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EXISTING SCIENTIFIC APPROACHES TO STUDYING METACOGNITION AND RELATED PROCESSES

У даній роботі автор здійснив детальний аналіз теоретичних здобутків закордонних та вітчизняних дослідників у сфері дослідження метакогніції та метапам'яті, а також виділив основні підходи до вивчення метакогнітивних процесів.

Ключові слова: *метакогніція, матапам'ять, метакогнітивні судження.*

В этой работе автор сделал подробный анализ теоретических достижений зарубежных и отечественных исследователей в области метапознания и метапамяти, а также выделил основные подходы изучения метакогнитивных процессов.

Ключевые слова: *метапознание, метапамять, метакогнитивные суждений.*

In this paper author made a detailed analysis of the theoretical achievements of foreign and domestic researchers in the field of metacognition and metamemory, and also highlighted the main approaches of studying of metacognitive processes.

Keywords: *metacognition, metamemory, metacognitive judgments.*

Making decisions is a process that often involves metacognitive level. For example, deciding which memorizing strategies to choose for effective learning refers to metamemory. However, there are several existing approaches to studying metaciognition in general and metamemory in specific, the two major ones opposing each other and treating metacognitive processes as (a) reflexive, and (b) conscious.

The father of metacognitive studies and the author of the term "metacognition», J. Flavell treated metacognitive processes as those that are stimulated consciously by an individual in order to solve some concrete tasks. Nowadays many scientists use Flavell's theory as basis for their

studies. Thus, one of the theoretic's followers, A. Brown supposed that metathinking processes are involved into an individual's activities with the condition that he or she is motivated properly for fulfilling a certain task. The scientist also stated that an individual only uses metathinking for solving problems with high level of complication [4]. According to Brown, metathinking has the following functions: planning, regulation and matching of the thinking processes [2]. It has to be noted that another scientist, V. Satriane expressed a similar idea, stating that the metacognitive ability can be formed and developed [4].

Besides the metathinking functions named by Brown, there is one more function, defined by an american scientist E. Flebre-Pinare. Thus, besides the fucnctions of planning, regulation and matching, the classification of this scientist includes also the function of thinking processes control [4].

The mentioned scientists studied metacognitive processes from the point of view of metacognitive regulation. However, the turning point of metacognitive studies was the division of another metacognitive category, metacognitive knowledge, by american scientists V. Schneider and M. Pressley. Thus, according to their theory, metacognitive regulation includes monitoring and control of metacognitive processes, while metacognitive knowledge includes the knowledge of an individual about their own learning, thinking and memory abilities [6].

The aspect of metacognitive knowledge was also the object of study of another american scientist, M. Wellman. He defined such phenomena of metathinking:

– permanent knowledge of an individual about the thinking tasks;

– knowledge of an individual about the state of their own thinking at a certain moment;

– regulation and control of the thinking process;

– realization of the emotions that appear in the process of learning [8].

It has to be mentioned that all the processes of metacognitive level are tightly connected to each other. The studies of M. Verde distinguished the notions of *knowing* the information and *remembering* it [7]. An individual often feels confused while trying to distinguish there two notions, as the processes of metamemory and metalearning are interactive.

As it can be seen, the American and European scientists have considerable results in studying metamemory. The modern empiric studies are aimed at studying the elements of metamemory structure, such as monitoring and control, and also other processes that interact with metamemory processes and influence the effectiveness of remembering and predicative validity of

metamemory judgments. These issues are being studied in the works of such scientists as T. Miyake, S. May, B. Schwarz, T. Schreiber, D. Nelson, etc.

As for the Russian scientists, it is essential that most of their studies are based in the theoretical ground of their foreign colleagues. However, many of the Russian scientists have their own approach to studying this particular problem, which is often opposing to that of american and european scientists'.

Indeed, unlike Flavell and Brown, who treat metamemory as a category of metacognition that appears as a result of an individual's conscious effort, V. Liaudis thinks that metamemory is a process that is not realized by an individual. According to the scientist, metamemory occurs as a result of reflexive regulations of thinking [3].

However, Liaudis also states that metamemory is only typical for a certain kind of individuals, admitting the relatively conditioned character of metacognitive processes. To be more specific, the scientists treats metamemory as a result of a well-developed form of involuntary remembering, but only with the condition of the subject's proficiency in a certain kind of activity [3; 4]. In other words, metamemory is a feature of highly qualified professionals. This argument is to a certain extent accordant with the idea of Satriane about the possibility to form metamemory ability, as with the growing qualification and improving skills the ability of an individual to use metamemory also increases.

The theory of Liaudis was proved experimentally by S. Kysil, who also concluded that metamemory ability depends on the professional level of an individual. In addition, the scientist states that thinking is only one of the elements of memory system, and that this process is only started when the task has a high level of uncertainty [2]. In other words, metamemory as a process is going on constantly and helping an individual to perform the daily taks using the information learned in the past. In contrast, thinking is in fact developing the new strategies of action, which is used by an individual only in case of a great need.

A famous Russian scientist, A. Karpov has a different position, differentiating practical and theoretical thinking. Thus, the scientist distinguishes two modes of reflexivity: cognitive (involving theoretical thinking) and regulative (involving practical thinking) [1]. At the same time, M. Kholodnaia states that the mechanisms of metacognitive regulation depend on various cognitive styles [5].

An interesting completion to the mentioned ideas is Karpov's statement that, besides metacognitive processes, there is a range of other

metaprocessess, such as metaregulative, metaemotional, metamotivational processes [1]. Therefore, the scientist increases the meta-level of cognitive psychology.

All in all, it can be concluded that the existing approaches to studying metacognitive processes can be divided into reflexive and conscious. In the scope of metamemory studies, it has to be noted that the effectiveness of the process of monitoring impacts the decision making while choosing a certain memorizing strategy, which is decisive for learning effectiveness. Our task is to find out in our future studies whether this kind of decision making can be controlled or if it belongs to the reflexive processes.

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