СЕКЦІЯ 3
ВІКОВА ТА ПЕДАГОГІЧНА ПСИХОЛОГІЯ

THE EMOTIONAL NATURE OF COGNITIVE ACTIVITY IN ADOLESCENTS
ЕМОЦІЙНИЙ ХАРАКТЕР ПІЗНАВАЛЬНОЇ ДІЯЛЬНОСТІ ПІДЛІТКІВ

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The article examines the emotional nature of cognitive activity. To elucidate this issue, experiments conducted with adolescents are described. It is demonstrated that cognitive processes not regulated by emotions during adolescence cannot sustain their continuity for extended periods. Researchers have diverse perspectives on this issue. These perspectives elucidate the relationship between emotion and cognitive activity, highlighting both its negative and positive aspects. By reviewing these studies, it becomes feasible to investigate the emotional nature of cognitive activity in adolescents, as emotion serves as a crucial and significant stimulus for cognitive activity. The article delineates the methods applied to age-differentiated groups of adolescents and their outcomes. Based on the tasks administered to the subjects, it is clarified how adolescents can overcome and regulate emotional influences in cognitive activity. It has been ascertained that, in general, the primary cause for the emergence of anxiety in cognitive activity in adolescents is related to the regularities of psychological age and individual characteristics. However, social factors also significantly impact their emotional sphere. Notably, adolescents demonstrate their acquisition of scientific knowledge in various subjects and their ability to solve complex tasks through summative evaluations. Nevertheless, they encounter difficulties in fully comprehending their individuality and personal qualities. They are not yet capable of sufficiently employing their willpower to manage learning activities by safeguarding them from emotional influences. Resolving these contradictions in the impact of emotional processes on cognitive activity presents significant challenges for adolescents. All these issues are associated with the search for self, self-determination, interest in new emotional impressions, and the instability of these interests, which arise from the age crisis. The article also highlights the factors contributing to the ineffective emotional regulation of cognitive activity in adolescents during the learning process. Examples include confusion in the tasks given and their solutions, difficulties in comprehending tasks, recognizing new concepts, and selecting the necessary mental constructs. Other factors include the inadequacy between self-assessment and academic evaluations, among others.
Key words: *learning activity, cognitive activity, evaluation, emotion, willpower, motivation, self-regulation.*

У статті досліджується емоційна природа пізнавальної діяльності. Для з'ясування цього питання описано експерименти, проведені з підлітками. Доведено, що когнітивні процеси, нерегульовані емоціями в підлітковому віці, не можуть підтримувати свою безперервність протягом тривалого часу. Дослідники мають різні погляди на це питання. Ці точки зору з'ясовують зв'язок між емоціями та когнітивною діяльністю, виділяючи як негативні, так і позитивні аспекти. Переглядаючи ці дослідження, стає доцільним дослідити емоційну природу пізнавальної активності підлітків, оскільки емоції є вирішальним і значущим стимулом пізнавальної діяльності. У статті окреслено методи, застосовані до диференційованих за віком груп підлітків, та їхні результати. На підставі завдань, поставлених досліджуваним, з'ясовано, як підлітки можуть подолати та регулювати емоційні впливи в пізнавальній діяльності. Установлено, що у цілому першопричина виникнення тривожності в пізнавальній діяльності підлітків пов'язана із закономірностями психологічного віку та індивідуальними особливостями. Однак соціальні чинники також суттєво впливають на їхню емоційну сферу. Слід зазначити, що підлітки демонструють набуті наукові знання з різних предметів та вміння розв'язувати складні завдання шляхом підсумкового оцінювання. Проте вони стикаються з труднощами в повному усвідомленні своєї індивідуальності та особистих якостей. Вони ще не здатні достатньою мірою використовувати свою силу волі, щоб керувати навчальною діяльністю, захищаючи себе від емоційного впливу. Вирішення цих протиріч у впливі емоційних процесів на пізнавальну діяльність представляє значні проблеми для підлітків. Усі ці проблеми пов'язані з пошуком себе, самовизначенням, інтересом до нових емоційних вражень і нестійкістю цих інтересів, що виникає внаслідок вікової кризи. Висвітлено чинники, що сприяють неефективній емоційній регуляції пізнавальної діяльності у підлітків у процесі навчання. Приклади включають плутанину в поставлених завданнях та їх рішеннях, труднощі в розумінні завдань, розпізнаванні нових понять і виборі необхідних розумових конструкцій. Інші чинники включають неадекватність між самооцінкою та академічними оцінками, серед іншого.
Ключові слова: *навчальна діяльність, пізнавальна діяльність, оцінювання, емоції, вольові зусилля, мотивація, саморегуляція.*

Introduction. The organization of cognitive activity in adolescents during the educational process is a complex task, both theoretically and practically. On one hand, the emotional state induced by the adolescent crisis, and on the other hand, the challenges adolescents face with new subjects and increased learning demands in school, further complicate this process. Consequently, extensive research in psychology is devoted to examining this issue. The objective of

our study is to identify these existing difficulties and develop appropriate recommendations. To this end, various projective methods and survey tests were employed in adolescent groups, and the results were analyzed and synthesized.

Degree of problem elaboration. The issue examined in this article has been studied from various perspectives by researchers such as U. Neisser, B.F. Lomov, L.S. Lazarus, S. Schachter, A.A. Alizadeh, R. Jacobson, N.Y. Karamova, T.N. Beryozina, A.N. Gusev, Y.S. Ibadov, among others. These studies analyze the impact of sexual maturation, emotional tension, and emotional safety in the educational environment on adolescents' cognitive activity. The application of methods developed to study the emotional state of adolescents in their learning activities facilitates the determination of their emotional state and the identification of strategies to alleviate their tension.

Objectives and tasks. The objective of the research is to investigate the content of emotions that influence adolescents' cognitive activity during the educational process. The tasks of the research include:

1. Examining the theoretical foundations of the issue;
2. Identifying emotional influences that can stimulate adolescents in cognitive activity;
3. Clarifying the positive aspects of these emotional influences;
4. Elucidating the content of the emotional environment that stimulates adolescents' cognitive activity during the educational process.

Methods. The research employed theoretical analysis, tasks to determine the levels of emotional regulation over cognitive activity in adolescents when solving educational tasks, the "Determination of Anxiety Level" survey, Y.S. Ibadov's "Abstract Compositions,» and B. Phillips' "School Anxiety and Emotional Regulation of Mental Reasoning" tests.

Main section.

The cognitive activity of adolescents

Although definitive data on the cognitive determinants of emotions have not yet been established, it is accepted that cognitive operations recorded in the brain, influenced by emotions, are inherently emotionalized. Consequently, the cognitive activity of adolescents is viewed not merely as a product of rational knowledge but as a multifaceted process influenced by emotions, which also channels creative potential into this activity. This process can be described within the framework of contemporary theories.

This process is referred to in NLP theory as "the release of tension from stress.» In the school's physics curriculum, information about "Ohm's law" is provided. The German physicist G. Ohm (1787-1854) experimentally demonstrated that the strength of the electric current flowing through a metal conductor (wire) without any external force is proportionally distributed across the ends of the wire: I = U/R. Here, I represents current strength, U stands for electric voltage, and R denotes the electrical resistance of the wire. The essence of the law is as follows: each metal contains free electrons within it, which possess resistance to external influences. When an electric current is applied to the metal, the following occurs:

1. Along with the current, an electric force F, directed opposite to the force acting on the metal's electrons, also influences them;
2. The free electrons within the metal move together with the current, in the same direction as the electric force;
3. As a result, not only the electric force applied to the wire but also the free electrons move in the same direction [2, pp. 74-75].

In 1966, H. Silva, a radio engineer from Texas, applied this law to psychology, thereby enhancing its practical applications. Ohm's law was used to explain the processes occurring in the human brain and mind during visualization. The same principle applies to the interaction between cognitive activity and emotions. When an individual begins to think and act based on these thoughts, emotions, which are the driving force of their inner strength, join this force and move along with it.

To elucidate the issue, let us examine the theses of several cognitive theories regarding emotions. In cognitive theories of emotions, the regulation of cognitive activity in this manner, as well as the role of cognitive processes in the emergence of emotions, is clarified. According to U. Neisser [10], R. S. Lazarus [9], B. F. Lomov [6], R. Jacobson [7], S. Schachter [11], and others, the integrative functions of adolescents' brain centers are responsible for attention, memory, emotion, and the associative connections of cognitive activity as a whole. During psychosomatic and affective disorders, these connections weaken or are significantly disrupted.

A.A. Alizadeh [1], M. P. Yakobson [46], A. N. Gusev [6], and other scholars place particular emphasis on the role of emotions in the educational activities of adolescents. According to these researchers, the impact of emotions on adolescents' cognitive activities arises from the transformation of their primary activities. The transition of adolescents' primary activities to personal and intimate relationships further intensifies the connection between cognitive activity and the emotional domain. N. Y. Karamova describes the relationship between cognitive processes and the emotional domain in adolescents as follows: "The results presented reflect the characteristics of how emotional tension impacts the psychophysiological processes of both healthy and oligophrenic adolescents, depending on the level of individual development. Unlike healthy adolescents, oligophrenics do not exhibit a response

to emotionally tense conditions. Additionally, the activation of cognitive processes is influenced by individual characteristics and the level of mental development and functional interrelations. The findings demonstrate that the activation of cognitive processes depends on the optimal level of emotional tension" [3, p. 4].

Although emotions are not regulated by cognitive components, they can exhibit cognitive characteristics. These can be termed "intelligent emotions.» For instance, the reactivation of cognitive activity impaired by negative emotions through the exertion of effort. During decision-making, the differentiation of past impressions among memory materials based on emotional tone, along with other attributes, etc. In this regard, T. N. Beryozina explains the cognitive content of emotions as follows:

1. Emotion does not solely emerge as a conclusion to cognitive activity but accompanies the process, facilitating its success;

2. The term "value" has dual meanings, one of which is that emotion itself performs an evaluative function (emotional evaluation) [4, p. 30].

In many emotional-cognitive theories, the intensity and nature of the emotional state that arises during cognitive activity are also associated with empathy. According to S. Schachter, in this context, the emotional state progresses under the mutual influence of two components: a) Activation, the completion of the emotional arousal process; b) Analysis of the causes of the emotion (evaluation) [11].

In contrast to S. Schachter's approach, the cognitive theory of emotions proposed by M. Arnold and R. Lazarus offers a more comprehensive explanation of this phenomenon. These theories indicate that, in fact, in many situations, emotions function as determinants of cognition, serving as intuitive evaluations. Like cognitive activity, emotion is also based on this evaluation. R. Lazarus does not view affective reactions merely as impressions. For him, emotion represents a syndrome encompassing three primary groups of symptoms: subjective impressions, physiological changes, and behavioral reactions. R. Lazarus posits that an emotional reaction reflects a syndrome, a component, or an internal stimulus. In this context, R. Lazarus's concept advances two main theses:

1. Not every emotional reaction fully encapsulates its content;

2. The thought or knowledge expressed by an emotional state may not fully align with that emotion [9, p. 821].

The psychological mechanisms underlying the inhibiting and distracting effects on adolescents' emotional-cognitive activity

Although the characteristics of such emotional states in adolescents have been extensively elaborated, there are limited effective and optimal interventions for their mitigation. According to P. M. Yakobson's approaches, similar to those of other scholars, "Indeed, we are addressing only a minor aspect of the problem at hand. In relation to behaviorism, human emotional responses are described based on their intensity, organization, or lack thereof. The adequacy of emotional responses is contingent upon the precision of their orientation within life circumstances" [6, p. 192].

The objective we aim to elucidate is to determine the psychological mechanisms underlying the inhibiting and distracting effects on adolescents' emotional-cognitive activity and to identify appropriate corrective strategies. To this end, we utilized both conventional measurement techniques and alternative approaches. To validate these, we conducted research based on the following methodology:

For adolescents aged 10-13 years: Grades V-VII.

1. "Abstract Compositions" projective assessment.

2. "Determination of Excitability Level" questionnaire.

3. Tasks to assess levels of emotional regulation in cognitive activities during problem-solving.

For adolescents aged 14-15 years: Grades VIII-IX.

1. "Abstract Compositions" projective assessment.

2. Biman Phillips's "School Excitability Test.«

3. "Emotional Regulation of Intellectual Judgments" assessment.

Given the complexity of delineating the emotional content of cognitive activity, we initially employed methods from alternative psychology. Using Y. S. Ibadov's "Abstract Compositions" assessment, we diagnosed the emotional-cognitive domain of adolescents. This assessment, developed by Y. S. Ibadov with the assistance of psychogram, was effectively implemented in schools in the Narimanov and Yasamal districts of Baku from 2001 to 2003. The essence of the assessment and its diagnostic and corrective significance are thoroughly described in the source [5, pp. 180-186].

The primary goal of administering the assessment was to clarify the emotional state of the participants through the laboratory analysis of the volume and interactions of colors in the compositions. The results of the assessment participants were evaluated using a specifically designed computer program. During the application of the abstract compositions assessment, it was possible to conduct psychoprotective, psychodiagnostic, and psychocorrective interventions by appropriately directing mental energy: studying sensitivity and the impact of emotions on the psyche; managing actions, accurately directing activity; enhancing visual acuity, expanding the visual field, strengthening visual memory; increasing

emotional resilience; and fostering abstract thinking and creative imagination.

The "Abstract Compositions" assessment was administered to participants aged 10-15. Currently, we will examine the results of the 10-13-year-olds. These results have been synthesized based on percentage indicators of colors derived from laboratory analyses. For an in-depth evaluation, we reviewed the outcomes for 10 participants selected from each age group. The results indicate that, among the 10-11 and 11-12-year-olds from School No. 285, there is a predominant preference for warm colors. Although the differences are marginal, students in Grades V and VI exhibited a higher selection of yellow, red, light green, orange, and pink during the test. In contrast, among the 12-13-year-olds, the preference for cool colors is more pronounced (3.92 percent).

We also compared these findings with the adolescents' summative evaluations. It was observed that no comprehensive correlation was evident between the selection of colors in abstract compositions and academic performance across any age group. Conversely, some adolescents with lower grades (3) produced more intricate and substantive compositions compared to their higher-graded peers (4-5). This dependency was also evident in gender differences, with females showing a greater inclination towards warm colors compared to males.

To explore whether adolescents' emotional states are influenced by inherent characteristics or educational contexts, we conducted research in Grades V and XI at both schools using the "Methodology for Determining the Emotional Character of Adolescents' Cognitive Activity.» Subsequently, the "Determination of Excitability Level" questionnaire was administered during the resolution of training tasks in Grades V-VII. The results were analyzed based on the scores obtained.

In the table, both the control and experimental groups exhibited the highest levels of arousal at ages 12-13: 38.09% in the control group and 33.33% in the experimental group. These individuals are seventh-grade students. It is noteworthy that the levels in the experimental groups were consistent for both ages 11-12 and 12-13. Considering that the assessment was conducted during the second semester of the academic year, this aligns more closely with the latter stage of age 12. In developmental psychology, the adolescent crisis is also recognized to intensify at ages 12-13. Therefore, the primary reason for the heightened arousal at this stage should be sought in the psychological age-related patterns rather than in social factors. The lowest levels of arousal correspond to ages 10-11, i.e., fifth-grade students. Since they are still in the preliminary stage of the crisis, it is anticipated that the results reflect this developmental phase. Based on Table 3, we can examine the variations in arousal affecting cognitive activity across different ages.

Throughout the research period, an analysis of the pedagogical-psychological environment at the school revealed that the primary cause was associated with social factors. Based on the tasks assigned to the V-VI and VII grade students, we identified the impact of emotions on cognitive activity and explored the opportunities for regulation and management of these emotional influences.

The primary criterion for solving the tasks was adherence to the allotted time and precise execution. In this task, the highest performance was achieved by 12-year-old adolescents. This suggests that their developmental capabilities allowed them to effectively demonstrate their cognitive abilities in addressing the given tasks. Although there were minimal differences among classes, the results from the Cəlayır village school remained superior.

Table 1

Results of the "Determination of Excitability Level" questionnaire by age groups

Age	Level							
	High anxiety		Medium anxiety		Low anxiety		Total	
Control groups	Person	Percentage	Person	Percentage	Person	Percentage	Person	Percentage
10-11 y.o. – V grade	5	25,00 %	11	55,00 %	4	20,00 %	20	100 %
11-12 y.o. – VI grade	6	31,57 %	10	52,63 %	3	15,78 %	19	100 %
12-13 y.o.– VII grade	8	38,09 %	10	47,61 %	3	14,28 %	21	100 %
Results per group	19	31,67 %	31	51,66 %	10	16,67 %	60	100 %
Experimental groups								
10-11 y.o. – V grade	2	13,33 %	10	66,66 %	3	20,00 %	15	100 %
11-12 y.o. – VI grade	5	33,33 %	8	53,33 %	2	13,33 %	15	100 %
12-13 y.o. – VII grade	6	33,33 %	7	38,88 %	2	11,11 %	18	100 %
Results per group	13	27,08 %	25	52,08 %	7	14,58 %	48	100 %
Total results	32	30,47 %	56	53,33 %	17	16,19 %	105	100 %

Table 2

Levels of Emotional Regulation in Cognitive Activity Among Adolescents Aged 10-13

Age	Level							
	High level of emotional regulation		Medium level of emotional regulation		Low level of emotional regulation		Total	
Control groups	Person	Per-centage	Person	Per-centage	Person	Per-centage	Person	Per-centage
10-11 y.o. – V grade	7	35,00 %	8	40,00 %	5	25,00 %	20	100 %
11-12 y.o. – VI grade	6	31,57 %	9	47,36 %	4	21,05 %	19	100 %
12-13 y.o. – VII grade	7	33,33%	8	38,09 %	6	28,57 %	21	100 %
Results per group	20	33,33 %	25	41,66 %	15	25,00 %	60	100 %
Experimental groups								
10-11 y.o. – V grade	5	33,33 %	10	66,66 %	5	33,33 %	15	100 %
11-12 y.o. – VI grade	4	26,66 %	5	33,33 %	6	40,00 %	15	100 %
12-13 y.o. – VII grade	5	27,77 %	5	27,77 %	8	44,44 %	18	100 %
Results per group	14	29,16 %	20	41,66 %	19	39,58 %	48	100 %
Total results	34	32,38%	45	42,85 %	34	32,38 %	105	100 %

Table 3

Results of B. Phillips' "School Anxiety" Test for School No. 285

No.	Attributes	VIII grade – 23 p.		IX grade – 25 np		Total – 48 p.	
		p.	%	p.	%	p.	%
1.	General anxiety related to school	0	0	2	8,00%	2	4,16%
2.	Social stress experienced in school	3	13,04 %	5	20,00%	8	16,66%
3.	Achievement demands	4	17,39 %	2	8,00%	6	12,50%
4.	Fear of inability to express oneself	3	13,04 %	2	8,00%	5	10,41%
5.	Assessment of knowledge	3	13,04 %	4	16,00%	7	14,58%
6.	Fear of failing to meet expectations	5	21,73%	3	12,00%	8	16,66%
7.	Weak resistance to stress	3	13,04 %	2	8,00%	5	10,41%
8.	Conflicts with teachers	2	8,69%	5	20,00%	7	14,58%
Overall anxiety		23	100%	25	100%	48	100%

Significant differences were observed between the levels of anxiety and the emotional regulation of cognitive activity among 10-13-year-olds. Based on the results of this task, the high level of emotional regulation at School No. 285 was 33.33%, whereas at Jalayir village school it was 29.16%. The lower threshold was 11% higher at Jalayir school. The average level was also 3.57% higher at School No. 285. However, both academic performance indicators and prior research revealed that the control school's indicators were comparatively lower.

Let us investigate the state of emotional regulation in cognitive activity among 14-15-year-olds (grades VIII and IX) using the following age-appropriate methods:

"Abstract Compositions" projective technique.

According to the test instructions, a 50/50 ratio of warm to cool colors indicates emotional equilibrium. A predominance of warm colors suggests a higher level of positive energy (masculine energy), whereas a predominance of cool colors indicates a higher level of negative energy (feminine energy). When both color types are balanced, regulating cognitive activity becomes more manageable. It should be noted that the quantity of colors does not necessarily correlate with academic performance. This correlation may or may not be present.

It is well established that high academic performance does not always align with moral-ethical and psychological indicators or other personal attributes. The focus here is on the internal harmony of the individual, the direction of life goals, and thoughts towards positive outcomes. According to the test results, the findings for 14 and 15-year-olds are similar to those for 13-year-olds, with a preference for cool colors. Girls tend to favor warm colors. Among 15-year-olds, the preference for cool colors was more pronounced, at 15.48%. Significant differences are attributed to the boys' results. Thus, the predominance of cool colors among adolescents was evident. The sequence of color preferences was as follows: green, blue, violet, black, brown. The preferences for warm colors were: red, yellow, orange, pink. The most commonly encountered conditions were:

1. An unengaging and monotonous educational environment that fails to foster a positive emotional state in students, leading to apathy, boredom, and the pursuit of additional entertainment (e.g., using electronic devices, engaging in unrelated subjects, conversing with peers, daydreaming out of the window, leaning on desks, disputing with teachers).

2. Anxiety, confusion, shyness, irritation, and apprehension arising from tense situations due to unmet behavioral expectations.

Each of these emotional states ultimately creates various impediments to adolescents' cognitive activity. In instructional scenarios that lack motivation, problem clarification, or hypothesis formulation, the situation becomes increasingly challenging. Conversely, interactive and creative teaching methods foster a sense of comfort, security, and initiative within their emotional domain. Active participation in questioning, engaging in discussions, seeking problem-solving strategies, validating opinions, and striving towards goals were observed. These factors were reflected in the students' cognitive activity.

In the study, such conditions were predominantly observed in the VI "a" class of School No. 285 and in the V and VIII grades of the Cəlayır village school.

3.4. **Biman Phillips' "School Anxiety" Test**

This test was designed to evaluate school-related fears and the anxieties associated with events occurring within the school environment among primary and secondary school students. It is a survey-based assessment consisting of 58 questions. The administration of the test can be either oral or written. Each question is answered with "Yes" or "No.» If the answers align with the key in less than 50% of the cases, it indicates elevated levels of anxiety; if there is more than 75% mismatch, it reflects significantly high levels of anxiety. The results are used to identify the effects of various factors contributing to anxiety.

At School No. 285, the results of B. Philips's test revealed a significant level of anxiety among the participants. Various situations at the school cause anxiety for the majority of adolescents aged 14-15. At this school, anxiety was recorded for different criteria, ranging from 2 to 5 adolescents across 8 criteria for each of the 48 participants.

In School No. 285, the highest scores were observed for "Fear of not meeting expectations" (8 individuals – 16.66%) and "Situation involving the assessment of knowledge" (7 individuals – 14.58%). The results from the Jalayir village school were better than those from School No. 285. In the Jalayir village school, no instances of "General anxiety related to school" or "Conflicts with teachers" were recorded. The most significant source of anxiety at this school was "Fear of not meeting expectations" (9 individuals – 30%) and "Failure to meet the demand for achievement" (7 individuals – 23.33%). The lowest result was recorded for the factor "Social stress experienced at school."

Subsequently, we compared the results from both schools (see Figure 3.2.4). The figure illustrates that stress factors and their impact on anxiety were lower at Jalayir village school. Overall, the primary source of anxiety among students at the school was "Fear of not meeting expectations" (16.66/30.00). This was followed by "Failure to meet the demand for achievement" (12.50/23.33).

Interestingly, although adolescents may demonstrate their acquisition of academic knowledge and problem-solving abilities through summative assessments, they still struggle to fully understand their individuality and personal qualities. They have yet to effectively manage their actions by shielding them from emotional influences. Resolving these conflicts between volitional and emotional processes presents significant challenges for adolescents. This is related to self-exploration, efforts to define oneself, and a curiosity about new emotional experiences, coupled with instability in those interests.

Table 4

Results of B. Philips's "School Anxiety" Test at Jalayir Village Secondary School

No.	Attributes	VIII grade 15 p.		IX grade 15 p.		Results 30 p.		Total	
		p.	%	p.	%	p.	%	285	Jalayir
1.	General anxiety related to school	0	0	0	0	0	0	4,16%	0
2.	Social stress experienced in school	1	6,66%	1	6,66%	2	6,66%	16,66%	6,66%
3.	Demand for achievement	3	20,00%	4	26,66	7	23,33%	12,50%	23,33%
4.	Fear of inability to express oneself	3	20,00%	1	6,66%	4	13,33%	10,41%	13,33%
5.	Assessment of knowledge	3	20,00%	2	13,33%	5	16,66%	14,58%	16,66%
6.	Fear of not meeting expectations	4	26,66%	5	33,33%	9	30,00%	16,66%	30,00%
7.	Weak resistance to stress	1	6,66%	2	13,33%	3	10,00%	10,41%	10,00%
8.	Conflicts with teachers	0	0	0	0	0	0	14,58%	0
Overall anxiety		15	100%	15	100%	30	100%	100%	100%

Table 5

Evaluation Criteria for the "Emotional Regulation of Cognitive Judgments" Test

Number of mistakes	Scores	Emotional-logical levels of cognitive activity
0	5	High emotional-logical levels of cognitive activity
2-3	4	Medium emotional-logical levels of cognitive activity
4-6	3	Low emotional-logical levels of cognitive activity

Table 6

Results of the "Emotional Regulation of Cognitive Judgments" Test

School	grades	Emotional-logical levels of cognitive activity						Total	
		high		medium		low			
		p.	%	p	%	p.	%	p.	%
School No. 285	VIII grade	6	26,08%	12	52,17%	5	21,73%	23	100%
	IX grade	8	32,00%	13	52,00%	4	16,00%	25	100%
	Total	14	29,16%	25	52,08%	9	18,75%	48	100%
Jalayir village school	VIII grade	5	33,33%	7	46,66%	3	20,00%	15	100%
	IX grade	6	40,00%	7	46,66%	2	13,33%	15	100%
	Total	11	36,66%	14	46,66%	5	16,66%	30	100%
Total		25	32,05%	39	50,00%	14	17,94%	78	100%

3.5. "**Emotional Regulation of Cognitive Judgments" Test.**

The participants listen carefully to the cognitive judgments derived from them. Some of these judgments are correct, while others are incorrect. Participants must determine the correctness of the cognitive judgments and record their responses on small cards provided to them. According to the procedure, each participant in a group test is given one card. They write their name, surname, and class at the top of the card. Each response is allotted one line. Participants are not allowed to make corrections, rewrite, or make drafts on the responses.

Each task is allocated 10 seconds for consideration. The cognitive results for judgments 1, 3, 5, 7, 9, and 11 are incorrect. All other cognitive results are correct. The results are depicted in the table below. There are differences in percentage scores between the two schools for the "Emotional Regulation of Cognitive Judgments" test. The high-level performers at School No. 285 exceed those at the Jalayir school by 7.5%. Conversely, the difference in average-level performers is 5.42% higher at School No. 285. The low-rated performers are similar in both schools.

The results of the "Emotional Regulation of Cognitive Judgments" test indicate that out of 78 adolescents aged 14-15, 14 individuals (17.94%) either do not consider or are unable to think about the main ideas of the tasks assigned to them. Their cognitive constructs are poorly developed, and emotional regulation of cognitive processes is weak. Consequently, the emotional-logical level of cognitive activity for these individuals is rated as "poor.«

For 39 adolescents (50%), these processes are managed at an average level, while 25 adolescents (32.05%) manage them at a high level. If the participants had experience in effectively using their internal resources and regulating their cognitive activity emotionally, their results could have been better.

The analysis allows us to determine that the regulation of adolescents' cognitive activity during the training process is significantly dependent on the state of their emotional-volitional domain. This dependency is evident from the fact that the majority of those rated as "poor" also have lower academic scores, and they exhibit delays in their developmental demands, lack of motivation in their activities, and incompleteness in cognitive activities.

Conclusions. The primary difficulties in the emotional regulation of adolescents' cognitive activity during the training process stem from the weakness of key regulatory factors – interest, demand, and motivation. Additionally, insufficient psychological development of the emotional domain according to age and challenges in preventing discomfort and anxiety during task execution are contributing factors. Another issue is the confusion and difficulty in comprehending and addressing tasks, recognizing new concepts, and selecting necessary cognitive constructs observed among some participants during task administration and solution.

Another contributing factor to the ineffective emotional regulation of cognitive activity is the inadequacy of self-assessment compared to academic evaluations. Considering the facts encountered in practice, it is necessary to correlate self-assessment with other indicators.

The dependence between adolescents' emotional state and effective regulation of

cognitive activity is related to various factors. Key among these are the adolescents' emotional stability, resilience, and their confidence in aligning with their social roles. Another factor is the proper regulation of cognitive activity according to task requirements. Additionally, the high-level construction of cognitive constructs in the cognitive domain is also crucial. The emotional character of adolescents' cognitive activity primarily manifests in individual characteristics. This character, on the one hand, reflects the type of temperament and, on the other hand, represents the overall emotional tone of the cognitive system and volitional strength, which together express their cognitive style in cognitive activities.

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