# PSYCHOLOGICAL DETERMINANTS OF STUDENTS' INTELLECTUAL ACTIVITY OPTIMIZATION

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Abstract. This article reveals the content and essence of the concept of intelligence. The psychological-pedagogical features of students' intellectual development were also discussed. Keywords: intellect, mind, mental activity, thinking, intellectual operations, competence,

skills, philosophy, psychology, pedagogy.

**INTRODUCTION** Intellect is the highest form of human mental activity, intelligence, and conscious behavior. Intellect is a tool for knowing the environment, social environment, and reality, as well as the main condition for rational implementation of a wide range of human activities. Indeed, increasing the intellectual potential is becoming the main condition and criterion of national development today. Because intellectually backward people will never develop. Most of the products exported by developed countries in the world are intellectual property. Human intelligence has a more complex structure and includes not only many types of thinking, but also various intellectual operations, skills and abilities. Intellect consists of the structure of strong and stable mental abilities of an individual.

In explaining the nature and development of intelligence, there are two views in psychology: Intelligence is a hereditary characteristic, that is, as an innate characteristic that passes from generation to generation. Intellect is a feature that is formed under the influence of the capabilities of the organism and appropriate education. The term intelligence is used in many ways in our everyday life and has different interpretations. The main criterion for distinguishing intelligence as an independent reality is its behavior management function. When they talk about intelligence as a kind of ability, they first of all rely on its importance of adaptation for humans and higher animals.

## LITERATURE ANALYSIS AND METHODOLOGY

In Uzbekistan, it is aimed to study the opinions of M.G.Davletshin, E.G'.Ghoziyev, B.R.Kadirov, G'.B.Shoumarov, V.M.Karimova, R.Toshimov, M.M.Mamatov, E.Z.Usmonova, Z.E.Nishonova, M.Vahidov on this issue. is appropriate. E. G. Ghaziyev is one of the scientists who widely covered the psychology of thinking in Uzbekistan. According to the author, human thinking is divided into independent and non-independent thinking in terms of its independence. "Independence of thinking is the ability of a person to set concrete goals and new tasks on his own initiative, to make practical and scientific assumptions about them, to visualize the result, to complete the task without anyone's help, It is necessary to understand the mental ability of finding different ways, methods and means and solving independently by one's own mental search without guidance"

**DISCUSSION AND RESULTS** The independence of thinking is manifested in the quickness, maturity and criticality of the mind. The thinking of the mind means that a person sets a new problem, specific goals and concrete tasks in front of him, personally searches for methods and means in the implementation, completion, and search for a solution of all these, strives with

mental effort, and applies to them. We mean the presence of stages consisting of the introduction of additional signs and symptoms. The maturity of the mind is in quickly solving tasks, quickly finding new methods and tools during solving, sorting them out, using these methods and tools precisely in their place, getting rid of old ways and methods, etc. expressed in processes. E. G. Ghaziyev believes that the growth of intellectual development is ensured by the knowledge acquired at school. In order to develop students intellectually, they need not only a system of knowledge, but also certain methods of mental activity (analysis, synthesis, comparison, categorization, abstraction, generalization, memorization, etc.) emphasizes that it should be kept in mind. Logical thinking is of great importance in improving students' intelligence, because the development of thinking enriches the mind with additional information. Mental activity is a mental activity of a person related to the acquisition of certain knowledge or discovery of news. Thinking is a mental process that reflects the reality in the environment directly, summarizing it with the help of speech, mental activity aimed at understanding socio-causal connections, discovering new things and forecasting. This problem is interpreted according to V.M. Karimova. the issue of abilities is primarily related to the quality of human intelligence, the unity of skills, abilities and knowledge in it. In particular, the mind and intellectual potential of every young person who wants to become the owner of a profession is studied in connection with the concept of ability in psychology, because it guarantees that he will become a qualified specialist. The traditions of science are such that the question of intelligence and perception, qualities related to human intelligence, have been the object of many studies. Scientists have tried to determine the mechanisms of the development of abilities, their psychological structure and system, created reliable methods, and measured the indicator related to the quality of the mind of each person. Many scientists identify verbal, quantitative, and spatial indicators of human intelligence and connect them with processes of logic, memory, and imagination. Abilities have a social character, and the external environment, human relationships in it, and the period of life directly affect it and the intellect.

No one denies the influence of the family environment on the growth of intelligence. M. G. Davletshin studied mental concepts in connection with the concept of ability. The formation and development of abilities, firstly, by determining the appropriate natural mental targets, depending on the presence of a tendency or desire for a certain activity and the quality of the results of the activity, and secondly, the way to train and develop the natural characteristics of a person by involving them in systematic activities under the guidance of a specialist with, thirdly, it should go by the way of formation of generalized mental operations, which should ensure the formation of competences and skills in the activities planned to easily and effectively absorb general and special information. The growth of abilities in children occurs in the process of education. Formation of creative activity and the creative ability underlying it in the growing young generation is one of the important tasks facing republican schools. Because "the main task of the current school is to improve the methods of education, the methods of developing students' thinking". G. B. Shoumarov places special emphasis on the intellectual level of the country's citizens and acknowledges that the development of every state, society, and its prospects are determined by the level of its citizens. Intelligence is one of the important factors and criteria in the development of society and science and technology. Also, Shoumarov emphasized the importance of paying attention to the mentally retarded in any humane society, saying that the factors of mental retardation are organic disorders of the central nervous system, as a result of

which the child's cognitive activity is permanently reduced. R. Toshimov and M. Mamatov emphasize the need to create theoretical foundations for the study of intelligence. Examination, study and implementation of mental development cannot be done without diagnostic methods. A practical approach to human abilities in the process of diagnosis of mental capabilities requires a certain amount of knowledge that helps a person move from one stage of mental development to another. E.Z.Usmonova said that the wider and deeper a person's knowledge is, the more perfect is the experience of his mental activity. He can see so many unsolved problems, intellectual tasks that require a quick solution arise from his mind, and he connects mental development with the deepening of knowledge. Emphasizing thinking, which is one of the important qualities of the mind, he emphasizes that with its help it is possible to mentally solve phenomena that are not given to intuition, perception and cannot be observed at all. B.R. Kadirov conducted research on intellectual development of intelligence and talent in his work. He even managed to create a bank in this regard. "Enrichment of intellectual potential means paying more attention to popular and, at the same time, traditional, non-objectionable types of intellectual formation, strengthening their material and financial aspects as much as possible, encouraging young people who achieve certain achievements more widely. It is very important to encourage them and create a financial and cultural environment for them. The following can be included in the range of traditional methods that educate mental activity, increase its productivity, and develop creative qualities:

- 1. Science circles in schools.
- 2. Scientific societies of students in special secondary and higher educational institutions.
- 3. Olympiads of students and students in various fields.
- 4. Students' research works.
- 5. Creative work, auditions, contests, competitions, etc."

Z. Nishonova says that the problem of mastering the methods and ways of mental activity in her scientific research is important due to the increase in new modern requirements for science and technology, the improvement of educational methods, the strengthening of the theoretical level of educational programs, and the acceleration of education. Also, he recommends to use the strategy of developing methods and ways of mental activity in students with the help of group training method in the practice of Uzbek schools. Also, it is recognized by scientists that intellectual youth and a high level of intellectual development require signs of the general state of human health, ensuring that he feels young for a long time and looks young compared to his peers. According to René Descartes (1596-1650), it is not enough to have a good mind, but to be able to use it properly. According to René Descartes, all people have the same mental capacity. Differences between people's intellectual level depend on methodological thinking. In general, the basic rules of Descartes' scientific method are as follows. It is very important to consistently observe certain requirements in determining the correctness of knowledge and knowledge. First of all, one should not accept something as true until one is convinced that it is undoubtedly true, that is, one should always avoid haste and self-convincing. One should include such things in one's judgment that there is no room for uncertainty in one's mind. Secondly, he should divide difficult things into as many parts as required. Only then will it be possible to solve them quickly and correctly. Thirdly, it is important to be able to control the direction of one's thoughts. Starting with the simplest and easiest things to know, you should gradually, step by step, move towards knowing more and more complex things. One should not forget to consider that there is an order even between things that do not follow one another in a natural state. Fourth, always focus on making

complete lists and annotations to ensure that nothing is left out. French philosopher Henri Bergson (1859-1941) put forward the following views. In science, more attention is paid to intellectual (mental) knowledge. The world comes into existence as a result of intuitive and intellectual knowledge. In order to discover the law, a person must have free creativity. When he talks about vitality, he pays more attention to intuitive knowledge. Science does not have the power to intuitively know. Intuition is found in every person and lives with him. Intuition is the spirit of creativity. According to Bergson, intuition is present in everyone. But people cannot open it in some cases. Bergson does not oppose intuition and intellect, but says that intellectual knowledge should serve intuition. Bergson, thoughts come to us from the world of thought. It is said that when a person is pure, good thoughts come to him, and when he is impure, impure thoughts come to him. The means of intellectual self-awareness is logic, conscious determinations to work on symbols. According to the famous American philosopher William James, as the human mind develops the ability to think abstractly, it separates itself from other creatures. He sets a goal for himself and tries to fulfill it consciously. A person's mind separates him from the rest of existence and helps to influence him. The range and flow of thoughts in each person has an individual form. That is why people's minds are different from each other. The problem of measuring intelligence was consistently solved in the late 19th and early 20th centuries. Abroad, such works were studied by Spearman, Bine-Simon, Eysenck and others. They used special tests to study abilities and talents. The general essence of these tests is that the system of tasks in them becomes more and more difficult. For example, Eysenck's famous intelligence test consists of 40 tasks, which measures the speed of intellectual processes. Time is important here. Other authors have come up with different methods, saying that slowness is not a sign of incompetence. For many scientists, for example, for Russian scientists, a reliable criterion for measuring ability is to record the achievements of a person and changes in his ability directly in the process of activity. According to Edmund Husserl (1859-1938), the founder of the phenomenological school of the 20th century, consciousness is a complex structure in which the mind is located. The bright rays of the mind illuminate all the vagaries of the mind. For the mind, the mind is the only and brightest sun. The stream of thought flickers in the rays of the mind. 4 features are characteristic of the flow of thoughts: 1. The beauty and perfection of thoughts; 2. Interrelatedness and cooperation of ideas; 3. The essence of thoughts and their reflection through logical concepts. These are the feelings of a phenomenologist who studies the flow of thoughts. It is the influence of emotions on the flow of thoughts. J. Piaget divided the theory of intelligence into two important aspects, including the functions of intelligence and the main periods of intelligence. The main functions of intelligence include organization (orderliness) and adaptation (adjustment), which are referred to as functional invariance of intelligence. The orderliness of intellectual activity means the ability to distinguish between the whole state and other elements included in it, as well as their mutual relations in the process of showing the subject's intellectual activity [1, 122-123]. The adaptation function of the intellect, in turn, consists of assimilation and accommodation processes. According to this theory, assimilation means restoring the characteristics of an object that can be perceived (understanding), accommodation is the process of adaptation of the subject seeking knowledge to the requirements of modern existence. This process does not end when an individual perceives the overall characteristics of a perceptible object, but the object itself changes as a result of increasing cognitive activity. J. Piaget helps progress in psychology by emphasizing the connection between concrete operations and objects. When commenting on the period of formal operations, it is

emphasized that contact with objects is gradually lost. It is said that the growth of intelligence is based on the human operating system. During the stage of development of the intellect, mental actions are concentrated. At the same time, according to the theory of J. Piaget, the exchange of periods of intelligence indicates the growth of thinking, and the sequence of periods represents the internal laws of growth. The intellectual teaching of J. Piaget is important, it uses an objective "clinical" method, the genetic root of intelligence is given, and the characteristics between subjects and intelligence are highlighted, the change of the subject in intellectual activity is based on empirical and theoretical data. proved. Russian psychologists L.S. Vygotsky, O.K. Tikhomirov, B.D.Bogoyav revealed that the development of human intellectual ability is a manifestation of comprehensive thinking in early childhood and in old age, regardless of age characteristics. . In addition, the human brain requires constant exercise, and an active mind keeps all physiology in balance. Psychologists M. Akimova and E. Golubeva proved that the development of intelligence depends on activity. A lack of intellectual activity, a decrease in the level of blood supply to the brain, in turn, affects the state of the intellect, as well as memory. The state of memory is closely related to the level of development of the intellect, and the lack of movement of a person's intellectual ability is the first sign of a decline in memory. P. Anokhin and E. Polejayev were reflected in the scientific research conducted on the psychophysiological characteristics of the individual. A.N. Leontev, reflecting on the subject of the psychology of thinking, divides thinking into manifestations, admits that thinking is an activity, but calls it an objective-practical activity. According to M.K.Akimova, the basis of intelligence is this mental activity, at the same time, it provides the level of activity necessary for solving the task as self-management. E. A. Golubeva also agrees with this opinion and emphasizes that activity and self-control are one of the main factors of intellectual efficiency, and also adds the ability to work. There is soul in looking at the nature of intelligence as a faculty. This problem is clearly visible if we look at the ratio of consciousness and unconsciousness in the human psyche. Problem solving plays a leading role at different levels. If consciousness takes the lead at the stage of setting and solving a problem, the activity of the unconscious plays a decisive role at the stage of "incubation of ideas" and at the time of the birth of a hypothesis. At the time of unexpected discovery and prediction, the idea of "stopping briefly" breaks into the mind according to the principle of "key-lock principle", and vivid emotional experiences occur at this time. At the stage of selection and verification of hypotheses, consciousness takes the leading position.

**CONCLUSION** It can be concluded that during an intellectual act, consciousness takes the lead and controls the solution of the problem, and unconsciousness appears as an object of control, that is, it is in a subdominant state. Intelligent behavior begins with acceptance of the rules of the game, which an intelligent environment requires of a system with a psyche. The criterion of intellectual behavior is not to change the environment, but to open opportunities for the individual to adapt to the environment.

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