

METHODOLOGICAL AND CONTEXTUAL FOUNDATIONS OF METACOGNITIVE MONITORING TRAINING PROGRAMME IN STUDENT SELF-REGULATED LEARNING

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ABSTRACT

Aim. This manuscript aims to present the theoretical and contextual characteristics of the components of students' self-regulated learning activities with the use of metacognitive monitoring. The authors sought to analyse these phenomena in scientific literature and develop a training programme; inform students about the features of metacognitive monitoring and control of self-regulated learning activities; form comprehension and task analysis skills.

Methods. A system of general scientific methods was used: analysis and synthesis of the main characteristics of the concepts of self-regulated learning and metacognitive monitoring as a complex multidimensional formation, comprehension of the psychological foundations of self-regulated learning, systematisation and generalisation of scientific provisions of metacognitive monitoring in student self-regulated learning.



Results. This paper presents the theoretical aspects of the concepts of metacognitive monitoring and self-regulated learning of university students. The theoretical essence of the methodological and contextual characteristics of the above-mentioned phenomena has been studied. The role and importance of metacognitive monitoring and its components in the learning efficiency and academic self-regulation of university students have been described. The training programme for increasing the efficiency of metacognitive monitoring in student self-regulated learning has been developed and presented.

Conclusions. The programme was designed to help students consciously approach the independent planning and setting of learning goals, control intellectual and metacognitive activities, and use cognitive and metacognitive strategies in learning, monitoring, controlling and correcting their learning activities. The use of this type of training programme will help students optimise their learning outcomes through metacognitive monitoring in the process of self-regulated learning activities.

Key words: metacognitive monitoring; self-regulated learning; training programme; university students

INTRODUCTION

The new realities of modern society have radically changed the scientific approaches to studying the essence of the necessary individual and personal characteristics needed for personal and professional development, competitive employment in the labour market, self-realisation and self-regulation of one's own life. There is a scientific need for certain factors, mechanisms and methods by which one can form the optimal style of self-regulation of individual behaviour, including in educational activities.

The relevance of the study of metacognitive monitoring in self-regulated educational activities has been primarily caused by the need to determine the various competencies needed by students for the effective, independent, responsible solving of educational problems. Student age is characterised by a higher level of development of cognitive processes, individual-personal and motivational-volitional qualities, a flexible value system that is formed, the development and formation of personal and intellectual maturity and more. However, often metacognitive monitoring of students' learning activities is not effective enough due to the so-called phenomenon of "cognitive optimism" (Avhustiuk, 2018, p. 8).

An important role in the formation of effective metacognitive monitoring of self-regulated learning activities is played by individual-personal, motivational-volitional, cognitive, and metacognitive characteristics of students because metacognitive processes in students' learning activities should be considered in the context of their involvement in integral learning and correlation with these characteristics (Avhustiuk et al., 2021).

Self-regulated activity is considered as a complex process of personal activity, which allows fulfilling the goals and objectives through certain mechanisms and the comprehensive mobilising of a student's indi-

vidual psychological and personal characteristics. However, despite a large number of studies on self-regulation as a mental mechanism for the personal activity of a person in accordance with the requirements of the socio-cultural environment, there is a lack of basic research on its various aspects, mechanisms and factors. Accordingly, many training programmes have been developed, which are aimed at forming or raising the level of certain components of the process of self-regulation in educational activities. Some parts of these programmes can be used in the process of working with students, but there is no holistic comprehensive programme aimed at forming the optimal style or appropriate level of self-regulation.

Despite a rather wide range of foreign and domestic scientific developments, both theoretical-methodological and empirical components of the correlation between the metacognitive aspects of self-regulation of learning and its success remain debatable. Therefore, psychological and pedagogical science is faced with the need to develop a comprehensive training programme that would contribute to the formation of successful metacognitive monitoring of students in self-regulated learning. Thus, the purpose of this study is to substantiate and develop an optimal training programme for improving metacognitive monitoring in student self-regulated learning.

LITERATURE REVIEW

Representatives of different segments of society with different personal psychological characteristics become students. During the educational activity, students' potential learning opportunities are determined, learning motivation is formed, and individual and personal qualities are developed, including activity, determination, purposefulness, responsibility, etc. Students' cognitive and metacognitive abilities are vital in the learning process. In forming effective metacognitive monitoring of educational activities, metacognitive activities in learning should be considered in the context of their inclusion in a student's comprehensive learning activity and through the prism of correlation with his/her personal characteristics. Some scientists consider students' metacognitive activity in learning through the prism of metacognitive processes. First of all, psychologists are interested in the study of potential cognitive abilities and limitations of students in learning, conscious determination of their cognitive strategies, cognitive awareness of learning, etc. (Savin & Fomin, 2013).

The studies linking the accuracy of metacognitive judgments to academic performance are especially interesting (Carvalho, 2009; Isaacson & Fujita, 2006; Koriat et al., 2013; Nietfeld et al., 2005; Sihinishyna, 2012; Young & Fry, 2008). Subjects with a high level of knowledge are less prone to overconfidence and, therefore, are more reliable in metacognitive monitoring. In contrast, subjects with a low level of knowledge are more difficult

when it comes to the accuracy of metacognitive judgments (Dunning et al., 2003; Miller & Geraci, 2011).

Some aspects of the study of the metacognitive features of monitoring are presented in foreign works (Andrade, Brookhart & Yu, 2021; Andrade and Valcheva, 2009; Kitsantas, 2014; Nietfield et. al., 2005; Young & Fry, 2008), and contemporary national researchers (Avhustyuk, 2018; Balashov, 2020c; Voloshyna & Dovhaliuk, 2015; Avhustiuk, Pasichnyk & Kalamazh, 2018, etc.)

When studying self-regulation in students' learning activities, scientists, however, study only some of its components, and do not research this phenomenon comprehensively. Therefore, the results of theoretical analysis have proved the feasibility of developing and implementing a special programme for the development of metacognitive monitoring of students' self-regulated learning, which aims to promote levels of individual-personal, motivational-volitional, cognitive and metacognitive components of students' psychological readiness for self-regulated learning.

METHOD

This study focuses on theoretical analysis of the concepts of metacognitive monitoring and self-regulated learning, and the design and development of a training programme for developing metacognitive monitoring efficiency in student self-regulated learning. Firstly, based on theoretical analysis, this paper aims to present some specific instructional measures for both students and teachers on how to identify the relationship between the components of the levels of self-regulated learning in the process of metacognitive monitoring. In addition, this work presents instructional measures for the development of students' individual personality traits relevant for improving the efficiency of self-regulated learning, including motivational, volitional, cognitive, and metacognitive characteristics. To do this, the authors sought to analyse these phenomena in scientific literature and a training programme aimed at: the development of student reflexivity, internal learning motivation, and metacognitive skills; informing students about the features of metacognitive monitoring and the metacognitive control of self-regulated learning activities; increasing students' awareness of the characteristics of their own processes of understanding, evaluating and reproducing information; and the formation of comprehension skills and skills regarding the analysis of tasks and understanding the specifics of performed tasks.

The training programme is supposed to aid in developing the components of self-regulated learning in the process of metacognitive monitoring, as well as aid in establishing the level of development of students' relevant personal, motivational, volitional, cognitive, and metacognitive characteristics. Therefore, the targets of the programme implementation were defined as follows:

- activation of the functional mechanisms of self-regulation through the actualisation of formal-programme qualities of individuality (personal component);
- provision of positive motivation to participate in the development programme and updating the motivation of self-regulated learning (motivational and volitional component);
- formation of a system of actions and operations that underlie the successful implementation of self-regulated learning activities (cognitive component);
- formation of awareness of the participation results in the development programme and updating the attitude to their active use in future self-regulated learning activities (metacognitive component).

The objectives of the training programme were aimed at the development of reflection, internal learning motivation, the metacognitive skills of students, conveying to students the knowledge about the features of metacognitive monitoring, and the metacognitive control of self-regulated learning activities; their awareness of the characteristics of their own processes of understanding, evaluating and reproducing information; the formation of skills of comprehension and analysis of tasks, understanding of specifics of performed tasks. In order to ensure its effectiveness, the authors needed to add additional targets to the programme, namely to develop the processes of learning self-regulation as goal setting and planning, self-motivation, attention control, self-control, flexible use of learning strategies, seeking help and more.

TRAINING PROGRAMME AND DISCUSSION

Since the aim of optimising students' metacognitive monitoring processes in learning activities is to make adequate assessments of their ability to understand information, taking into account the results of the theoretical analysis and empirical research, the following areas of formative influence were identified: the formation of knowledge about tasks and external stimuli; the formation of knowledge about the field of study; the impact on students' personal, motivational-volitional, cognitive and metacognitive characteristics, which are related to the reliability of metacognitive monitoring; the training skills of metacognitive monitoring in self-regulated learning activity. Accordingly, we have developed a training programme to improve the effectiveness of self-regulated learning at the appropriate levels in the process of metacognitive monitoring of educational activities, which included blocks corresponding to these levels.

The training programme was based on general theoretical principles of psychological training (Karamushka & Kanivets, 2013). Some of the general goals of the training programme include: studying psychological topics related to training participants, improving the participants' subjective and

psychological well-being, improving psychological mechanisms of interpersonal interaction, and developing participants' self-awareness to correct or prevent emotional disturbances based on the behavioural change of participants, optimisation of life, etc.

The concept of strategic training is quite common in scientific literature. It includes 6 stages: motivation, explanation of strategies, strategic instructions (materials for use), application of strategies, and feedback (feedback protocols, evaluation and diagnosis of tests based on training results) (Kalamazh, 2019).

The main principle of the multilevel training programme development was its complexity. The first principle was implemented by choosing forms and methods of work that would allow participants to act effectively and simultaneously in several directions. Thus, the programme aimed to develop all structural components of the participants' self-regulation. The principle of multilevelness provided for the construction of the programme taking into account three developmental components: information-semantic, diagnostic, and correctional-developmental.

Work with the training programme participants was planned to be carried out with the help of special interactive techniques and methods: multimedia presentation – presentation of the general structure, stages of the training programme and individual semantic issues; worksheets – studying expectations, disclosing the content of basic concepts on each topic of the programme; method of “brainstorming” – individual and group; discussion (intergroup and general group) – presentation of the results of tasks, asking questions and making clarifications, answering questions, etc.; situation analysis – discussion of problematic issues and situations, search for optimal solutions and answers; performance of creative tasks and their presentation in the form of drawings and collages; psychological workshop – performance of diagnostic tasks, their analysis and discussion of the obtained results; role-play – modelling different situations and finding their optimal solutions and answers; reflection – self-analysis of experiences, emotions and thoughts that arose during the tasks of the programme; questionnaire – filling in the final questionnaire “Analysis of training effectiveness,” etc. (Balashov, 2020a).

The total length of the presented training programme is 30 academic hours, which were completed in extracurricular time. Based on the above principles, the training programme was divided into 6 content modules: “Initial” – 1 hour, “Motivational” – 8 hours, “Functional” – 8 hours, “Operational” – 8 hours, “Reflective” – 4 hours, “Final” – 1 hour. Each session within the blocks began with greeting the participants and providing emotional support to those who needed it. After the trainer determined the group's readiness to work, the participants were informed about the purpose and objectives of the current training. The implementation of each of the planned tasks ended with its discussion (reflection). The following is a brief description of the developed programme in modules and stages (Table 1).

Table 1

Structure of the Metacognitive Monitoring Training Programme in Student Self-regulated Learning

Module	Level	Purpose
Initial	-	Creating comfortable conditions for training and group interaction, clarifying the expectations of programme participants, determining the rules of group work, determining the emotional and volitional state of programme participants and readiness for active work
Motivational	Motivational-volitional	Actualisation of self-regulated learning motivation, provision of positive motivation to participate in the programme and actualisation of self-regulated learning motivation
Functional	Personal	Activation of functional mechanisms of self-regulation through actualisation of formal-programme individual-personal qualities
Operational	Cognitive	Formation of the system of actions and operations which underlie the successful implementation of self-regulated learning activities
Reflective	Metacognitive	Development of metacognitive skills; ability to use metacognitive strategies of self-regulated learning; development of metacognitive monitoring of self-regulated learning
Final	-	Awareness of the results of participation in the training programme and updating the attitude to the participants' active use in future self-regulated learning activities

Source: own research

The authors planned to implement the logical beginning of the training programme by starting with the initial module. The structural content components of this module are presented in Table 2.

The tasks of this module were implemented in the following areas:

- increasing participants' awareness of issues of self-regulated learning activities related to metacognitive monitoring;
- increasing participants' awareness of the importance of self-regulated learning activities for its successful implementation.

It should also be noted that during the execution of the "icebreakers" (exercises for relieving stress and creating a positive attitude toward work), it has been planned to exercise a variety of interactive exercises for establishing an atmosphere of cooperation and mutual respect, assessing the participants' levels of knowledge and skills, identifying participants' expectations and attitudes, capturing the interest of participants in this topic, and encouraging them to be active from the very beginning of the learning process.

Table 2
Content Components of the Initial Module of the Training Programme

Module	Exercises	Tasks
INITIAL	Introduction	Directing students to constructive work in accordance with the tasks
	Brainstorming "Our rules"	Creating comfortable working conditions
	Icebreaker "Positivity"	Creating a comfortable working atmosphere
	Acquaintance. Exercise "Greetings. Business card"	Presentation of programme participants, creating an atmosphere of group interaction, relieving tension in the group
	Exercise "My expectations"	Presentation of students' opinions on personal goals and the formation of requests of the programme participants
	Exercise "Let's line up by height"	Enabling participants to flex their muscles and relax
	Exercise "Breathing"	Creating conditions for relaxation and switching from other activities
	Group discussion "Coloured balls"	Feedback on the effectiveness of training from different evaluation positions (negative, positive, etc.)
	General reflection	Summarising the results

Source: own research

During the implementation of the second module of the training programme – motivational – it has been planned to improve the motivational and volitional level of student self-regulated learning. The purpose of this module is to provide positive motivation to participate in the programme and update the motivation of self-regulated learning, volitional and communicative self-control, volitional self-regulation, motivational self-regulation, and learning motivation.

The motivational module of the programme includes methods for improving learning behaviour. Thus, students determine what motivation is and why it is needed, learn to motivate themselves to succeed in business and design their future. During the training sessions, participants of the programme acquire knowledge and goal-setting skills; distinguish their own goals from those imposed upon them; learn to see the positive in each activity and behaviour; learn to be independent and autonomous. The content components of this module are presented in Table 3.

Table 3*Content Components of the Motivational Module of the Training Programme*

Module	Exercises	Tasks
MOTIVATIONAL	Psychological practicum - Questionnaire of Morosanova "Style of self-regulation of activities"	Understanding the importance of self-regulated learning activities
	Group discussion "Learning for me is..."	Understanding the direction of learning motivation
	Work in small groups "Motivation is..."	Determining the characteristics and level of learning motivation
	Informational message "Volition and volitional qualities"	Understanding the important role of volitional qualities in learning
	Brainstorming "Qualities and characteristics important for efficient volition"	Understanding the importance of volitional regulation in self-regulated learning
	Exercise "Believe in yourself"	Understanding the importance of one's own strengths
	Brainstorming "What hinders us from achieving success"	Determining the obstacles in self-regulated learning
	General reflection	Summarising the results

Source: own research

The formation of volitional characteristics is supposed to be carried out by revealing the concept of "volition," defining volitional qualities and characteristics that are important for the implementation of volitional efforts. Students learn independence, perseverance, the desire to succeed, and master the skills of rejection, if necessary. Also, participants have the opportunity to understand what hinders them from achieving success and how to overcome it, as well as learn to motivate themselves to achieve their goals.

The main tasks of this module were identified as follows:

- to assist students in mastering the skills of motivation, goal setting, task definition;
- to master the skills of planning and breaking self-regulated learning activities into stages;
- to actualise the motives related to the development of aspects of volitional and motivational self-regulation in learning;
- to actualise the skills of volitional and communicative self-control;
- to increase awareness of the importance of motivation associated with self-regulated learning activities.

The third module "Functional" is aimed at the activation of functional mechanisms through the actualisation of formal individual-personal qualities. The basis of functional mechanisms of abilities (according to Shadrikov) is a person's set of multilevel ontogenetic qualities, which are genotypically determined and developed with the accumulation of individual

experience (Shadrikov, 1982). The content components of this module are presented in Table 4.

Table 4

Content Components of the Functional Module of the Training Programme

Module	Exercises	Tasks
FUNCTIONAL	Exercise "Carousel"	Providing opportunities for the participants' positive self-disclosure, search and awareness of their strengths
	Brainstorming "Qualities and personality traits important for effective self-regulation"	Updating knowledge about the effectiveness and personal characteristics of the subject of self-regulation
	Exercise "Give advice on how to become successful"	Determining satisfaction with one's own activities
	Exercise "Wheel of fortune"	Determining the level of self-respect
	Exercise "Experience of confident behaviour"	Understanding the different ways to achieve confidence and psychological well-being in solving problems
	Brainstorming "What is psychological well-being?"	Understanding the definition and signs of individual psychological well-being
	Work in groups. Exercise "Signs of a psychologically prosperous person"	Understanding the characteristics of a psychologically prosperous person
	Test "Your level of psychological well-being"	Determining the level of psychological well-being
	General reflection	Summarising the results

Source: own research

The main tasks of this module were:

- to actualise students' knowledge about the influence of individual and personal characteristics of the subject on self-regulated educational activities;
- to increase awareness of the importance of individual reflexivity, psychological well-being, and self-esteem of students in self-regulation;
- to determine the importance of the level of psychological well-being in the process of learning self-regulation.

The essence and purpose of the next module of the training programme – operational – was to form the students' components of personal operational activities aimed at successful self-regulated learning, awareness of self-efficacy and self-esteem as components of motivation, their importance for complex activities, and development of intellectual abilities. This module is distinct due to the fact that neither self-regulated learning and autonomy, nor independent and effective use of strategies in self-regulated learning is possible if students are not ready to evaluate, self-assess, self-regulate, control, and correct learning and its results. The semantic components of the module are shown in Table 5.

Table 5*Content Components of the Functional Module of the Operational Programme*

Module	Exercises	Tasks
OPERATIONAL	Brainstorming. "Self-Efficacy is ..."	Actualisation of the concept of self-efficacy
	Test for evaluation of self-efficacy level	Evaluation of self-efficacy level
	Exercise "One can become efficient if..."	Conditions for reaching personal self-efficacy
	Exercise "Meet, it's me"	Characterising the level of self-esteem
	Exercise "At which step am I?"	Evaluation of self-esteem level
	Exercise "Steps of success"	Evaluation of locus of control in achievements and failures
	Exercise "Internal or external"	Understanding own locus of control
	Exercise "Development of general internality"	Training skills to make decisions and take responsibility
	Exercise "Discussion"	Determining the signs of constructive learning behaviour, criteria for harmonising the cognitive sphere of educational activities
	General reflection	Summarising the results

Source: own research

A necessary condition for the formation of the control and evaluation component of the activity is reflexivity, which is the ability to look at yourself, your patterns of behaviour and thinking, etc. as an object of knowledge, i.e. self-esteem. It is worth noting that "The inability of the individual to independently identify the ineffective strategies of behaviour, thinking, communication, and cognition may be a significant obstacle to personal development, professional development and effective learning activities" (Kalamazh, 2019, p. 103).

Control and assessment, which transition, respectively, to self-control and self-assessment, are necessary components of the structure of educational activities that students have to master. In the early stages of self-regulated learning activities, students are motivated, given tasks, get acquainted with the ways to complete those tasks, control the implementation process, and evaluate the result. Therefore, insufficient self-assessment and self-control lead to difficulties in controlling the process of student self-regulated learning activities.

Some scientists have noted the importance of students' active participation in the process of formative assessment of their peers by improving communication, critical thinking, focus, etc., which occurs along with the use of expert assessment and feedback from teachers (Alzaid, 2017; Andrade & Valtcheva, 2009; Andrade et al., 2021; Panadero & Lipnevich, 2021).

There are the following levels of self-esteem in the process of task execution in the psychological and pedagogical scientific literature: *lack of assessment* (students cannot, do not try and do not need to evaluate their actions; cannot assess their strengths in solving the problem); *adequate retrospective assessment* (students are able to independently assess their own actions and substantiate the correctness or erroneousness of the result); *inadequate prognostic assessment* (students take on a new task, try to assess their capabilities, but take into account only the fact of familiarity with the problem, not the possibility of using the known action methods); *potentially adequate prognostic assessment* (students take on a new task; they can assess their own capabilities in its solution with the help of a teacher, taking into account changes in the known methods of action); *currently adequate prognostic assessment* (students take on a new task, are able to independently assess their own capabilities in its solution, taking into account changes in the known methods of action) (Balashov, 2020a).

The main tasks of this module were identified as follows:

- - to actualise students' knowledge about the impact of self-efficacy in self-regulation of learning activities;
- - to increase awareness of the importance of individual self-esteem in self-regulation;
- - to actualise cognitive control of self-regulated learning;
- - to determine the importance of determining cognitive criteria in the process of learning self-regulation.

A special place in the training programme has been given to training the reflexivity skills among student youth. Reflexive self-regulation is an important element of behaviour, so the authors consider it necessary to develop these skills. It should be noted that the results of each training session are concluded with a reflexivity session, during which participants are supposed to jointly discuss their impressions of participating in the training programme (note the most successful and interesting forms and methods of work, and express the ideas to improve training in a constructive way). With the help of such reflective work, it is possible, in accordance with the interests of the participants, to identify the necessary areas for improving the training programme in a timely manner.

The essence and purpose of the next block of the training programme – reflective – was the formation of students' components of personal operational activities aimed at successful self-regulated learning, awareness of self-efficacy and self-esteem as components of motivation, development of intellectual abilities and self-training. Its foundation is formed by the peculiarities of the formation of skills for assessing educational tasks with the selection of motives, problems and their perception; evaluation of educational activities aimed at solving relevant tasks; control as the ratio of action and its result; evaluation as a fixation of the quality of learning outcomes, and motivation for further self-regulated learning activities. The content components of the reflective module of the operational programme have

been presented in Table 6.

Table 6

Content Components of the Reflective Module of the Operational Programme

Module	Exercises	Tasks
REFLECTIVE	Exercise "Theatre of abbreviations"	Assessment of learning situations and tasks with the allocation of motivation, problems and their perception; mastery of the task by obtaining confidence in decision making
	Exercise "Algorithm of Cicerone"	Self-analysis of various aspects of evaluation and features of information awareness
	Exercise "Incomplete Sentences"	Feedback on self-monitoring results
	Exercise "Evaluation"	Evaluation of the effectiveness of learning self-monitoring; self-monitoring of the assessment of the quality of learning outcomes; development of metacognitive knowledge
	Exercise "Synonyms"	Development of metacognitive awareness; awareness of the peculiarities of thinking and ways of solving problems
	Exercise "Search for contradictory items"	Knowledge of metacognitive strategies in completing tasks; awareness of metacognitive involvement in activities
	Exercise "Coded word"	Understanding the process of information analysis and evaluation of memory processes
	General reflection	Summarising the results

Source: own research

The main tasks of this module were:

- to update students' knowledge about the impact of effective self-monitoring and metacognitive monitoring of the subject on self-regulated educational activities;
- to increase awareness of the importance of using components of students' metacognitive experience in self-regulation;
- to actualise the metacognitive monitoring skills in self-regulated educational activities;
- to determine the importance of metacognitive involvement in activities for self-regulated learning activities.

There are a number of empirical studies by Voloshyna and Dovhaliuk (2015), Avhustiuk, Pasichnyk & Kalamazh (2018), Brown, Andrade and Chen (2015), Kitsantas (2014), which show that the spontaneous development of metacognitive processes does not occur, and they require purposeful formation (Balashov, 2020b). Students, using learning strategies for solving the learning problems, must have metacognitive knowledge about their own approaches to learning, a good understanding of a task; and should develop the ability to choose strategies that best meet the require-

ments of a task and learning opportunities of a student. Possessing metacognitive skills helps students to distribute their learning efforts appropriately (Balashov, 2020c).

At the final stage of the training programme (in the final module) the goal was to understand the results of student participation and update their attitude towards their active participation in future self-regulated learning activities. The result is supposed to be a reflexive summarisation by students of the results of participation in it by filling out the appropriate forms of the individual student report and the group discussion. The report includes the following reflective questions: "Describe your role in the work" (list the main types of work you have performed); "What tasks did you perform that turned out to be the most difficult for you? Why?"; "What tasks did you perform that were most useful for you from a professional point of view and why?"; "List the new professional knowledge and skills you have gained through work during the training"; "What is the most important thing you learned during this training?"; "What influenced you the most in the work of the group? Why?"; "What needs to be changed to make this project better for future participants?" The participants perform exercises regarding the evaluation of their expectations; fill out the questionnaire "Analysis of training effectiveness"; and execute the exercise "Sculpture of the training." The training programme ends with the final words of the trainer concluding that "Everything is in your hands!"

The proposed training programme for the development of students' self-regulated learning activities in the process of metacognitive monitoring was developed when the authors took into account the general theoretical concepts of socio-psychological training. The classes are supposed to use interactive methods and techniques that should correspond to the peculiarities of personal development, as well as interpersonal relationships and the educational process in HEIs. The authors see the prospect of further scientific research in the introduction of the training programme into the educational process and testing it with the students.

CONCLUSIONS

Taking into account the results of theoretical analysis and empirical research, the authors have identified areas of formative influence such as the formation of knowledge about tasks and external stimuli, the formation of knowledge about its field, the impact of metacognitive monitoring on individual, motivational, cognitive and metacognitive characteristics of the students, and the training programme students' skills of metacognitive monitoring of self-regulated learning activities.

According to the analysis, the authors developed a training programme for improving the effectiveness of self-regulated learning at the relevant

levels in the process of metacognitive monitoring of student learning activities, which included the modules that corresponded to these levels. The objectives of the training programme were focused on the development of reflection, intrinsic learning motivation, metacognitive skills of students, metacognitive monitoring, and metacognitive control of self-regulated learning activities; the students' awareness of the characteristics of their own processes of understanding, evaluating and reproducing information; the formation of skills of comprehension and analysis of tasks, understanding of specifics of performed tasks. In order to ensure the effectiveness of the programme, the authors sought to solve additional problems. Namely, to develop processes of learning self-regulation such as goal setting and planning, self-motivation, attention control and self-control, the flexible use of learning strategies, and more.

According to the authors of this paper, the proposed training programme should help students to flexibly approach the setting of educational goals; monitor, control and correct their own cognitive activities; and apply independent planning in learning. Approbation of the main components of this programme would allow the development of approaches to the optimisation of self-regulated educational activity of students by means of metacognitive monitoring.

Based on the obtained results, the authors plan to develop psychological and methodological recommendations aimed at improving the level of objectivity and effectiveness of the self-regulation of student learning activities in the process of metacognitive monitoring. The system of recommendations will be focused on the reliability of metacognitive monitoring and divided into areas such as: taking into account students' individual, motivational-volitional, cognitive and metacognitive characteristics; forming students' knowledge of effective self-regulated learning; developing skills of effective metacognitive monitoring in learning self-regulation. It may be concluded that the requirements for the formation of skills of effective metacognitive monitoring of student learning activities should be taken into account by educators and should be aimed primarily at stimulating students' learning motivation, forming adequate self-esteem, developing the ability to reflect, use self-regulation, metacognitive activity, and monitoring in learning activities.

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