

# Features of clip thinking and attention among representatives of generations X and generations Z

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**Abstract.** The research solves the problems of analyzing the main approaches devoted to the study of clip thinking, examines the relationship of the phenomenon of clip thinking and attention. An empirical research provides an assessment of the level of clip thinking among representatives of generations X and generations Z; the features of attention are researched among representatives of generations X and generations Z; the existence of interconnections between the characteristics of clip thinking and the characteristics of attention among representatives of generations X and generations Z; significant differences were established between the characteristics of clip thinking among representatives of digital and up-network generations.

Accelerating the pace of life and work of modern society, first of all, requires a person not only to have a high ability to focus for a long time on a particular object, but also to quickly and accurately switch from one object to another. This leads to a decrease in the quality of the selected information, as well as the mixing of third-party factors with the main investigated phenomenon, which additionally loads and disorients the work of a person as a whole [1]. As a result, we get a superficially thinking person who is not capable of long-term concentration on a specific object, impulsive action and a low level of reflection, which in turn is a sign of clip thinking.

Clip thinking upsets the balance of cognitive mental processes, enhancing or weakening specific properties of a particular sphere.

For the first time, the American futurologist E. Toffler spoke about the phenomenon of clip thinking in the book *Futuroshok* of the same name in 1970. He believed that clip thinking is a product of the impact information society on the person. The surrounding world, with its active influence on the individual, strike his psyche, resulting in a state of over-excitement [2].

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E. Toffler considers that the incipient clip consciousness began to influence the form of perception of information. In response to the active influence of technogenic society and a decrease in the general background of mental activity, a new type of perception of information arises - clip thinking, which leads to disunity of mass consciousness [2, 3].

A different point of view on the formation of clip thinking, as well as the role of information systems in this process, was stated by the Canadian philosopher and sociologist M. McLuhan in 1962. His theory about the influence of the information world on human perception begins with the definitions of “cold” and “hot” communications [4, 5].

By “cold” communication, the author understands a limited amount of certain information that connects mechanisms of rethinking, imagination and completion to fully comprehend the received data. “Hot” communication, on the contrary, presents its consumers with a holistic picture of the world, filled with a variety of bright details [5].

In 2009, N.V. Azarenok published an article on the impact of clip thinking on a person. He believes that this phenomenon was formed primarily under the influence of media materials. Modern literature, television and the Internet reduce the content part of the information provided, making its presentation more aggressive [6]. As a result, a person is subjected to psychological influences that are initially aimed at a certain emotional shock.

At the same time, V. G. Lankin and O.A. Grigoriev touch upon the problem of fragmented thinking from the position of a sign-communication system. The authors consider that throughout history, a sign-symbolic system had a huge impact on the nature and content of people's consciousness. The media throws out a huge amount of information, which leads to an overload of the information field and the human society cannot perceive and comprehend such a news flow. As a result, the texts once filled with meaning turned into a huge unfiltered mass of information which meets the needs of modern society. This nature of the consumption of information was reflected in the thinking of mankind as a whole, making it more fragmented, significantly reducing the level of reflection and perception of individuals [7, 8].

A little later, in 2010, domestic journalist, futurologist and culturologist K.G. Frumkin, again raises the problem of studying fragmented thinking. The author defines clip thinking as a certain stage in the development relations of human and the information world. These relations are on stage of active switching of individuals from one information flow to another, but as a consequence, there is an inability to perceive long linear information of the same type [9]. This in turn led to a decrease in the analytical capabilities of thinking, as well as the inability to perceive long-term linear information and the emergence of the phenomenon of clip thinking [9].

In 2016, the Russian philosopher F.I. Girenok, considering the problem of clip thinking, appeals primarily to the consciousness and thinking of a person. According to the author, any thinking requires time, reflection and concentration. Clip thinking, in turn, encourages a person to make immediate rash decisions, bypassing the analysis of a problem situation and its factors. Clip thinking ceases to develop and move in any direction. It places consciousness outside of time, where the human consciousness is determined by media communications. Clip consciousness does not think – it visualizes the world, making the invisible visible [1].

The concepts considered are united by several common ideas. First, every scientist agrees with the statement that clip thinking is a disparate set of erratic sensations, feelings and images. This orientation forces a person to make immediate rash decisions, bypassing the analysis of the problem situation and its factors. In this connection, individuals have a decrease in the level of reflection and introspection. Secondly, one of the main factors contributing to a change in the direction of human thinking is the information and technical evolution. Over time, new sources of information transfer appeared, to which a person began to pay a lot of attention, as a result of this they gained some power over emotions,

sensations, feelings and thoughts of a person. Thirdly, the main source influencing human thinking is the media. It gives a person access to a large number of information sources, but it imposes aggressive advertising, focused primarily on the emotional sphere, and not on the semantic component. A person avoids additional mental load, since the transmitted information is simplified as much as possible. As a result, the effectiveness of analytical thinking is significantly reduced, which leads to the inability to perceive long-term linear information and the emergence of the phenomenon of clip thinking.

Along with thinking, attention is also undergoing significant changes. First of all, under the influence of clip thinking, such properties of attention as the distribution and switching of attention are enhanced. This allows a person to work with large information flows with less energy. However, such properties as concentration, concentration and stability of attention are weakened. As a result, the person is less adaptable to the long monotonous work [10, 11].

The greatest interest for our study is generation X and generation Z. This is due to the high contrast of the information environment in which they were formed.

The process of formation of generation X came at a time when information technology was in its infancy and for most people were not available. At the same time, at a more Mature age, they were in an information-rich environment, which is becoming more saturated every year. This led to the need to adapt to it, to look for ways to adapt [12, 13].

Digital generation or generation Z, on the contrary, from early childhood was brought up in a rich information environment. This generation was born in the information society. Generation Z representatives are "connected" to each other through various media environments such as the Internet, YouTube, SMS and MP3 players [13, 14].

Nowadays, modern students are the first representatives of the generation brought up in a fragmentary media environment. Therefore, the most promising in this regard is the study of the relationship of clip thinking and attention of representatives of generation Z. The relevance and importance of the study of this issue is due to the fact that the research of the relationship of clip thinking and attention processes in representatives of generation Z allows to develop effective methods of prevention of fragmented phenomenon among the younger generation.

The study involved 40 people. All respondents were divided into 2 groups by age. The first group included representatives of generation Z aged 19 to 21 years (students of don state technical University), the second group included representatives of generation X aged 34 to 50 years (working people).

The following methods were used as diagnostic tools:

1. Questionnaire for the definition of clip thinking (modification of the test for thinking and creativity of J. Bruner)

2. "Proof-reading test " (**B. Bourdon's technique**)

3. Test "Red-black tables" (Gorbov-Schulte technique)

The reliability of the obtained data was ensured by the use of mathematical procedures such as Spearman's correlation coefficient and determining the significance of differences based on Student's T-test. Statistical analysis was carried out using SPSS Statistics computer program.

Based on the statistical analysis of the data, the following results were obtained:

There were no differences between the level of clip thinking in the representatives of generation Z and generation X ( $t=0,286$ ). Therefore, in any of the samples there is no predominance of people with one or another level of clip thinking, despite the different conditions of upbringing and different experiences of interaction with the environment.

Discovered a negative interconnection ( $r = -0,482$ ;  $p < 0.05$ ) between the clip thinking, and measures of attention from the representatives of the generation Z, when performing task 1, the technique of "Red-black table" on a scale of "number of errors". Therefore, the

higher the level of clip thinking of the generation Z, the more mistakes they make at the beginning of the process. At the same time, there is no connection between the indicators of clip thinking and the results of tasks 2 and 3 for students, which may indicate a significant difficulty for the representatives of the digital generation with high rates of clip thinking, the process of entering in to the work, after overcoming which, the differences in the indicators of attention with the rest of the respondents from the group of digital generation are leveled.

Discovered a negative interconnection ( $r = -0,504$ ;  $p < 0.05$ ) between the clip thinking, and measures of attention from the representatives of generation X when performing task 1, the methodology of "proof-reading test" on a scale of "number of errors". Therefore, the higher the level of clip thinking of representatives to the generation X, the more mistakes they make at the beginning of the process. At the same time, there was no connection between the indicators of clip thinking and the results of tasks 2 and 3 for working people. This may indicate that the main difficulty for the representatives of the pre-generation X with high rates of clip thinking is the process of entering the work, after overcoming which, the differences in the indicators of attention with the rest of the respondents from the group of the pre-generation X are leveled.

Discovered a negative interconnection ( $r = -0,513$ ;  $p < 0.05$ ) between the clip thinking, and measures of attention from the representatives of generation X when performing task 1, the methodology of "proof-reading test" on a scale of "sustainability of attention". Therefore, the higher the level of clip thinking of representatives to the generation X, the more reduced the sustainability of attention at the beginning of the process. The reliable relationships between the indicators clip thinking and results 2 and 3 tasks for the representatives of generation X is not detected. Consequently, the main difficulty for the representatives of the generation X with high rates of clip thinking is the process of adapting attention to the working process, after the completion of which, the differences in the indicators of attention with the rest of the respondents of the generation X become insignificant.

Discovered a negative interconnection ( $r = -0,412$ ;  $p < 0.05$ ) between the clip thinking, and indicators of attention from the representatives of the generation Z while performing task 2 according to the method of "proof-reading test", on the scale of "productivity". This indicates a decrease in the productivity of attention among the representatives of the digital generation with an increase in the indicators of clip thinking. At the same time, the absence of a significant link between the indicators of clip thinking and the results of task 3, indicates a high recoverability of attention resources among the representatives of the digital generation with a high level of clip thinking, which compensates a somewhat low level of productivity of attention in general.

According to the results of the t-test student data obtained using the method of "Red-black tables" on the scale of "switching time" were discovered differences between the generation Z and generation X ( $t=4,622$ ). Representatives of the digital generation are switching from one activity to another faster than representatives of the generation X. Consequently, the attention of of participants from the group of generation X is more rigid, resulting in the process of switching attention from one activity to another getting slower. This means that this indicator of attention is associated not so much with the indicators of clip thinking, but with the type of activity and the return factor of the participants.

The results of the research allow us to conclude that high rates of clip thinking in students complicate the initial stage of activity and reduce their performance, however, compensatory mechanisms of the psyche are able to cope with the negative manifestations of this phenomenon to a certain extent. Further research in this direction will allow to better understand, the mechanisms of its relationship with the cognitive processes and as a result to develop effective ways to manage both positive and negative aspects of clip thinking.

## References

1. F.I. Girenok, *Clip consciousness* (Prospect, Moscow, 2016)
2. E. Toffler, *Shock of the future* (AST, Moscow, 2008)
3. E. Toffler, *Third Wave* (AST, Moscow, 2009)
4. M. McLuhan, *The Gutenberg Galaxy. The Becoming of a Man Printing* (Prospect, Moscow, 2015)
5. M. McLuhan, *Understanding Media* (Prospect, Moscow, 2014)
6. N.V. Azarenok, Hum. Psych. in the modern world: mat. of the All-Rus. Jub. Scien. Conf. dedicate. to the 120th birthday of S. L. Rubenstein, **5**, 101–113 (2009)
7. V.G. Lankin, O.A. Grigoryeva, *Socis*, **7**, 78-84 (2009)
8. V. G. Lankin, *Book as an information and technological basis of culture* (RAS, Moscow, 2009)
9. K.G. Frumkin, *Topos: lit. and philos. j.* **9**, 3-8 (2010)
10. E. Ksenchuk, *Systemic Thinking. The boundaries of mental models and systemic vision of the world* (Case, Moscow, 2011)
11. T. Soloviev, *Attention as an organic force. The experience of the biological theory of attention* (Librocom, Moscow, 2011)
12. K.S. Nogales, *Theory of Generations XYZ* (Prosvet, Moscow, 2016)
13. Shamis, E. *The theory of generations. Baby Boomer Strategy* (Synergy, Rostov-on-Don, 2017)
14. S.S. Nosova, *Siber. Psych. J.*, **49**, 81–85 (2013)