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The Use of GPT Chat Phenomenon in the Uses & Gratification Theory Perspective



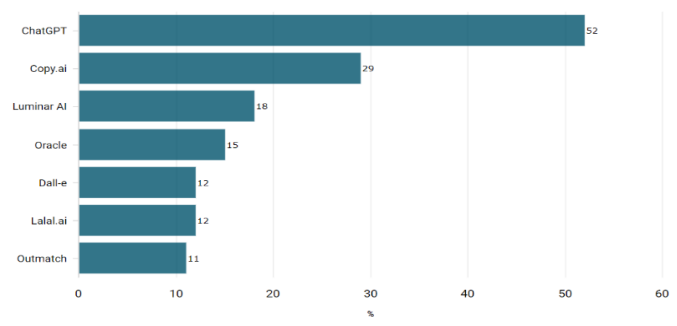
Abstract: - GPT Chat is an artificial intelligence system developed by Open Artificial Intelligence (AI) that is able to answer a variety of text-formed questions. It does not only produce text, but also translates languages and writes various kinds of creations. It is used in any fields, including education. The purpose of this research is to analyze the phenomenon of the use of GBT Chat in college using the theory of uses and gratification. The medium is chosen to meet the needs of its users as a medium of communication, information, entertainment, education, employment and mention some. The method used is a survey that collects data from students who are actively using GPT Chat in the teaching and learning process. Research results show that students use GPT Chat to meet their needs such as seeking help in doing their assignments or lecturing projects and preparing final assignments. The study also showed that students and educators assessed the use of GPT Chat as having a positive impact on meeting their needs.

Keywords: Uses and Gratification, GPT Chat, Artificial Intelligence, Education, Students..

1) Introduction

The rapid globalization era marked by advanced technology has brought changes to life, especially in the field of education. By using technology, learners can gain more knowledge from e-books, video tutorials and online learning platforms as well as access to training, certification, online courses which are increasingly accessible without time, distance and space limits. It is very useful because it can fulfill the need to develop knowledge independently without any time and place restrictions. One technology that is now popular and useful in the world of education is GPT Chat which was released by Open AI in November 2022 (openai.com, 2022). GPT Chat is a Generative Pre-Training Transformer (GPT) chatbot that is able to answer various questions that can be inputted in the chat column.

Figure 1 Most Used AI Applications in Indonesia (April 2023)



Source: databoks.katadata.co.id

Of the several AI applications, GPT Chat is ranked the first most accessed by internet users in Indonesia. Arwanto (2023) explained that one of the advantages of GPT Chat based on the search words used is that it can provide information quickly. The positive impact of GPT Chat is for customer service such as contributing to increased customer satisfaction because this technology can be accessed at any time. In other fields, it can be useful for health, financial management, and education. In the field of education, GPT Chat can be used as a

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virtual assistant that helps the teaching and learning process by answering problems and questions related to learning materials and learning tasks for students (Dwivedi et al., 2023)

With its highly advanced capabilities, GPT Chat can even become a personal assistant in learning. GPT Chat provides a positive value in the world of lectures because GPT Chat can provide fast answers, and it can develop ideas. Students can collaborate with each other because by using GPT Chat students can create student groups, allowing them to work together on projects and assignments. The writing produced by GPT Chat can be used to motivate students to write as well as improve their writing skills. However, there are still many AI chatbots that have difficulty in handling complex conversations and understanding context. (Ramadhan, Faris, Wahyudi, & Sulaeman, 2023; Setiawan & Luthfiyani, 2023)..

The use of GPT Chat has shortcomings and has a negative impact for its users, so there are parties who oppose the presence of GPT Chat. Moreover, Indonesia has a high number of students and university students. Therefore, to overcome doubts about the presence of GPT Chat in the educational environment, self-development and a critical attitude in following new technological developments are needed so that GPT Chat can help the learning process. There are studies that state that the use of GPT Chat has not been able to increase their motivation in learning. There is also the potential for unfairness in assessment by lecturers and the risk of plagiarism which can reduce critical thinking skills.

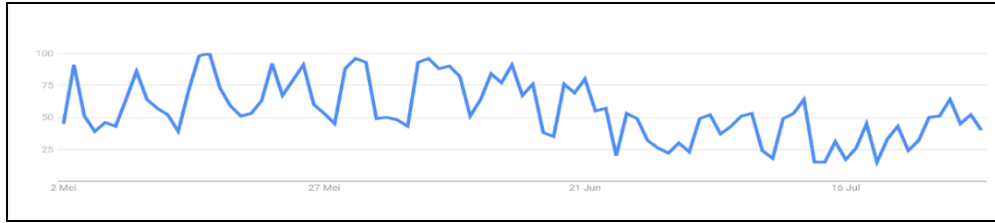
There is research proposed by Setiawan & Luthfiyan (2023) with the research title "The Use of GPT Chat for Education in the Education 4.0 Era: Proposed Innovations to Improve Writing Skills". In this research, researchers experimented with making scientific papers and even books with prompts formulated from the beginning. As a result, the researcher was able to produce 693 words of writing in approximately 7 minutes, including the documentation time of GPT Chat processing results. The second study conducted by Aydın & Karaarslan (2022) found that the use of GPT Chat in scientific writing resulted in unoriginal scientific work. This indicates that students could potentially use the system to cheat by submitting papers that are not their own. This undermines the purpose of higher education to challenge and nurture students' creativity which in turn can lead to disorientation of the educational process.

Educational institutions need to consider the potential risks and benefits of utilizing GPT Chat and take steps to ensure that this technology can be used ethically and responsibly. This can be done by involving the developers of policies and procedures for the use of GPT Chat, providing training and support for students and using various methods to detect and prevent academic dishonesty (Mairisiska & Qadariah; Wahid et al., 2023). Ratodi (2023) explained how to overcome unwanted risks when using GPT Chat in the era of artificial intelligence, especially for data security and bias detection, namely analyzing the training data used in GPT Chat to detect and remove bias in the dataset. Another way of overcoming risk is clear interpretation by providing clear documentation and instructions on how to interpret the GPT Chat output.

In this study, the uses and gratification theory is used to explain a person's motives in using certain media and what is expected from the media. There is an assumption that people use certain media to fulfill their needs and they choose the media that they consider most appropriate in meeting their needs. In the context of using GPT Chat in a university environment, this theory is used to explain the motives of students using GPT Chat. Do students have the belief that GPT Chat can fulfill their needs for learning, doing assignments, doing final assignments or vice versa.

Several studies have shown that this theory is valid to explain the motives for media use. People use media to fulfill their needs for information, entertainment, social relationships and self-identity. Therefore, this theory is considered important in understanding media use, especially to understand a person's motives for using the media, knowing the expectations of media users and the impact on their users. This theory can be used to examine whether GPT Chat has a positive impact on students in the learning process or vice versa.

Figure 2 Trend of Chat GPT Usage in the Last Three Months in Indonesia
(May, June and July)



Source: Google Trend

Figure 2 proves that GPT Chat has become an AI trend in lives of many users in Indonesia, including in the world of education. The uses and gratification theory is widely used by researchers in exploring the motivation for using media, whether conventional media or media that has an internet network (Falgoust et al., 2022). This theory was introduced by Katz (1950) who suggested that everyone has differences in searching, using, and responding to media content based on social and psychological factors between individuals (Morissan, 2013). The purpose of this study is to obtain students' understanding in utilizing GPT Chat in the learning process by explaining the reasons for using GPT Chat and how it impacts them.

2) Methods and Methodology

In this research, the method used is a survey method with a quantitative approach and a questionnaire is implemented as an instrument to collect data. This research is descriptive quantitative, which only describes situations or events and does not test hypotheses or relationships between variables. Suryandari (2017) says that a quantitative descriptive approach is used to find out what events, how many and to what extent the research is carried out. This research was conducted at the Tarakanita College of Communication and Secretariat (STARKI), East Jakarta. The population of this study were active students in the odd semester 2023/2024 with a total population of 344 people. The sampling method used by researchers is purposive sampling, which is where researchers select samples based on appropriate characteristics in this study. In this case, the criteria for research subjects are that they know and have used Chat GPT and are active students of STARKI, totaling 224 people.

3) Results

The development of communication technology is growing so rapidly. Almost every day artificial intelligence applications appear that are disseminated through social media. However, the massive application of artificial intelligence does not mean that communication technology replaces the role of humans as users. Not all digital communication technologies are chosen and favored by some people. For example, GPT Chat, based on a survey conducted among students in Jakarta, is not massively used by students to assist in the learning process. Thus, it can be said that learning by students has not fully utilized artificial intelligence. The teaching and learning process is still dominantly carried out conventionally, including still using books and lectures as the main source of learning. In addition to books and lectures, journal articles become the second reference for students to learn. The most important thing is that the use of artificial intelligence is tailored to the needs because students are unlikely to use applications that are new every day, for example the use of certain applications for health checks, for making advertisements, for agriculture, for medicine and others (Setiawan & Luthfiyani, 2023; Wisky, Akhiyar, & Robianto, 2023).

This research seeks to test the uses and gratification theory. Of the total respondents who were aware of GPT Chat, only 63.4% used or had used it. Judging from the intensity of using GPT Chat, in terms of time duration, 59.9% of respondents have used GPT Chat for 1-3, 21.8% for 3-6 months, and 15.5% 6-9 months. Meanwhile, in terms of the duration of use in a week, 50% of respondents use GPT Chat 1-3 times a week, 27% less than 1 time or almost never, 14.1% access GPT Chat 3-6 times a week. For your information, GPT Chat was launched in November 2022. Even so, not many people know about it let alone use it.

Reviewing the satisfaction in using GPT Chat, there are 40.2% acknowledging that GPT Chat helps students create scientific articles or other papers and the rest tend to disagree. Thus, students still use conventional methods in doing papers as coursework. This is supported by the finding that 28.9% of respondents thought that the answers provided by GPT Chat were accurate. Most respondents do not believe in the answers recommended by GPT Chat. When viewed from other motivations, students use GPT Chat in the learning process. There were 56.3% of respondents could not enjoy using GPT Chat in the learning process and the rest admitted to enjoying and being quite satisfied using GPT Chat. They also thought that the use of GPT Chat was just following the trend of technological development, 55% of respondents agreed that the use of GPT Chat as a learning medium was because GPT Chat was the current trend. This is because they think GPT Chat is just a trend that they have to experience. Another finding was that 43% of respondents did not recommend using GPT

Chat to other friends. The students generally (27.5%) trusted the answers provided by GPT Chat while 25.3% did not trust the references provided by GPT Chat.

4) Discussion

McGuire (1974) in Katz, Blumler, & Gurevitch (1973) explains that there are two ways of using the media, namely based on content (content gratification) and based on experience (process gratification). According to Eginly & Tas (2018), social media and conventional media differ in their content in providing satisfaction to media users to communicate with others. Motive is one of the factors driving a person to act. Uses and gratification theory is an analytical method in examining and understanding the motives of students in using GPT Chat. Elements of the type of needs according to Katz, et al (1973). became the concept used to examine the motives of students using GPT Chat, namely cognitive needs, affective needs and personal integration needs (West & Turner, 2008).

West & Turner (2008) explain that cognitive needs are carried out by a person in obtaining information, knowledge and understanding based on the desire to understand, satisfy curiosity and investigate further. In this case, GPT Chat as an AI-based media must be able to provide satisfaction to student needs. The satisfaction of student needs in question is the need for information, education and accurate answers in the fulfillment and satisfaction of the learning process such as coursework, course materials, writing scientific papers and so on. Based on the results of a survey conducted with STARKI students, it states that 54.2% of the majority of respondents use GPT Chat to understand lecture material that is not understood in the learning process. The majority of students use GPT Chat to access and obtain information about lecture material as needed. In addition, 40.2% of respondents use GPT Chat to help them compile scientific articles or other written works.

Affective needs according to West & Turner (2008) is the need for emotional experiences and pleasant things. This relates to a person's experience and satisfaction in using certain media to fulfill their needs. Based on the research results, it shows that 18.3% of respondents shared their experiences with their friends and 10.6% stated that they enjoyed the learning process using GPT Chat. This shows that only a few students use GPT Chat and enjoy it to share their experiences using GPT Chat with their friends. In addition, there is a need for personal integration, which is related to credibility, stability, confidence and individual status.

In this research, 28.9% of respondents use GPT Chat to simply follow the trend of technological development so that they can be recognized as not being out of date. There are 14.1% of respondents who recommend GPT Chat to their friends. This is due to the emergence of other AIs that offer other advantages compared to GPT Chat. In addition, one of the factors that not many recommend GPT Chat to their friends is because only 5.6% of respondents trust and follow references from GPT Chat. The information obtained from GPT Chat is considered inaccurate.

Students as users of AI, especially GPT Chat, argue that GPT Chat is not a favorite application or much liked by students. The utilization of AI needs to be reflected upon (Thohir, Reditiya, & Sari, 2023; Wahid et al., 2023). This is due to several factors, first, the possibility that lecturers do not encourage students to use GPT chat. Second, lecturers' literacy in AI is still relatively low and they still use conventional ways of exploring knowledge in this digital era. Third, students and lecturers have not switched from conventional methods to digital learning methods. Fourth, there is no campus policy to conduct digital learning by utilizing AI.

It is understandable that the utilization of communication technology is still low. The rapid and diverse development of the quantity of communication technology applications has made some people apathetic because they are always behind. They simply use the applications they already know and have used so far. So, the use of AI is still not so massive because all of this depends on the needs of the users (Ramadhan et al., 2023; Setiawan & Luthfiyani, 2023; Suharmawan, 2023). GPT Chat has not yet become a reference for self-study for students even though AI in general and GPT Chat in particular can be utilized in education (Liriwati, 2023; Manongga, Rahardja, Sembiring, Lutfiani, & Yadila, 2022). This is due to the many AIs that continue to develop and emerge. Therefore, there is a need for literacy regarding the right AI to be used in the educational environment according to the needs of the students (Asnawati et al., 2023; Farid, 2023; Nugraha & Sufanti, 2023).

5) Conclusion

In the new media era, learning methods are not only based on lectures and books, but can utilize technology such as AI. A case in point is the utilization of GPT Chat where students can find out answers, ideas, ideas and can be developed in the learning process in class. The phenomenon of using GPT Chat in this educational environment is interesting to study using uses and gratification theory to see the motivation of students using

GPT Chat in the learning process. Based on the results of the research and discussion that has been described, the motives of students using GPT Chat based on the types of needs and satisfaction with the media by Katz in UGT theory are cognitive, affective, and social integration needs.

From the results of the analysis it can be concluded that students are faced with two GPT Chat paradoxes, namely active students determine the prompts included in GPT Chat in asking something to meet their needs in the learning process and on the other hand using GPT Chat just to follow the trend and not intensely use it. In terms of satisfaction in using GPT Chat, respondents did not recommend GPT Chat because the response or response received was considered not too accurate. This shows that the actual uses and gratification theory places users not free in choosing the media to be used because users, especially students, use the media that has been selected by the institution. GPT Chat is more popular than other AIs in the educational environment, even though there are many AIs that have features and offer many advantages over GPT Chat. This can be seen from the low user activeness, which is temporary and only a euphoria of the current technology trend. The use of GPT Chat is limited to information sources, educational media, especially in this case learning media, not as media in a broader sense. It is possible that if there is another AI that is more sophisticated than GPT Chat, then users will switch to another AI. Users will actively use certain media depending on social aspects, needs, opportunities to access them and also trends that play a role in determining the media to be used. Referring to the research results, GPT Chat users depend on what is used and considered important by our social group.

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