best male individual who will give quality offspring".

Currently, biology, genetics and psychology are studying sexual dimorphism within their subjects. Biology and genetics examines the problem of sexual dimorphism both in terms of signs that are present at birth and that become noticeable during puberty. In research, the factors that take place inside and shape the external appearance (constitution) are studied on the basis of biological, chemical, physiological processes and mechanisms. And we study the problem in the direction of psychology.

Many studies have been devoted to the psychological aspects of sexual dimorphism. Meanwhile, Freud's (1998) basic principles of psychoanalysis, Craig & Baucum's (2005) developmental psychology, Miller's (2000) gender differences in intelligence indicators, Alizade's (2009) sexual development of children and adolescents etc. we can show. In these studies, the differences manifested in the psychological structures of sexual dimorphism in different age periods, especially in the cognitive field (perception, memory, thinking, imagination, etc.), as well as in role behavior and other social structures of personality, are analyzed. In particular, the issues (gender) that are relevant for modern times in the role behavior in inter-gender relations are clarified.

Wide study of the psychological problems of sexual dimorphism begins with S. Freud. He explains the difference in the sexual characteristics of women and men and the psychology. From Freud's explanation, it seems that girls understand the first difference of sexual dimorphism (differences in sexual organs). This has a significant impact on character formation in girls. "As a result of this first broken dream in competition, they completely distance themselves from sexual life" (Freud, 1998: 45).

The difference in sexual organs is not the only sign that girls and boys perceive themselves as representatives of different sexes. These differences start from the end of preschool age, in their body structure, skin, hair, body fur, muscle strength, etc. It is also evident in the signs. Craig & Baucum (2005: 108) show that

> "At the age of 9, girls are slightly lighter and shorter than boys, but then their growth rates increase dramatically due to hormonal changes that begin earlier than boys. It is known that sometimes there are boys and girls who lag behind their peers in terms of height and weight. These differences can affect the child's body image and general self-concept. This is an example of the interaction between physical, social and cognitive development processes".

Differences in the sexual dimorphism of girls and boys during adolescence are also recorded due to the general pace of development. A number of factors influence this. Even in the 19th century, the French philosopher Gabriel Compayré (1914: 130) noted about these issues that "The age of sexual maturity has a number of differences depending on climate, race, and individuality. In Rome, the age of puberty is defined as 12 (girls) - 14 (boys), in France 15 (girls) - 18 (boys)".

20th century researchers Craig & Baucum (2005: 567) included individual physiological structure, geographical area, culture, religion, etc. among those factors. point out: "In the USA, the average age of first menstruation in girls is about 12.5 years. Girls from the former Czechoslovakia had their first period at age 14. The median age for Kenya is 16, and for New Guinea it is 18 (Power et al., 1989)".

These authors show that sexual dimorphism is manifested not only in the biological system of girls and boys, but also in the psychological system: "The psychological factors associated with early sexual experience between men and women differ to some extent. Sexually experienced male adolescents have relatively high self-esteem. Teenage girls who have this kind of experience have lower self-esteem" (Craig & Baucum, 2005: 510).

Craig & Baucum (2005: 515) include the following in the signs of gender differences in intelligence and cognitive field:

1) "more efficient use of individual components of information processing, such as memory and memorization, as well as their application to other situations;
2) build more complex strategies for solving different types of problems;
3) master more effective ways of assimilation of information and symbolic memory;
4) to have a higher level of executive functions, including planning, decision-making, flexibility in choosing strategies from different scenarios".

Alizade (2009: 69) explains the psycho-pedagogical aspects of the sexual dimorphism of adolescent girls and boys and the differences between them in both sexual, social and educational (cognitive) interests, mutual relations, social-gender clearly manifested in their roles:

> "Interests are the needs, ideals, etc. of boys and girls. it is natural that there are certain gender differences between them in this field. The existing templates and stereotypes about boys' and girls', men's and women's games, professions, and art occupy the main place among the factors that determine the formation of gender differences in interests. The customs and traditions of the nature of boys and girls are also closely related to those templates and stereotypes".

Apparently, sexual dimorphism is the appearance, structure, shape, color, weight, etc. in the biological nature of living beings. Is a concept related to signs. However, its manifestations are not limited to these. Just as biological and physiological systems are manifested in different structures of the psyche, sexual dimorphism is also manifested in a number of psychological signs and qualities. A number of facts have been collected in this field in the science of psychology. We have shown examples of sources related to a few of them above. However, there are still many issues that need to be clarified. Among them are the concepts of "social intelligence" and "cognitive skills", which are more relevant now.

The concepts of "social intelligence" and "cognitive ability" express the priority problems of modern psychology. Both of these concepts include, on the one hand, human social skills, and on the other hand, problems that clarify the essence of conscious, deliberate and purposeful activity. If we include sexual dimorphism among the natural factors in the initial structure of these concepts, we create a general portrait of a person that is specific to both gender and social aspects of personality. If we have to express this portrait in an artistic language that everyone can understand, not in a scientific way, then the image of "Gaconda" (Mona Lisa) created by Leonardo da Vinci comes to life in our imagination. This psychological image, in which social qualities are combined with sexual dimorphism, is the "The Gioconda" phenomenon" that needs to be clarified for us. The question arises: "Why "The Gioconda"?

For centuries, art critics, psychologists, anthropologists, etc. the experts of the scientific fields are engaged in unraveling the secrets of the "The Gioconda" portrait, which is believed to have been created by Leonardo do Vinci in 1503-1517. Some of them "puzzle" about his smile, others about his facial features, others about his personality, the connection between the background and the figure, or the contradictions. In the latest information, there are possibilities that will surprise everyone:

> "The prototype of the character is not only Lisa Gherardini, the wife of the Florentine silk merchant. Also the artist's student and probably his lover is G.G. Caprotti, known by the pseudonym Salai. Kaprotti was a student of L.Vinci from 1490, when he was 10 years old. Working as his assistant for 20 years, he earned the nickname Salai and Little Devil. Joconda's nose, forehead and smile are strikingly similar to other paintings in which Salain

is depicted. Among them are portraits of Yahya and an erotic painting called 'Angel in the Body'" (Oktay, 2017).

Of course, our intention is not at all to open a new direction in gender studies or to reject the reality of sexual dimorphism and follow the unanimous traditions in the formation of the male and female psyche. Especially, in the East, in the society where ethnic cultures still maintain their presence to a significant extent, doing so will not bring positive results. On the other hand, it is clear to everyone what these efforts will lead to.

Even at the end of the 19th century and the beginning of the 20th century, researchers predicted what their future families and future generations as a whole could face due to the improper establishment of sexual education in the development of adolescents. In the 21st century, these concerns are increasing. The most obvious statistics are families that break up early. Studies also show that the reason for this is some inappropriate information promoted under the name of "gender equality" contrary to the natural realities of sexual dimorphism.

In fact, under the concepts of "gender" and "feminism" we can ensure the vital interests of men who feminize themselves (feminization) and women who masculinize themselves (domestication), who do not accept sexual dimorphism firmly, who oppose their natural roles "without looking at the white and gray". We are looking for ways. If the boys and girls of the new generation are able to realize and actualize their personality by revealing their inner psychological resources on the natural-sexual characteristics given to them by nature, we think that they will not be inclined to rebel against their nature.

Regardless of gender, the most outstanding qualities for a modern person are those inherent to cognition (perception processes that take place in the brain of sensory signals until creating different types of images, images, frames, scenarios, etc.) and social-emotional intelligence. So, how are these qualities characteristic of cognitive structure and social intelligence formed, or should they be formed, in order to strengthen the family institution in the world and in our country?

The concept of "cognition" (lat. cognitio) includes all the possibilities of the field of understanding of personality. This concept is used to represent all processes related to the acquisition of knowledge. The term "cognition" was first used by E.R. Hilgard in his work "Consciousness in Modern Psychology". "The mental activity involved in the acquisition of cognition-knowledge, the functioning of the mind, expresses its importance" (Amrahli, 2018: 39).

Amrahli (2018) studied the characteristics of cognition in the cognitive activity of teenagers in the training process and came to a number of conclusions. It was determined that monitoring the manifestations of cognition in the training activities of teenage girls and boys gives the researcher conflicting information, because the leading activity of teenagers in this period is intimate-personal communication. In them, the training motivation weakens, the psyche focuses its energy more on self-search, self-determination and self-identification.

During adolescence, the psyche reaches such a level of development that they can have high cognition, characteristic of old age, and get opportunities to acquire social and emotional intelligence. On the one hand, sexual energy increases in the biological system during adolescence, creating a natural basis for activity. On the other hand, the internal psychological resources are enriched, the will-emotional capabilities of the cognitive field expand, but despite the social stimuli and demands they face both in the family and at school, the cognitive skills important for educational activities are still poorly formed in teenagers.

> "'Cognitive skill' - the subject's ability to accurately perceive and perceive sensory signals in cognitive activity, acting on previously acquired knowledge, skills and habits. it is to carry out actions, to come to a mental conclusion, to master the ability to perform actions" (Amrahli, 2016: 11).

Cognitive skills are not mechanically formed by themselves. Here, a number of emotional-volitional, as well as spiritual structures of the personality should be combined. If we diagnose the biological intelligence of adolescents, among the students who show high results, we can see those who have low academic performance and also exhibit undesirable behavior. On the contrary, among those whose intelligence is lower than them, there are students with high academic performance and social role behavior. The reason for this is, of course, the social factors that affect the interests of understanding the adolescent personality, as well as the learning motives. Therefore, for the formation of cognitive skills, the cognitive field, implicit knowledge, automated action, past habits and skills involved in this process should be directed to training goals and interests. Amrahli (2016: 16) notes that

> "the formation of each new skill is actualized with the knowledge, skills and habits that are its basis." In order for the skill to be more accurate and perfect, all the elements related to its construction are strengthened with gradual refinements and improvement of means".

But, as we mentioned, teenagers are not able to take advantage of their potential in this area. Because their attention is directed to their inner world according to the demands created by the leading activity of the age.

In order to clarify whether the cognitive skills and cognitive activity of adolescents are correlated with gender dimorphism (gender-self), we conducted research in rural schools of Gakh region. We determined the contradictions between their summative grades, cognitive skills and self-evaluation levels based on the following criteria:

1) summative grade given by the teacher to the teenager according to cognitive skills;
2) scores on test results of cognitive skills of teenagers - expert evaluation;
3) self-assessment of the adolescent according to cognitive skills;
4) levels of test results of adolescents on scales.

At the initial stage, the academic grades, which are the main factor in determining the cognitive skills of teenagers, were determined based on the results of large summative tests. At the same time, a special methodology was developed and implemented to measure their general cognitive skills. We continued the research with the application of tests. We started this work with the "Anagram" test.

1) "Anagram" psychological test - 2011. Form "A" (A-2009.A)

Appointment. An anagram is an unintelligible word characterized by the displacement of letters, either intentionally or accidentally. The methodology is primarily intended for the detection of combination abilities, the sharpness of abstract-logical thinking. The results of the test also have a positive effect on the ability of the test takers to generalize and distinguish important signs, as well as to enrich the vocabulary.

2) Summary -2010. Form -A" (O-2010.A).

Appointment. One of the most important operations of cognitive activity is finding commonalities in things, various events, and specific concepts. The methodology allows to detect the cognitive abilities of the tested: This methodology is also intended for all cases aimed at learning verbal

intelligence. As a result, it is possible to determine the level of development of cognitive knowledge in teenagers and the ability to generalize this knowledge.

3) "Identification of cognitive abilities" test

Appointment. The test subjects are required to concentrate their attention at a high level, perceive sensor (sound) signals and perform the task based on them correctly. The process takes place on the basis of consistent, logical and coordinated execution of actions, as in cognitive activity. Most of the tested devices perform simple tasks in a short period of time (a few seconds). The results allow to diagnose the cognitive abilities of the subjects.

4) "Self-assessment" test.

Appointment. The self-assessment test is used to study teenagers' interest in educational activities, their cognitive abilities in this activity, the level of socialization and self-identification. In the questions asked, the pace of cognitive activity of teenagers, their interest in this activity, and their approach in terms of value are clarified. The obtained results are summarized in Tables 1 and 2.

TABLE 1. Levels of test scores of 14-year-olds

No.	Names and surnames of students	average price	Levels on test scales			
			anagram	generalization	cognitive abilities	self assessment
			0-2 Low 3-9 Average 10-12 Upper	0-16 Low 17-27 Average 28-40 Upper	0-25; 26-30 Low 31-35 Average 36-40 Upper	32-42 Low 43-64 Average 65-96 Upper
1.	Chalabiyeva A.	4,8	Upper	Average	Upper	Upper
2.	Ahmadov M.	3,0	Low	Low	Low	Upper
3.	Ahmadzade S.	4,8	Low	Average	Upper	Upper
4.	Hafizova M.	5,0	Upper	Upper	Upper	Upper
5.	Hafizov T.	4,6	Average	Average	Upper	Upper
6.	Hasanov T.	3,4	Upper	Average	Low	Upper
7.	Iskandarli A.	5,0	Upper	Average	Average	Upper
8.	Isayev R.	4,2	Upper	Average	Low	Upper
9.	Karakhova L.	5,0	Average	Average	Upper	Average
10.	Mammadzadeh S.	4,2	Upper	Average	Upper	Upper
11.	Osmanova R.	5,0	Average	Average	Upper	Upper
12.	Salmanov S.	3,0	Average	Average	Upper	Upper
13.	Sofiev H.	3,8	Average	Average	Upper	Upper
14.	Sharifova V.	3,0	Average	Average	Average	Average
15.	Tahirli T.	3,8	Average	Average	Average	Upper

As can be seen, the differences between the evaluations of 14-year-olds are clear. For example, the result of S. Ahmadzadeh, whose academic score is 4.8, is low on anagram, and average on generalization. Also, A. Isganderli, whose academic score is 5.0, has an average score on generalization and

cognitive abilities. Another remarkable difference can be seen in the result of M.Ahmädov. Although his academic GPA is 3.0, his self-esteem is high. A similar result was recorded in S. Salmanov. His academic grade is 3.0, and his cognitive abilities and self-assessment score are above.

TABLE 2. Levels of test results of 15-year-olds on scales

No.	Names and surnames of students	Levels on test scales				
		average summative the price	anagram	generalization	cognitive abilities	self assessment
			0-2- Low 3-9 Average 10-12 Upper	0-16 Low 17-27 Average 28-40 Upper	26-30 Low 31-35 Average 36-40 Upper	32-42 low 43-64 Average 65-96 Upper
1.	Asafova Ü.	3,0	Upper	Average	Average	Low
2.	Alieva Q.	4,4	Upper	Low	Average	Upper
3.	Alizade X.	3,6	Upper	Average	Average	Average
4.	Haydarov F.	4,2	Upper	Upper	Average	Upper
5.	İsgenderli N.	3,8	Upper	Average	Low	Upper
6.	Qazakhov R.	3,2	Upper	Upper	Average	Average
7.	Mehsimov V.	3,0	Upper	Upper	Upper	Upper
8.	Mehsimova V.	3,2	Upper	Upper	Average	Average
9.	Memmedova L.	4,4	Upper	Upper	Average	Average
10.	Nasirov R.	4,4	Upper	Upper	Average	Upper
11.	Sadıgov F.	3,2	Upper	Average	Average	Average
12.	Sofiev E.	3,8	Upper	Upper	Average	Upper
13.	Sofieva V.	4,4	Upper	Upper	Upper	Upper
14.	Sharifov M.	2,8	Upper	Low	Average	Upper
15.	Shirinov R.	2,8	Average	Low	Average	Average

Although the 15-year-olds solved the puzzle correctly compared to the 14-year-olds, the generalization and cognitive skills test results, as well as self-esteem, were lower. In this class too (IX "a") the prices of only 2 person - V. Sofiyeva and R. Sirinov - were adequate to each other. There are also contradictions between the evaluations of other teenagers. There were also teenagers whose academic grades were sufficient (M. Sharifov, V. Mahsimov) but their self-esteem was high. Or on the contrary, some teenagers rated themselves as average even though their academic grades were high (Kh. Alizade, L. Mammadova).

In this study, it was determined that the cognitive problems of adolescents with weak cognitive interests are also related to their character accentuation. These cases were 21% higher in poor readers compared to well-read teenagers. Dependencies between the percentage indicators of emotional problems and cognitive abilities were determined. It has become clear that the higher the cognitive ability of teenagers, the higher their ability to overcome their emotional difficulties. The reason is the close participation of cognitive structures in the regulation of the emotional state. Thus, the emotional tension of teenagers with poor cognitive abilities was 28% higher than that of good readers. Arousal is 31% higher in adolescents who are poor readers.

The following characteristics were identified as the cause of emotional instability in adolescents with weak cognitive abilities:

– not being able to analyze one's own actions internally, to plan, to build a strategy;

– not being able to analyze situations rationally and draw correct conclusions;

– not being open to self-criticism and self-correction;

– high typological characteristics such as schizoidness, pedantry, demonstrativeness, meticulousness, etc.

The emotional sphere also has a significant impact on the cognitive activity of adolescents. Since the development of thinking, which is an important component of the cognitive field, is connected with the development of feelings and emotions, it is responsible for the associative relations of cognitive activity as a whole. During psychosomatic and affective disorders, these relationships are weakened or broken. In our research, we encountered such violations in 20-22% of teenagers. The more common form was emotional and cognitive (cognitive) disorders, each of which ultimately caused different types of difficulties for the cognitive activity of adolescents.

The projective methods we applied to study the emotional-cognitive state of teenagers also allowed us to obtain interesting information. According to the results, emotional tensions were recorded in 20-22% of teenagers. The most frequent form of them is indifference, boredom, and the search for additional entertainment in students in an uninteresting learning environment (talking on the phone and other electronic devices, doing another lesson, talking to a friend, looking out the window and dreaming diving, sleeping on one's elbows at the desk, arguing with the teacher, etc.), as well as excitement, confusion, shyness, anger, fear of threats, etc. were situations.

As a result, each of these emotional situations creates different characteristic difficulties for the cognitive activity of young people. The situation becomes even more problematic in situations where training is organized without motivation, without clarifying the problem, without making assumptions and conducting research. On the contrary, in the educational process established by interactive and creative methods, comfort, security, initiative were created in their emotional field, the desire to ask questions, join discussions, search for solutions to problems, prove the correctness of their ideas and achieve goals arose. All this was reflected in the activity of the students. In the study, such situations were partially recorded in classes V (10-11 years old) and VIII (13-14 years old).

In the research, we used E.I. Rogov's questionnaire to determine the feeling of fear in V and XI grades, M. Lüsher's color test" and "Man in the rain" projective test to find out whether the emotional state of teenagers changes due to natural characteristics or training situations. The methods were used by classes as follows:

Grades V-VI: E.I. Rogov - questionnaire on determining the feeling of fear;

Grades VII-VIII: "M. Lusher's color test";

Grades XI: "Man in the rain" projective test.

Another analysis was conducted on the basis of independent creative works of teenagers. We asked them to create a visual representation of the road that goes outside of the area where they live, for example, to the district center. In this task, clear differences in sexual dimorphism were already revealed. The girls described the road and the objects on its side more precisely (with their names).

Some of them placed additional images on the picture. However, the objectivity in the pictures taken by the boys was more than that of the girls. The analysis allowed us to determine:

- the facts presented in the emotional background during the training process increase the level of sensitivity of teenagers, they are perceived and remembered more quickly;
- the correlation between the emotional state of teenagers and educational success is difficult, the state of the cognitive field of students who achieve high success in education is not at all adequate to these successes;
- there is a dependence between the emotional state of adolescents and the regulation of cognitive activity, the more stable and stable they are from an emotional point of view, the more confident they are in their suitability for their social (including sexual) role, the more appropriate it is to regulate cognitive activity. it becomes so easy.

Also, it was determined that the dependence of the cognitive activity of teenagers on the emotional field in the training process is that weak readers have incompleteness in the value-motivational field of personality and delays in the development of needs. These occur for the following reasons:

- weak inclination, demand and interests, which are the main factors of cognitive activity;
- insufficient development of the emotional sphere due to psychological age, difficulties in preventing distress and excitement while performing tasks;
- symptoms of impatience, denial, disagreement, stubbornness arising in the affective field, difficulties in perceiving and recognizing new materials, choosing and differentiating the necessary ones;
- inadequacy of self-evaluation and social evaluations.

It can be concluded that it is difficult to say that sexual dimorphism prevailed in all adolescents in the differences found in personality and cognitive indicators during adolescence (especially at the age of 13-15). The main factor here is the "Jakonda feomeni" - the realization of vital motives and goals in internal and external activities. However, for this realization, in addition to individual opportunities, there should be an environment that will stimulate their manifestation. If there are no significant differences in the cognitive skills of teenagers, or not much, then it is possible to do the following:

1) in the sexual education of adolescents, to educate them about the cognitive capabilities specific to their gender;
2) to form a cognitive base for their future career by forming cognitive skills;
3) prepare the ground for them to conduct family planning in a more rational way in the future;
4) preparing a "psychological portrait of a modern personality" and including the qualities characteristic of cognition and social-emotional intelligence in its features, introducing teenagers of both sexes to this portrait;
5) to create a favorable environment for teenagers to develop personality indicators corresponding to this portrait.

Now let's pay attention to the differences of sexual dimorphism in the content of social intelligence in students at an older age. For this, we conducted the "Intellectual lability" test with 94 students (47 boys, 47 girls) studying in different specialties in the first year. According to the char-

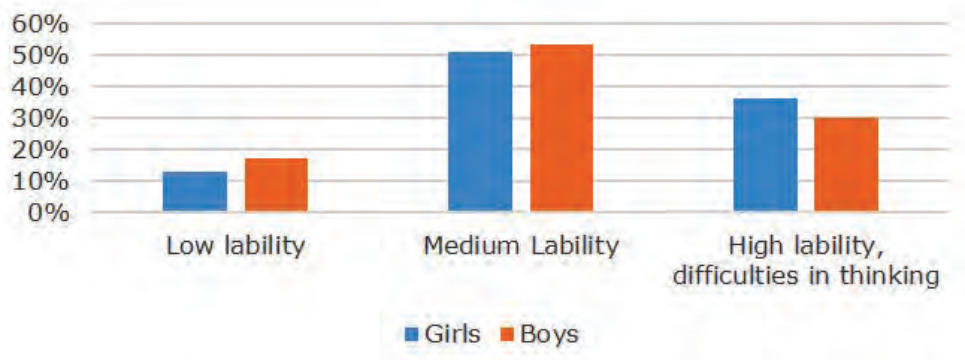
acteristics of the methodology, in terms of the structure of the intellect, the area that is more clarified here is attention, perception, understanding, analysis-synthesis processes of thinking, as well as aspects related to the social nature of the intellect.

TABLE 3. Results on the intellectual lability test

Levels of lability	Results				Results	
	Girls		Boys		Number	Percentage
	Number	Percentage	Number	Percentage		
0- 4 mistake: low lability	6	13	8	17	14	15
5-9 mistake: avarage lability	24	51	25	53	48	51
10-14 mistake: upper lability	17	36	14	30	32	34
15 or more mistakes: intellectual retardation	0	0	0	0	0	0

According to the results, 13% of 47 students in the group of girls and 17% in the group of boys have low intellectual lability. That is, their intellect has stable and stable qualities. This means an indicator close to the upper limit of intelligence and social intelligence capabilities. On this level, the indicator of the boys' group is 4% higher than the girls'. The average lability is 51% in the group of girls and 53% in the group of boys. Higher lability (stability) and thinking difficulties are also 6% more common in girls than in boys.

Figure 1. Gender differences in intellectual lability



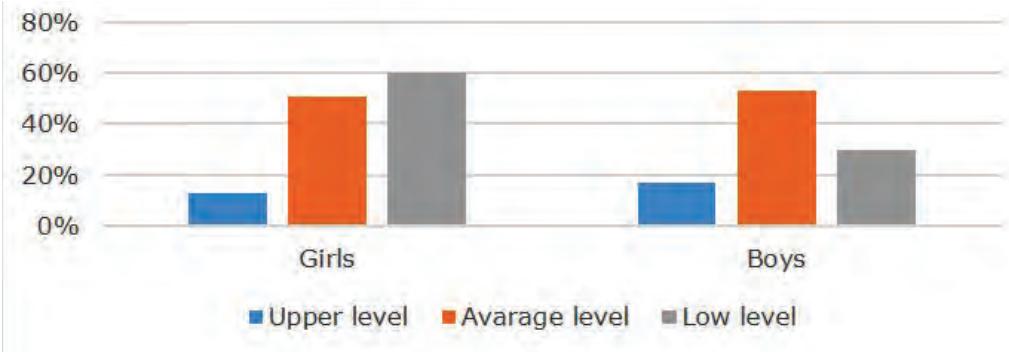
These results are consistent with the psychological and biological facts of sexual dimorphism in thinking. So, according to the laws of sexual dimorphism, boys have more opportunities to acquire social intelligence from a natural point of view. We also correlated these results with the results of the social intelligence test we conducted with those students. For this, we used the methodology "Diagnosis of motivation of self-evaluation on the level of social intelligence in students" modified by D. Marlow and D. Crown. "Diagnostics of motivation of self-assessment according to the level of social intelligence in students". Purpose: to evaluate the correctness of the statements by studying the answers given by the students regarding their social intelligence.

TABLE 4. Self-assessment on the level of social intelligence the results of motivation

Levels of social intelligence	Results				Results	
	Girls		Boys		Number	Percentage
	Number	Percentage	Number	Percentage		
15-20 points: upper level	11	23	9	19	20	21
8- 14 points: average level	24	51	23	49	47	50
0-7 points: low level	12	26	15	32	27	29
	47 n.	100	47 n.	100	94 n.	100

The fourth table shows the self-assessment indicators of social intelligence in male and female students studying in the first year. Apparently, in general results, girls have higher and average social intelligence scores than boys, At least, girls think so. According to the general results, only 29% of students are low. However, this indicator was 34% of intelligence labile. So are the separate results for girls and boys on basic intelligence. The upper lability of intelligence was 36% in girls and 30% in boys. However, the same indicator for social intelligence is 26% for girls and 32% for boys. That is, the differences between basic and social intelligence of girls and boys are clearly visible. This result suggests that in modern times, girls value themselves better in terms of social activity, they show more initiative to achieve this. Their academic results also prove this.

Figure 2. Correlation of intelligence levels of girls and boys



Of course, we can make as many comparisons as we want. Our goal is to dissuade teenagers and young people, who will represent the future generations in modern conditions, from rejecting the characteristics of their gender, rebelling against it, choosing ways that are alien to social norms, and showing the ways of forming the qualities that are characteristic of the personality of a modern person based on natural opportunities.

Sexual dimorphism is inevitable. It is a law of nature, but it is possible to form new qualities on sexual characteristics. The principles, methods and technologies of modern psychological science allow this. It remains for us to revive Leonardo da Vinci's Jaconda at the junction of modern social sciences about man, to give it a new life, a new breath. Our research is still ongoing. We will get more accurate and interesting facts in the future studies we will conduct on the effect of sexual dimorphism on interpersonal relationships in the family.

CONCLUSION

Research results Miller's (2000) (Sexual selection for indicators of intelligence) sexual selection in intelligence indicators, Pashchenko's (2003) cognitive and psychosocial features of social intelligence in early adulthood, Poryadina's (2007) gender differences in the structure of social intelligence of young, Saulina's (2015) characteristics of sexual dimorphism of cognitive abilities of adolescents with a high level of intelligence and coincides with the results of studies conducted by such researchers. At the same time, there are differences in the results. The difference is that we approach the problem not from the context of sexual dimorphism and social intelligence, or from the context of sexual dimorphism and cognition, but rather from the context of cognition, social intelligence, and sexual dimorphism. In the results of E.I. Pashchenko, the scope of the work carried out in this direction is wider, as in the issues studied by us, but cultural differences are evident in the results. On the other hand, in our study, the issue is considered in the dynamics of psychological age development. The sexual dimorphism of the manifestation of cognitive skills formed in adolescence at the level of social intelligence in youth is compared.

The facts obtained in the research and yet to be obtained can help us to strengthen the institution of the family. Because the awareness of both parties about the manifestation of sexual dimorphism in cognition, as well as in social and emotional intelligence, can help to regulate mutual relations in the family, as well as in the fields of work, in more civilized ways. The article provides information on the issues investigated in this direction and indicates directions for future research. On the one hand, based on the obtained scientific results, it will give a "green light" to the Upperic of "premarital dating", which has been taboo in the East for centuries, and will allow us to go down to its deep layers, which are important for the family. On the other hand, without accepting sexual dimorphism, the harmful consequences of going against one's own gender role on the basis of gender equality in the family are justified. Psychological problems, which have become the main factor in divorces in recent years, causing difficulties in the regulation of family relations, will be clarified in more detail. The theoretical scientific base created for developing, promoting and applying the socio-psychological aspects of preparing young people for family life will be enriched.

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