

# The attitude of young people to the use of artificial intelligence

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**Abstract.** The article examines the attitude of young people to the use of artificial intelligence. Young people, due to their greater psychological flexibility and adaptive capabilities, are more familiar with digital technologies. In the period of youth, the formation of a value-semantic sphere takes place. The respondents were young people in the number of 75 people. The comparative group consisted of respondents aged 40 to 50 years in the number of 50 people. The purpose of this work is to study the attitude of young people to the use of artificial intelligence. That will allow to understand more the attitudes of young people to the use of artificial intelligence from the perspective of benefits, motives of use and emotions; will provide reflection on the relationship of a person and the sphere of artificial intelligence. As research methods, the analysis of theoretical sources was used, the author's questionnaire was used to study the attitude to the use of artificial intelligence among young people. The data obtained were processed using the methods of mathematical statistics Student's T-criterion. The results of a study of attitudes to the use of artificial intelligence are presented. Significant differences in attitudes towards artificial intelligence systems were revealed in two groups of respondents on the possible benefits of artificial intelligence systems, the motives for their use of artificial intelligence, and the significance of the difference was revealed in relation to the emotions experienced by respondents of different ages when faced with these systems

## 1 Introduction

The current situation is such that artificial intelligence (AI) and information technology (IT) is becoming our new reality. The introduction and use of artificial intelligence in all areas of our lives is happening very quickly. Young people react most quickly to such changes. Young people are much more familiar with digital technologies and innovations due to greater psychological flexibility and adaptive capabilities. Youth is the period of formation of the value-semantic sphere, the degree of its formation affects the quality of life, self-determination, general life satisfaction, psychological well-being [1,2]. It can be assumed that the formation of the value-semantic sphere will influence the attitude to AI. Despite the intensive introduction of AI, there are not many interdisciplinary and psychological studies on this topic.

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In the original psychological sense, intelligence includes the ability of human thinking to rationally cognize the world. As a psychological category first appeared in the writings of Francis Galton. The research of intelligence is reflected in the works of G.Y. Eysenck, R. Amthauer, B.G. Ananyev, A. Binet, N. Bostrom, D. Wexler, C. Gardner, D. Guilford, E.A. Golubeva, V.N. Druzhinin, D.N. Zavalishina, T. Kelly, R. Kettell, J. Piaget, K.K. Platonov, J. Raven, S.L. Rubinstein, T. Simon, C. Spearman, R. J. Sternberg, B.M. Teplov, L. Thurstone, O.K. Tikhomirov, J. Thompson, R.L. Thorndike, M.A. Kholodnaya, V.D. Shadrikova, V. Stern. Thanks to their concepts and research, a psychological basis of knowledge about intelligence, modern diagnostics, career guidance, etc. has been created.

Another popular psychological and technical concept is artificial intelligence. D.I. Dubrovsky (Dubrovsky, 2007) was engaged in the substantiation of the problem of artificial intelligence as software and information modeling the intellectual functions of human technical systems. Technogenic and psychological consequences of the AI problem are considered by S.F. Sergeev [3], V.V. Chekletsov (V.V. Chekletsov, 2013). At the moment, researchers agree that there is no generally accepted understanding of artificial intelligence in modern science. Yu. Yu. Petrunin identifies several meanings of AI: modeling of cognition and thinking processes; intelligent devices; a set of ideas about the mind, cognition and man that help in modeling intelligence [4]. A.D. Vislova analyzes a range of problematic issues related to the possibility of using psychological theories and concepts in the context of AI interpretation [5]. The ideas of young people about artificial intelligence and their attitude to it are studied by M.I. Yasin [6]. He points out that respondents confuse AI with algorithmic computer programs, consider AI "useful and dangerous", and have well-developed practical skills. At the same time, the conceptualization of AI among young people remains low.

Surveys of the All-Russian Center for the Study of Public Opinion (VTsIOM) and ANO "National Priorities" on the topic of attitudes to artificial intelligence showed that (81%) of Russians are familiar with the term AI, (48%) trust AI, (33%) are afraid of replacing AI in their profession [7]. Some respondents do not realize that they are already interacting with artificial intelligence. A striking example of the use of AI is Alice, Siri and other voice assistants, ChatGPT, which imperceptibly and firmly enter our everyday life. The AI picks up books and podcasts, gives a quick response to the request. In the modern world, artificial intelligence is used in many areas: in education, science, business, medicine, military activities and many other industries. The problems of artificial intelligence, its impact on a person's life, his well-being, and the sphere of attitude to AI have not yet been sufficiently studied. AI can be used for someone's selfish interests to the detriment of the user. AI algorithms can have a discriminatory effect on different groups of people. There is a risk of using personal data collected with the help of AI for selfish purposes. AI can process information very quickly and thus track age, preferences, place of residence, social circle. The network is a time sink, since people are comfortable spending time online and AI does everything for this. In networks, AI selects the target audience, creating a possible situation of an "information well" when the user receives one-sided information, the algorithm selects texts of the same type of content. If the worldview, beliefs, and value-semantic sphere are not formed [1], then the ability to think critically decreases. There are risks of reducing the responsibility and ability to make an informed choice of users, it is easier to form a group identity, there are problems of professional formation and professional identity, unwillingness and unwillingness to engage in professional activity [8,9]. Conformism is manifested, withdrawal to the virtual world from problems, the level of Internet addiction is growing, anxiety, depressive states are increasing, loss of the meaning of life [10,11]. Therefore, artificial intelligence research is relevant and significant, and it is also necessary to conduct educational work, taking into account ethical and psychological aspects. For example, the Code of Ethics in the AI environment is signed by Yandex, VK, BEAC, MTS, etc. The purpose of this work is to study the attitude of young people to the use of artificial

intelligence. This will allow us to understand more about the attitude of young people to AI, will provide reflection on the relationship of a person and the AI sphere. To focus on solving the problems of digital literacy.

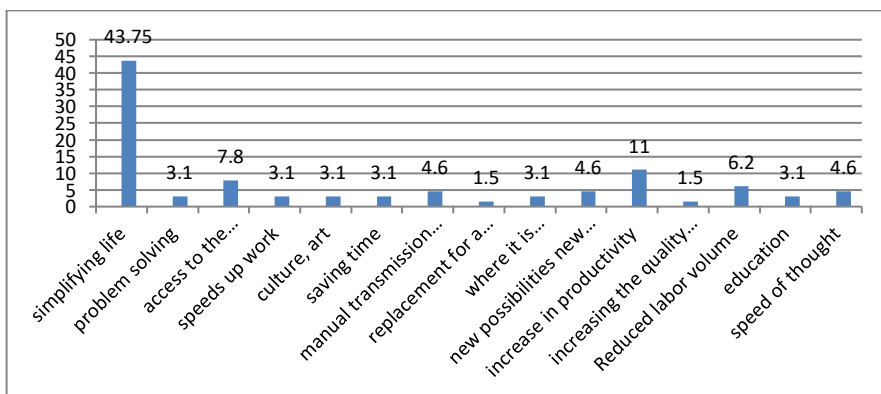
## 2 Methods

As a research method, the author's questionnaire was used to study the attitude to the use of artificial intelligence among young people and the methodology. The questionnaire consists of 10 questions of open and closed type. The study is based on the method of remote (using a Google form) survey among students of different fields of training. The study involved young people aged 20-35 years in the number of 75 people. The comparative group consisted of respondents aged 40 to 50 years in the number of 50 people. The data obtained were processed using the methods of mathematical statistics Student's T-criterion.

## 3 Results

As a result of processing the data obtained, it is shown that there are significant differences in attitudes towards artificial intelligence systems in two groups of respondents on the possible benefits of artificial intelligence systems, the motives for their use of AI, and the significance of the difference is revealed in relation to the emotions experienced by respondents of different ages when faced with AI systems.

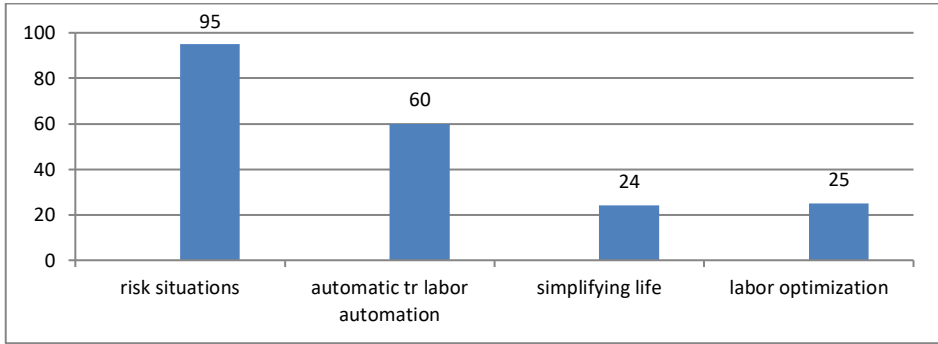
So, in a group of young people aged 20-35, the answers to the question of what in your opinion is the benefit of AI systems were distributed as follows: 43.7% - simplification of life; 7.8% -access to information sources; 6.2- reduction of human labor. The remaining responses were distributed in a percentage ratio of less than 6%, the results are shown in Figure 1.



**Fig. 1.** The benefits of artificial intelligence systems for humans (answers in the group of 20-35 years).

In the second group of respondents aged 40-50, the majority of respondents identified such an answer as labor automation - 60%. 25% noted the optimization of labor, and frees from routine. The percentage distribution of responses is clearly shown in Figure 2.

At the same time, 95% of respondents indicated that the use of AI systems is primarily in situations involving a risk to human life. It is in these situations that their application is necessary. Note that the frequency of this response in groups of 20-35 years is 5%. Young respondents, first of all, indicate that AI can be used to improve the quality and diversity of life, get rid of routine work at home and at work.

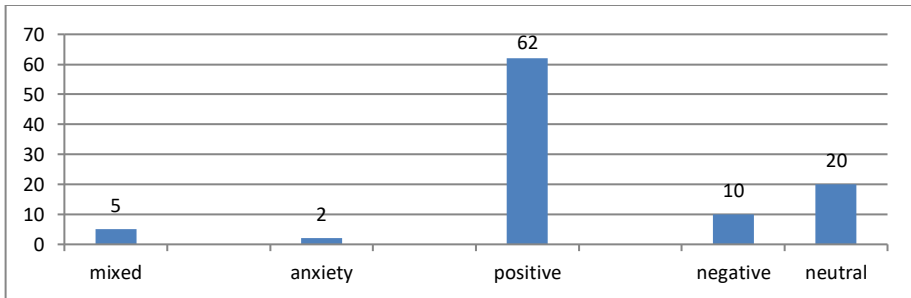


**Fig. 2.** The benefits of artificial intelligence systems for humans (answers in the group of 40-50 years).

It is interesting that in a group of young people (20-35 l) there are such options for the use of AI as the development of art and culture, the development of the speed of thinking, saving human time. Replacement in hazardous production was noted by only 2% of respondents.

The survey used a question about myths about AI. There are no significant differences in this issue. The majority of respondents in both groups indicated that they do not believe in AI myths. At the same time, among the possible indicated that AI is difficult to control 37% and can take control of a person, and that AI can be smarter than a person 26%. At the same time, there is a tendency that women are more among the respondents who note such mythical fears. Among women, 12% indicated that they believe in mythical fears, among men, only 4% noted that they believe in the possibility of such fantastic scenarios.

Significant differences were also obtained regarding the feelings experienced by respondents in different groups when confronted with AI. The results are shown in Figure 3.



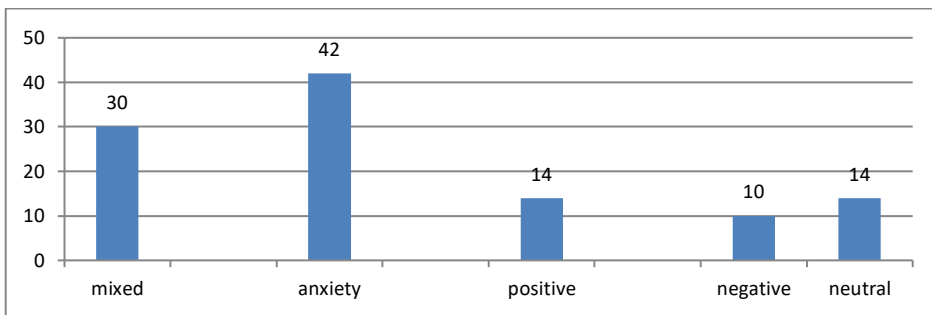
**Fig. 3.** Emotions that arise in young people when working with AI.

Thus, the figure shows that the predominant number of respondents have positive feelings – 62%, a neutral attitude - 20%. Only 2% experience anxiety. Negative (anger, irritation)-10%, and 5% mixed feelings.

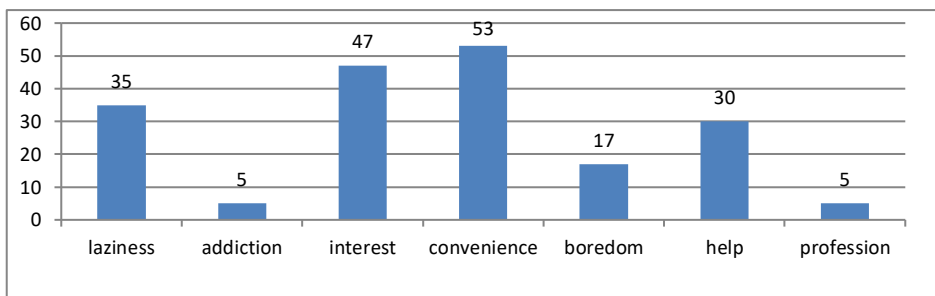
In the group of respondents aged 40-50, the answers were distributed differently. Which is reflected in Figure 4.

The figure shows that 10% of respondents have negative emotions (anger or irritation), while 42% experience anxiety. Mixed feelings (delight and anxiety) are experienced by 30%, and a neutral attitude is experienced by 14%.

The respondents' responses regarding the motives for using AI were distributed in an interesting way. So, in a group of young people, motives related to interest and laziness prevail. Some respondents note boredom and dependence on the Internet as motives. The results are shown in Figure 5.

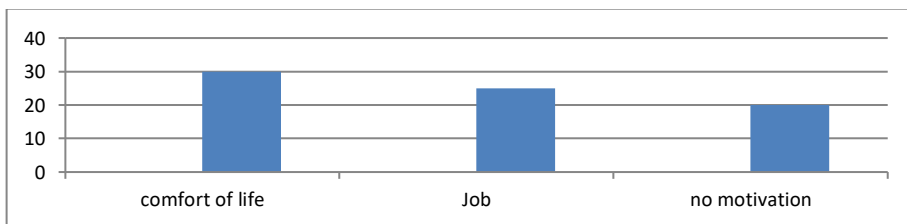


**Fig. 4.** Emotions that arise in people aged 40-50 years when working with AI.



**Fig. 5.** Motives for using AI in a group of young people.

In the group of respondents aged 40-50, the answers regarding the choice of motives are different. Some respondents noted that they have no reason to use AI, and do not use them. The answers are shown in Figure 6.



**Fig. 6.** Motives for using AI in a group of respondents aged 40-50.

Based on the data in Figure 6, it can be seen that the most pronounced motives are related to the fact that it is convenient to use AI at home and necessary at work.

## 4 Discussion

The responses received during the survey show that there are various trends in society in relation to the use of AI. Differences in attitudes to AI are related to age characteristics, the generation to which respondents belong. The survey also shows that, in general, the attitude towards the use of AI is positive, but there are a number of mixed feelings that may be related to the ability to use AI, the presence of digital literacy, and the necessary AI management skills. And communication with him. Of course, respondents indicated various neural networks designed to generate texts, search for information, or create images as the main AI systems. However, some respondents, about 35%, indicate that AI can help in financial

management, improving production, and protecting people from risk situations at work. But at the same time, about 50% note such a focus as leisure and entertainment when using AI.

## 5 Conclusion

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## References

1. O. Nikolenko, et.al, E3S Web of Conferences **175**, 15029 (2020)  
<https://doi.org/10.1051/e3sconf/202017515029>
2. E.V. Astapenko, Innovative science: Psychology. Pedagogy. Defectology **6(3)**, 32-39 (2023) <https://doi.org/10.23947/2658-7165-2023-6-3-32-39>
3. S. F. Sergeev, Institute of Psychology of the Russian Academy of Sciences. Organizational Psychology and Psychology of Labor **5(4)**, 33–53 (2020)  
<https://doi.org/10.38098/ipran.opwp.2020.17.4.002>.
4. Yu.Yu. Petrunin, New Philosophical Encyclopedia **4(2)** (2010)
5. A.D. Vislova, *The potential of the psychology of intelligence in the context of artificial intelligence modelling*, Proceedings of the Kabardino-Balkarian Scientific Center of the Russian Academy of Sciences **6(92)** (2019)
6. M.I. Yasin, Izvestiya Saratov University. A new series. Series: Philosophy. Psychology. Pedagogy **22(2)**, 197-201 (2022) <https://doi.org/10.18500/1819 - 7671-2022-22-2-197-201>
7. <https://wciom.ru/analytical-reviews/analiticheskii-obzor/iskusstvennyi-intellekt-blagoili-ugroza>
8. A.L. Zhuravlev, T.A. Nestik, Psychological Journal **5(40)**, 35-47 (2019)  
<https://doi.org/10.31857/S020595920006074-7>
9. L. Zheldochenko, O. Nikolenko, E3S Web of Conferences **210**, 22001 (2020)  
<https://doi.org/10.1051/e3sconf/202021022001>
10. I.N. Pogozhina, et.al, Education issues **6**, 60–94 (2020) <https://doi.org/10.17323/1814-9545-2020-3-60-94>
11. T.A. Barketova, E.E. Voronin, Bulletin of the Saratov State Socio-Economic University **3(77)**, 64-67 (2019)