

PSYCHOLOGY OF INTELLECT

Shukurova Iminur daughter of Bakhtiyarjon

Andijan State Pedagogical Institute, Pedagogy and Psychology, 2nd Stage Master's Student

A B S T R A C T	K E Y W O R D S
The researches of famous scientists on the psychology of intelligence and their opinions were described in the article.	Intelligence, creativity, abilities, psychology, IQ (intelligence quotient), creativity, behavior.

INTRODUCTION

In psychology, there are 3 theories that explain the relationship between intelligence and creativity. D. Veksler, G. Eysenk, L. Termen, R. Stenberg and others consider intelligence and creativity to be a unity of high-level human abilities. Intelligence is the highest level of creativity. This means not only that they are united, but that creativity is a derivative of intelligence. A high level of intelligence is the basis of a high level of ability. Lower intelligence - creates a lower level of intelligence. Hans Eysenck believed that creativity is a special manifestation of ability. Creativity is characterized by high intelligence.

Intelligence is the adaptation of humans and animals to new environment. V. Shterni, J. Piaget, D. Veksler and other authors also considered intelligence as a general ability that adapts people to new life conditions. In their research, they studied thousands of American schoolchildren using the logit method. In the process of research, their IQ (intelligence quotient) was determined at first. Pupils were divided into groups based on IQ coefficient and observed in 30, 40, 50, 60 years. Over the years, test takers with a high IQ have shown high performance in life and work. Test takers with a lower IQ scored 30 times less than them. But other studies have shown that intelligence and creativity are not related to each other. Creativity is not adapting a person to life, but changing it. There are also theories that believe that the main factor of creativity is the disadaptation of a person, that is, his inability to adapt to the environment and social environment. Some scientists defined the creativity of a person as isolation from the outside world and people. It is precisely when a person who has maladjustment to the real world, who cannot adapt, starts to create and create something new in order to overcome his loneliness. According to A. Adler, creativity in a person is a means of filling the complex of inaccuracies that exists in him. Empirical research shows that children with creative abilities face serious problems in the personal and emotional sphere. In studies, we can observe that the results achieved by such children at school are below their potential.

DISCUSSION AND RESULTS

Dj is another scientist who opposes creativity and intelligence. Being Gilvord, he builds his theory on the basis of two different ways of thinking. That is, convergent and divergent thinking. Convergent thinking is an analysis of all available means of solving a problem and choosing the only optimal one.

Convergent thinking is built on intelligence. Divergent thinking is a type of thinking that involves creating different options for solving a problem. Divergent thinking is based on creativity.

Therefore, intelligence and creativity are two general abilities that can be associated with information processing. Creativity is responsible for the reproduction of existing information and the creation of an endless new model of it. Intelligence is responsible for applying that information in real practice and adapting to the environment.

The owners of the third point of view see intelligence and creativity as two different factors that are inextricably linked. A. Maslow and others did not recognize creative ability. Creative activity forms some personal characteristics (interest, risk-taking) in a person compared to ability. But for the manifestation of this activity, a person must have a high level of intellectual ability. According to them, a person with low intelligence will not have any creativity. People with average intelligence have average creativity, and people with an IQ of more than 120 have excellent creativity. Let's analyze the relationship between intelligence and creativity from the point of view of evolution.

We tend to think of intelligence as a fixed, adaptive capacity that does not produce great discoveries. Only return is characteristic of the intellect. According to psychologists, this idea is wrong. The reason is that in the theory of evolutionary development, the main factor of human anthropogenesis is the development of the intellect. An example of this is mastering fire and making weapons.

Separating intelligence from creativity, personal creativity, originality, etc. are being adapted to creativity. Who was the first to create a great discovery, arrows, who thought of the possibility of taming fire? Intelligence? or Creativity? If there is creativity, then where did the intellect go? Therefore, such considerations reduce the role of intelligence in the creation of technical and scientific achievements of mankind. Again, we have seen an artist of superior talent falter before simple mathematical examples, and a brilliant mathematician with less artistic ability. Can we call such people intelligent? According to Spearman, humans have a general intelligence. In his opinion, people have their own abilities that separate them from each other. Spearman developed factor analysis, a statistical procedure. He explained the temporal connections of related elements. According to Spearman, the total sum of competence depends on our mental attitude. To this day, Spearman's theory of general intelligence, that is, the theory of one-sided assessment of intelligence, has caused many protests. Unlike Spearman, Thurstone introduced assessment of mental abilities through 56 different tests, 7 clusters. Thurstone did not judge people using a single scale. He believed that if a person successfully solves all the problems in the 7 clusters, he will achieve the same success in all the other areas. They compared mental ability with physical ability. In his opinion, the world champion in weightlifting can also practice figure sports. Because his physical training allows it.

Satoshi Kanazawa (2004) sees general intelligence as a type of intelligence. General intelligence helps us solve problems in everyday life.

By the 1980s, there was a comparison of Spiremennig's theory of single intelligence and Thurstone's theories of academic abilities. According to them, if a person achieves success in one cognitive area, then he will achieve similar victories in other areas. The main factor in adaptation to life is not the general intelligence of a person, but the ability to interact with each other over time. H. Gardner considered intelligence as a sum of several abilities. He conducted his research on people with low abilities. He believed that brain damage can disable one ability but leave the rest intact.

Gardner conducted his research on subjects with physiological damage to some parts of the brain. They often have lower scores on intelligence tests. Some of the representatives of this syndrome have not

developed speech. But they had the ability to calculate addition and subtraction as quickly as an electronic calculator. Some of them knew by heart the dates associated with a historical day. Owners of this syndrome were able to achieve success even in artistic creation. Using the above facts, Gardner came to the idea that a person has several different minds rather than intelligence. In general, he says that a person has 8 different types of abilities. It has been said that if a person succeeds in one area, then he will also achieve good results in other areas. R. Shtenbegr, R. Wagner agreed with Gardner's idea, but analyzed the presence of 3 different factors of intelligence in a person:

The presence of akademic competence in solving the problem. Such skills are evaluated by marking the only correct answer in mental tests

Practical intelligence helps to choose the most convenient solution to problems in everyday life in order to adapt to the environment.

Creative mind. Representatives of this type are distinguished by their reaction in unfamiliar situations. The problem of creativity, which is a higher form of independent thinking, has been studied very deeply in foreign psychology, which is mainly interpreted as the creativity of ability. The reason we do not use this definition as "creative" ("create" means "to create"), we used the term "creativity" to avoid the impression that creativity is a high level of intellectual activity. The problem of creativity in psychology has been consistently studied since the 1950s. But in our research, we tentatively called the term "creativity" in Uzbek as "mental creativity" and found it necessary to study it as a psychological basis of independent thinking. Thus, from now on, when thinking about mental creativity, non-standard thinking, its independence and "creativity" are meant.

The separation of creativity was motivated by the fact that there is no connection between traditional tests of intelligence and the success of problem solving. This quality essentially means that it depends on the ability to use the information given by the mind, the quick method and various methods in solving the tasks.

In 1962, J. W. Getzels and P. W. Jackson [10] published information in the press that there is no correlation between indicators of mental creativity. They just entered their (Sr) coefficient to measure creativity. Mental talent is measured by the amount of success achieved in relation to the child's age in the child's certificate, and is determined by the IQ coefficient. Separation of IQ and Cr coefficients was a factor in contrasting ability and logic with mental creativity. For the same reason, by the 60s of the 20th century, more than 60 definitions of creativity were developed. By analyzing the definitions of creativity, they can be divided into 6 types: gestalt definition (the creative process is defined as breaking existing gestalts and creating a better one), innovative (new) definition (according to the novelty of the final result oriented to the evaluation of creativity), aesthetic or expressive (emphasizing the self-expression of the creator), psychoanalytic (creativity is defined as the interaction between "He", "I" and "Ideal - I" 'reefing'); problematic (which defines creativity as a problem-solving process. It can also incorporate J.P. Guilford's definition that "Creativity is a process of divergent abilities"), the sixth type can include various definitions that do not belong to any of the above-described types (for example, " replenishing the stock of "universal" knowledge)

It is difficult to assess the content, essence and structure of definitions related to the term of creativity collected in the present period. Researchers say that "understanding what creativity is requires creative action. One of the authors of recent studies defines creativity as the achievement of something significant and new, that is, "in other words, it is the effort of people to change the world."

M.Wallach [10], one of the prominent researchers of creativity in the 60s of the 20th century, stated that intellectual tests are not correlated with creative achievements at high rates. Due to the different development of intelligence and creativity among 11-12-year-old students, he divides them into 4 different groups:

students who have reached a high level of intelligence and creativity evaluate themselves correctly, they have high self-control, they are interested in all new things and have independence in evaluation; students with a high intellectual level and a low level of creativity strive for success in school, but hide their secrets from others, and underestimate themselves;

students with a low intellectual level and a high level of creativity are distinguished from others by their anxiety, inattention, and lower social adjustment;

students with a lower intellectual level and creativity index easily adapt to the situation, high social intellectual level, but weak subjects evaluate themselves correctly.

Thus, the relationship between the creative process and the level of intelligence affects the personal characteristics of students and their adaptation methods.

According to Stenberg and Gardner, several abilities can make a person lucky.

One of the criteria of creativity is non-standard. As noted by E.P.Torrance, unique and original answers do not always correspond in essence. Often there is an unjustified mixing of concepts: creative ability is considered the same as non-standard, non-standard is interpreted as originality, and originality is interpreted as unique answers in the group of testers. Non-standard is a broader concept than originality.

The second criterion is awareness. In this context, it is assumed that the examinee has understood the solution to the problem.

Intelligence tests require convergent thinking from the individual. Creative tests require divergent thinking.

Creativity is the ability to create new and valuable ideas at the same time.[410]

Sternberg and his colleagues developed 5 components of creativity.

1. Diversity of knowledge in a person. The knowledge we gained was considered the basis for the abundance of our ideas. The more worldly knowledge we have, the more blocks there are in our psyche. The more knowledge we have in solving problems in life, the easier it is to solve them.
2. magical thinking allows to see things and events anew, to recreate and connect them. By imagining the main element of the problem, we master it and take it to a new level.

3. Risk-taking - searching for new impressions. This can be seen in two ways. That is, the first one can be seen as a determination to overcome risks and problems. People with this characteristic consider it better to have a new experience than to go back.

4. Internal motivation creates a feeling of interest and satisfaction in solving a complex problem in a person, rather than compulsion. A creative person does not think about the duration of the issue, his income and his applicants. The focus is on the satisfaction and motivation of solving the problem. When Isaac Newton was asked, "How do you solve such complex problems?", he replied, "I have been thinking about this problem all day and night."

5. A creative environment helps to support creative ideas in a person. A positive relationship with colleagues and their support motivates the development of ideas in a person. However, it should be noted that some studies have also observed the negative impact of the social environment on the individual. For example, American students are given an essay writing task. They were warned in

advance that the essay they wrote would be checked by their fellow students. The other group was only told to write an essay. The results showed that the warned group's essays were known to be poorly written. In this case, we can clearly see the negative impact of the social environment on creativity.

Nancy Cantor, John Kilstrom introduced the concept of social intelligence in addition to academic intelligence. Social intelligence means understanding certain social situations and overcoming them. S. Epstein, P. Meyers also agreed with this opinion. Why do academically talented individuals face failures in finding their place in society, achieving family happiness, and achieving some kind of achievement? According to S. Epstein, P. Mayerlarnnig, an important part of social intelligence is emotional intelligence. That is, the ability to accept, express, understand and manage one's emotions. Conscious, emotionally mature individuals are considered self-aware individuals. Such people are considered to be invincible depression, people who can control their emotions.

Emotional intelligence was also studied by E. Thorndike, Golman and other scientists. Dj. Mayer, P. Solovey, D. Krauso developed tests investigating 4 components of emotional intelligence, which are part of the ability. These are the following:

1. Receiving emotion (recognizing it from a person's face)
2. Understanding emotions (telling them to change)
3. Emotion management (knowing which emotion to use in which situation)
4. Being able to use emotions in flexible and creative thinking

If a person has a high intelligence quotient, but his emotional intelligence decreases as soon as he gets an injury somewhere in the brain. Neurologist Antonio Damasio gave an example of a brain cancer patient named Elliot. He surgically removed the tumor from his patient. During the hours of conversation with the patient after his recovery, he did not notice any emotion on her face. Elliot was shown pictures of human casualties caused by various barbaric and natural disasters. Elliot knew he had no feelings and couldn't express them. He knew very well that he couldn't feel anything now. As a result, Elliot lost his job and his family. His recovery was not the same. Elliot lost his place in society and failed.

But according to some scientists, emotional intelligence is a concept far from intelligence. But it should also be mentioned that emotional intelligence activates our desire and curiosity. It forces you to think less about the meaning of the problem. This process is important for creativity. Does high intelligence depend on the hemispheres of the brain? When researching this issue, it became known that the weight of the brain of Byron and Beethoven is much heavier than the brain of a normal person. There were also views that people with heavy brains have high intelligence. Unfortunately, some scientists have found that the brains of geniuses are much lower than those of normal people. On the contrary, it was found that the brain weight of some criminals is the same as Byron's. However, later, in the analysis of the brain with the MRI, it will be shown that the brain is connected with the body. It was determined that high intelligence depends not only on its severity, but also on the activity process in the frontal and parietal lobes of the brain.

When the brains of Einstein and a Canadian were studied, they found that there was almost no difference between their weights. But the lower part of Einstein's brain was shown to be 15% higher than the brain of a Canadian. It is the lower part of the brain that responds to mathematical and spatial information. On the contrary, they found that the parts of Einstein's brain that respond to activity are located lower. That is why we can see the slowness of Einstein and other physicists in speaking and learning.

CONCLUSION

It can be said that when we pronounce the word intelligence, we mean measuring it through tests. But how true these theories are. To what extent can we trust them? We can observe that the questions of this type of tests do not take into account the living conditions of representatives of all strata. Even Alfred Bine mentioned the need to work on the analysis of intelligence tests he discovered. The reason is that the results of these tests are far from the truth. In addition, such tests are aimed at researching only one aspect of intelligence. It has been observed that the results of people with highly developed emotional and practical intelligence do not show good results in these tests. However, today the IQ coefficient has not lost its significance.

REFERENCES

1. Ambalova S.A. O'smirlik davrida aqliy rivojlanish omillari // Pedagogik jarayon: muammolar va istiqbollar. Universitetlararo ilmiy maqolalar to'plami / - M., 2016.
2. Vygotskiy L.S. Yuqori psixik funktsiyalarning rivojlanish tarixi. T.3. - M.: Pedagogika, 2013.
3. Dragunova T.V. O'smir psixologiyasi. - Perm: Ilm, 2014.
4. Kreyg G., Bokum D. Rivojlanish psixologiyasi. - Piter: AST, 2004.
5. Taxoxov B.A. Zamonaviy "qiyin o'smirlar" ning psixologik va pedagogik xususiyatlari // Togliatti davlat universitetining fan vektori. Seriya: Pedagogika, Psixologiya. - Piter: 2018. No 3.