INTERRELATIONSHIP OF MEMORY AND THINKING AS THE MAIN COMPONENTS OF INTELLECTUAL ACTIVITY

Pardayeva Hilola
O'ralova Feruza
Soatova Sevinch
Psychology students
Termez University of Economics and Service
Kholmurodova Shokhista
Scientific supervisor:
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Abstract: This article discusses the interrelationship of thinking and memory and their importance in cognitive processes. While thinking is important in creating new ideas, memory plays a key role in preserving and restoring existing knowledge. The interaction of these two processes enhances a person's ability to solve problems. The article analyzes the psychological mechanisms of thinking and memory, as well as the associative connections between them, on a scientific basis. As a result, the interconnectedness of these processes for human development is demonstrated.

Keywords: thinking process, Memory mechanisms, Cognitive activity, Associative connection, Perception (perception), Information processing, Continuous memorization, Logical thinking, Mental models, Knowledge consolidation.

Thinking and memory, which are one of the most important components of the human psyche, are complex cognitive processes that are closely interconnected. Thinking determines a person's ability to perceive the environment, analyze information and create new ideas, while memory allows them to continuously store these ideas and knowledge and restore them when necessary. The harmonious activity of these two processes directly affects the level of thinking, educational activity, problem-solving skills and intellectual development of a person. Therefore, the study of the mechanisms of interaction between thinking and memory is of particular importance not only in psychology, but also in education, neuroscience and other scientific fields. This article analyzes in detail the psychological characteristics of these processes, their interdependence and their role in human activity.

Thinking and memory, as interrelated basic cognitive processes, complement each other and play an important role in the intellectual development of a person. According to the research of psychologists, in particular, J. Piaget, the development of thinking is based on the experience accumulated

through memory, and it is this experience that forms the basis for the formation of new concepts. L. S. Vygotsky, on the other hand, emphasized that thinking and memory are controlled by speech, proving that they are closely related to the social environment. According to the scientist, the knowledge stored in memory is processed in the process of thinking and actively participates in solving problems. This process ensures the continuous and systematic functioning of cognitive activity. The scientific work of neuropsychologist A. R. Luria also deeply sheds light on the connection between the mechanisms of thinking and memory with brain activity. He showed that the processes of memory restoration are associated with the activity of the frontal lobes, and thinking relies on the processes of analysis and synthesis that occur in these areas. Modern cognitive psychologists, including G. Ebbinghaus and W. James, have studied the interaction of memory processes with thinking and have emphasized that the level of information retention is related to how deeply the information is analyzed during thinking. Thus, the interaction of thinking and memory is one of the main factors determining a person's learning activity, creativity, and ability to perform any intellectual task.

Thinking and memory are the most important mental processes that make up a person's cognitive activity. Their interaction is the main factor determining the level of knowledge acquisition, problem-solving ability, and intellectual development of a person. Scientific research shows that information stored in memory is processed in the process of thinking, serving to create new concepts and solutions, while thinking, on the contrary, further strengthens and organizes memory. The works of Piaget, Vygotsky, Luria, and other scientists confirm the inextricable link between these two processes on a deep scientific basis.

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