ANALYSIS OF THE IMPACT OF USING CHAT GPT ON STUDENT LEARNING MOTIVATION

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Abstract: An AI technology called Chat GPT provides users with chat-based responses to their questions. Many industries, including education, have benefited greatly from this cutting-edge technology. Students may be able to use AI to help them achieve learning goals. However, considering the potential negative impact of this rapid adoption of Chat GPT, we should not ignore it. This article explains how students' use of Chat GPT reduces their learning motivation. The five respondents to this research were class C students at the Universitas Muhammadiyah Makassar in the seventh semester. A qualitative approach was used in this research. Researchers modified various previous instruments before adopting them. The researchers presented 20 interview questions to gather information. Based on research findings, Chat GPT has a negative impact because, out of 20 questions, 12 respondents said that Chat GPT has a negative impact on students' learning motivation, Chat GPT makes students lazy about studying.

Keywords: Chat GPT, Students' Learning Motivation, technology

INTRODUCTION

Chat GPT (Generative pretrained Transformer) is an AI (Artificial Intelligence) technology that is able to carry out human conversations very similar to conversations between humans. According to Nasim (2022), artificial intelligence (AI) has advanced significantly in recent years and is now applied in a variety of sectors and contexts. Additionally, AI is transforming how people live and work, and as science and technology develop, we anticipate that AI will grow and become more prevalent in society. Lockey (2021). Education is another industry that uses AI. It can revolutionize education by enhancing the quality of instruction and learning, tailoring instruction to each student, reducing administrative burdens, and creating new opportunities for research. Zhai (2021). Examples of AI applications in education include virtual reality simulations, data

analytics, automated grading systems, intelligent tutoring systems, and adaptive learning platforms Holmes (2022).

In addition, Regarding intelligent tutoring programs, Students can get assistance with writing assignments, receive comments and modification guidelines, and create assignments with the aid of an AI software like Chat GPT. Thus, it can be utilized to help individuals advance their abilities, Abdullayeva (2023). But according to Anders (2023), student use of Chat GPT has become conflicting. There are others who concur that this technology can improve student learning. On the other hand, a few of them appeared to be against the usage of Chat GPT Crawford (2023). Advocates asserted that chatbots, such as Chat GPT, can improve learning, teaching support, productivity, and communication. A new educational platform can tackle the trickiest educational issues by using this technology as an engagement tool. Sandu (2019). The other sides, however, contended that pupils would grow unduly dependent on Chat GPT. Rather than refining their analytical and problem-solving abilities, they grow dependent on the model for answers and solutions. Their inability to think freely and creatively, which is essential for both academic performance and personal development, may be hampered by this over-reliance. Fuchs (2023).

In addition to, the application of AI has been shown in multiple studies to positively affect students' motivation to learn. Huang (2023) asserts that students with a moderate degree of motivation are significantly more engaged and perform better academically when AI-enabled tailored video recommendations are used. However, Ali (2023) found that students' motivation to learn can be increased when they use Chat GPT. In a similar vein, (2022) found that employing chatbots powered by AI could increase students' drive to study. In a similar vein, Chiu (2023) claimed that employing AI-based resources for education could raise students' motivation. In this study, we examined the effect of Chat GPT usage on students' studying motivation using statistical techniques like as regression analysis. The research findings are also presented using tables and figures. Researchers will look at the detrimental effects of using Chat GPT on students' motivation to learn in this study.

RESEARCH METHOD

Students that are driven to learn might profit greatly from using Chat GPT, as it offers various advantages to them. Researchers plan to investigate whether using Chat GPT affects students' motivation to learn as well as whether using Chat GPT helps students learn more. The method used in this study is qualitative. The participants in this study are seventh-semester English language education majors at Universitas Muhammadiyah Makassar. Five students included in this study because, according to the researcher's findings, five members of that class frequently use Chat GPT. In this research, researchers conducted interviews as an instrument to obtain information about a topic and

involve participants in conversation, open interviews are usually used in qualitative interviews.

RESULT

Researchers asked respondents about the negative impact of Chat GPT on student learning motivation. The students' perceptions of the negative impact of Chat GPT are as follows:

Except (1) Is Chat GPT an effective learning tool?

Not really, it makes me feel lazy because everything in Chat GPT is instant (P1). It seems ineffective but it has its own function and is useful to use (P2).

While it does offer information and explanations, Chat GPT may not be as effective as hands-on learning experiences or interactive educational tools (P3).

I don't think so because the answers given are usually not accurate (P4 & P5).

Based on the aforementioned research findings, when researchers interviewed students about the efficacy of Chat GPT, they discovered that although the application offered immediate responses, students thought it was less effective overall and that occasionally, the responses provided by Chat GPT were erroneous.

Expect (2) Are you motivated to learn new things after using Chat GPT?

I don't feel unmotivated at all. It's only making me lazy (P1 & P2).

Motivation depends on what we are aiming for, right, but if you say that after using Chat GPT I will be motivated to always learn, I don't think so (P3).

Chat GPT provides instant answers, so if after using Chat GPT I will be motivated to study, I don't think so (P4).

No, I'm not motivated to learn new things (P5).

Based on the aforementioned research findings, researchers found that after using Chat GPT, students were not motivated to learn and were even becoming lazy about studying because the Chat GPT provides instant answers. Researchers also conducted interviews to determine the effectiveness of Chat GPT on student motivation.

Expect (3) Do you believe that Chat GPT is important for your future?

I don't think so, there are many tools that can significantly improve our ability. Chat GPT is just an artificial intellegent that sometimes can lead us to mis information (P1).

In my opinion, although it can help students make their assignments easier, it will make it even more lazier for us to study (P2).

I think no, it can be valuable, but it's not the sole determinant of success (P3).

No, even though it really helps people, in the future if we continue to depend on it then we won't use our critical reasoning anymore because we are provided with instant answers without getting tired of thinking critically anymore (P4 & P5).

Based on the research results above, when students were asked about the significance of Chat GPT for the future, they responded that there are still a lot of other options available. Given the detrimental effects of Chat GPT, such as how it discourages learning and dulls our critical thinking because answers are readily available, they felt that Chat GPT is not that important for the future.

Expect (4) Do you want to explore and expand your knowledge via Chat GPT?

Not really, I think expanding our knowledge can be via reading a lot of journals and articles, not always have go through Chat GPT (P1 & P2)

I have no desire to explore and expand my knowledge through Chat GPT, seeing the effectiveness of the tool (P3 & P4)

Not really, I'll try another tool (P5).

Based on the research results above, when researchers asked students in interviews if they would like to use Chat GPT to explore their knowledge, the students responded that there were plenty of other options available, such as reliable publications or articles that could broaden their knowledge.

Expect (5) Are you willing to put in the necessary effort to achieve academic success by always using Chat GPT?

No, I always want originality for my academic work (P1).

No, I think there are many other platforms that I will use to support my academic success (P2 & P3).

Willingness to use Chat GPT for academic success, perhaps I would first look at its effectiveness and awareness of its limitations (P4 & P5).

Based on the research results above, Students preferred other platforms to Chat GPT when researchers asked them in interviews if they would be willing to use it to support their academic achievements.

Expect (6) Is GPT Chat a complementary learning resource?

Not really, it makes me feel lazy because everything in chatgpt is instant (P1&P2)

I don't think so, Chat GPT cannot replace traditional learning methods or direct interaction with teachers (P3)

No, it is easy to use but the answers given are not satisfactory (P4 & P5)

Based on the results of the interview above, when the researcher conducted an interview regarding whether Chat GPT could be used as a complementary material in learning. Students are of the opinion that Chat GPT cannot be used as supplementary material in learning because the answers given are instant and make students lazy about studying.

Expect (7) Does GPT Chat help study more efficiently?

No, in my opinion it is less efficient because the data sources are sometimes inappropriate. (P1 & P3)

In my opinion, it is still not efficient, the answers provided are sometimes not appropriate. (P3 & P4)

In my opinion, maybe we should look for another platform because Chat GPT is still less efficient. (P5)

Based on the results of the interview above, when the researcher conducted an interview regarding the effectiveness of Chat GPT. Students think that Chat GPT is still not efficient enough to be used as a student learning resource.

Expect (8) Is Chat GPT better than other tools, like Google?

Not really, because if you compare it with Google of course I will choose Google. (P1&P2)

On Google we can access deeper information, for example scientific journals. (P3&P4)

Not really, everything has advantages and disadvantages, but using Google is certainly more efficient. (P5)

Based on the results of the interview above, when the researcher conducted an interview regarding the effectiveness of Chat GPT compared to other platforms. Students are of the opinion that Chat GPT cannot be said to be better than other platforms, there are still many platforms that are more complete.

Expect (9) Do You have a strong desire to always use Chat GPT?

No, I'm afraid I'll become addicted. (P1)

No, that's not good and you'll get lazier to think. (P2&P3)

Practically speaking, just seeing the negative impact, I thought again that I shouldn't always depend on this application. (P4&P5)

Based on the results of the interview above, when researchers conducted interviews regarding whether students would always use Chat GPT. They said that they didn't want to always use Chat GPT, because the impact was not good.

Expect (10) Are you curious and actively looking for new information and experiences using Chat GPT?

Not really, I stopped using it because I was afraid of dependency (P1&P2). I don't use it much because it doesn't have a very good impact on improving my skills (P3&P4).

No, I only use it when I'm stuck (P5).

Based on the results of the interviews above, when researchers conducted interviews with students about whether they were curious and actively looking for new information and experiences using Chat GPT. It turns out that students answered that they didn't want to rely too much on Chat GPT because it had a bad impact on improving students' skills and abilities.

Expect (11) Do you believe that learning to use Chat GPT helped you develop new skills and abilities?

No, learning to use Chat GPT didn't improve my skills, in fact I became more lazy about learning (P1&2P2).

Of course not, my critical reasoning is getting duller because I'm too lazy to think (P3&P4).

Not really, I don't think there was any improvement in my skills (P5).

Based on the reasons above, when researchers conducted interviews with students regarding whether Chat GPT could improve students' skills and abilities. Students answered no, Chat GPT cannot improve students' skills and abilities, in fact students are getting lazier because Chat GPT can help them complete their assignments. So, it can be concluded that Chat GPT cannot improve students' skills and abilities.

Expect (12) Are you optimistic about GPT Chat?

Not really, because there are still many shortcomings (P1).

Not really, because the impact is still a lot less good (P2&P3).

Not really, for example checking the data is still a lot less accurate (P4&P5).

Based on the results of the interview, when researchers interviewed students about whether they were optimistic about Chat GPT, they answered that they were not optimistic, why is that because there are still many negative impacts, one of which is the data source which is sometimes still less efficient. So, it can be concluded that students are not optimistic about Chat GPT.

Based on the results of the research conducted by the researchers, the researchers provided 20 questions to participants; however, from the process of analyzing the data from these 20 questions, the researcher found that there were 12 statements from the 20 questions that participants responded negatively to regarding the use of Chat GPT itself. There are several negative impacts of Chat GPT, namely; students become lazy about studying, thinking critically, and their analytical skills do not improve. Chat GPT provides instant answers that sometimes don't match the questions they ask and usually the source of the data isn't clear either.

CONCLUSION

Based on the researcher's explanation, it may be said that Chat GPT has a lot of drawbacks, one of them is that it occasionally gives quick responses that are unrelated to the topic at hand. In addition, the use of Chat GPT deters students from thinking critically and lowers their desire to study. Additionally, students rely too heavily on Chat GPT as their primary source of immediate information, which makes it harder for them to complete activities or make judgments without the aid of technology. Issues may arise if technology malfunctions or is unavailable. Therefore, to avoid negative effects and enhance potential benefits, the usage of Chat GPT must be combined with stringent laws, appropriate digital skills, moral awareness, and sufficient supervision.

Additionally, Researchers hope that students always have an open mind about the impact of the technology they use, they must see what the negative and positive impacts are, as well as the more positive or negative impacts. Researchers also hope that students will be smarter in choosing the platforms they will use to learn or improve their skills.

REFERENCES

- 1. Abdullayeva, M., & Musayeva, Z. M. (2023). The Impact of Chat Gpt on Student's Writing Skills: An Exploration of Ai-Assisted Writing Tools. International Conference of Education, Research and Innovation, 1(4), 61–66.
- 2. Ali, J. K. M., Shamsan, M. A. A., Hezam, T. A., & Mohammed, A. A. Q. (2023). Impact of ChatGPT on learning motivation: teachers and students' voices. Journal of English Studies in Arabia Felix, 2(1), 41–49.
- 3. Anders, B. A. (2023). Is using ChatGPT cheating, plagiarism, both, neither, or forward thinking? Patterns, 4(3).
- 4. Athanassopoulos, S., Manoli, P., Gouvi, M., Lavidas, K., & Komis, V. (2023). The use of ChatGPT as a learning tool to improve foreign language writing in a multilingual and multicultural classroom. Advances in Mobile Learning Educational Research, 3(2), 818–824.
- 5. Ausat, A. M. A., Massang, B., Efendi, M., Nofirman, N., & Riady, Y. (2023). Can chat GPT replace the role of the teacher in the classroom: A fundamental analysis. Journal on Education, 5(4), 16100–16106.
- 6. Black, W., & Babin, B. J. (2019). Multivariate data analysis: Its approach, evolution, and impact. In The great facilitator: Reflections on the contributions of Joseph F. Hair, Jr. to marketing and business research (pp. 121–130). Springer.
- 7. Caitlin, C. (2023) Queensland public schools to join NSW in banning students from ChatGPT.
- 8. Chiesa-Estomba, C. M., Lechien, J. R., Vaira, L. A., Brunet, A., Cammaroto, G., Mayo-Yanez, M., Sanchez-Barrueco, A., & Saga-Gutierrez, C. (2023). Exploring the potential of Chat-GPT as asupportive tool for sialendoscopy clinical decision making and patient information support. European Archives of Oto-Rhino-Laryngology. https://doi.org/10.1007/s00405-023-08104-8
- 9. Chiu, T. K. F., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2023). Teacher support and student motivation to learn with Artificial Intelligence (AI) based chatbot. Interactive Learning Environments, 1–17.
- 10. Crawford, J., Cowling, M., & Allen, K.-A. (2023). Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI). Journal of University Teaching \& Learning Practice, 20(3), 2.
- 11. Crompton, H., & Burke, D. (2023). Artificial intelligence in higher education: the state of the field. International Journal of Educational Technology in Higher Education, 20(1). https://doi.org/10.1186/s41239-023-00392-8
- 12. Dayawansa, S., Mantziaris, G., & Sheehan, J. (2023). Chat GPT versus human touch in stereotactic radiosurgery. Journal of Neuro-Oncology, 163(2), 481–483. https://doi.org/10.1007/s11060-023-04353-z
- 13. Elkins, Katherine, and Jon Chun. (2020). Can GPT-3 Pass a Writer's Turing Test?. Journal of Cultural Analytics 5 (2). https://doi.org/10.22148/001c.17212.
- 14. Esra, M., & Sevilen, Ç. (2021). Factors influencing EFL students' motivation in online learning: A qualitative case study. Journal of Educational Technology and

Online Learning, 4(1), 11–22. Fuchs, K. (2023). Exploring the opportunities and challenges of NLP models in higher education: is Chat GPT a blessing or a curse? Frontiers in Education, 8, 1166682.

- 15. Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. European Journal of Education, 57(4), 542–570.
- 16. Huang, A. Y. Q., Lu, O. H. T., & Yang, S. J. H. (2023). Effects of artificial Intelligence- Enabled personalized recommendations onlearners' learning engagement, motivation, and outcomes in a flipped classroom. Computers \& Education, 194, 104684.
- 17. Lee, Y.-F., Hwang, G.-J., & Chen, P.-Y. (2022). Impacts of an AI-based cha bot on college students' after-class review, academic performance, self-efficacy, learning attitude, and motivation. Educational Technology Research and Development, 70(5), 1843–1865.
- 18. Lockey, S., Gillespie, N., Holm, D., & Someh, I. A. (2021). A review of trust in artificial intelligence: Challenges, vulnerabilities and future directions.
- 19. Lubis, A. H. (2019). The Impact of ICT Usage Towards Learning Process Quality Among Lecturers on Selected Private Universities in Medan, Indonesia. School of Human Development and Techno Communication, Universiti Malaysia Perlis
- 20. Lund, B. D., & Wang, T. (2023). Chatting about ChatGPT: How may AI and GPT impact academia and libraries? Library Hi Tech News.
- 21. Mishra, S. B., & Alok, S. (2022). Handbook of research methodology. Educreation publishing.
- 22. Nasim, S. F., Ali, M. R., & Kulsoom, U. (2022). Artificial intelligence incidents \& ethics a narrative review. International Journal of Technology, Innovation and Management (IJTIM), 2(2), 52–64.
- 23. Radford, A., Wu, J., Child, R., Luan, D., Amodei, D., & Sutskever, I. (2019). Language models are unsupervised multitask learners. OpenAI Blog, 1(8), 9.
- 24. Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education. Journal of Applied Learning and Teaching, 6(1).
- 25. Sandu, N., & Gide, E. (2019). Adoption of AI-Chatbots to enhance student learning experience in higher education in India. 2019 18th International Conference on Information Technology Based Higher Education and Training (ITHET), 1–5.
- 26. Shoufan, A. (2023). Exploring Students' Perceptions of CHATGPT: Thematic Analysis and Follow-Up Survey. IEEE Access.
- 27. Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. Smart Learning Environments, 10(1). https://doi.org/10.1186/s40561-023-00237-x
- 28. Tsai, M. L., Ong, C. W., & Chen, C.-L. (2023). Exploring the use of large language models (LLMs) in chemical engineering education: Building core course

problem models with Chat-GPT. Education for Chemical Engineers, 44, 71–95. https://doi.org/10.1016/j.ece.2023.05.001

- 29. Wang, N., Rebolledo-Mendez, G., Matsuda, N., Santos, O. C., & Dimitrova, V. (2023). Artificial Intelligence in Education. 24th International Conference, AIED 2023, Tokyo, Japan, July 3–7, 2023. https://doi.org/10.1007/978-3-031-36272-9
- 30. Zhai, X., Chu, X., Chai, C. S., Jong, M. S. Y., Istenic, A., Spector, M., Liu, J.-B., Yuan, J., & Li, Y. (2021). A Review of Artificial Intelligence (AI) in Education from 2010 to 2020. Complexity, 2021, 1–18. https://doi.org/10.25082/amler.2023.02.009