ChatGPT's Impact on Academia

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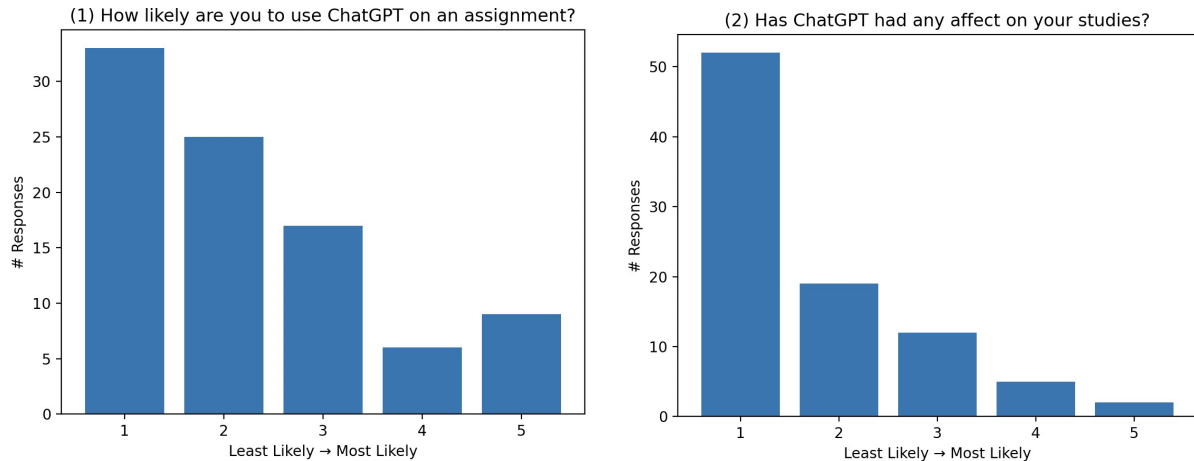
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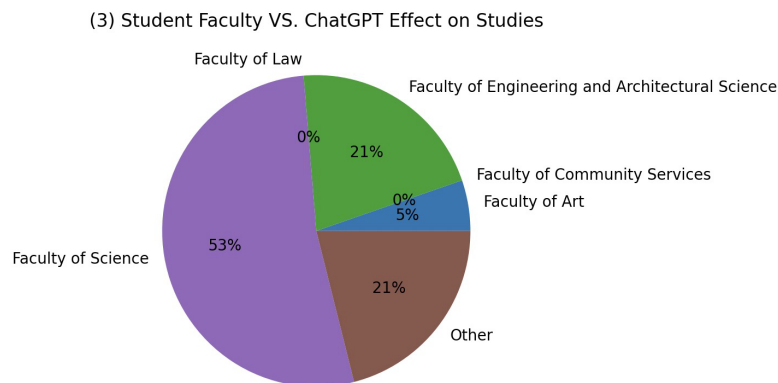
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ChatGPT is an advanced language model designed and developed by OpenAI. This chatbot was created to bring artificial intelligence to new heights and to test the limits of what a powerful AI system can accomplish (Shankland, 2023). ChatGPT works by analyzing the context of a prompt and uses its knowledge of language patterns to create a fitting result for the user (Ortiz, 2023). ChatGPT has been used by many people around the world for purposes such as getting help with education, asking simple questions and much more. However, ChatGPT hasn't always been used in an honorary way. Students have used ChatGPT to violate academic integrity by using the chatbot to do their homework for them. This begs the question of whether ChatGPT is fair use when it comes to school work.

ChatGPT has been a tool for many individuals in many fields, but how does ChatGPT affect students? In order to answer this question, a survey was conducted to students in academia, asking them questions related to the academic use of ChatGPT, and students' overall opinion on ChatGPT.
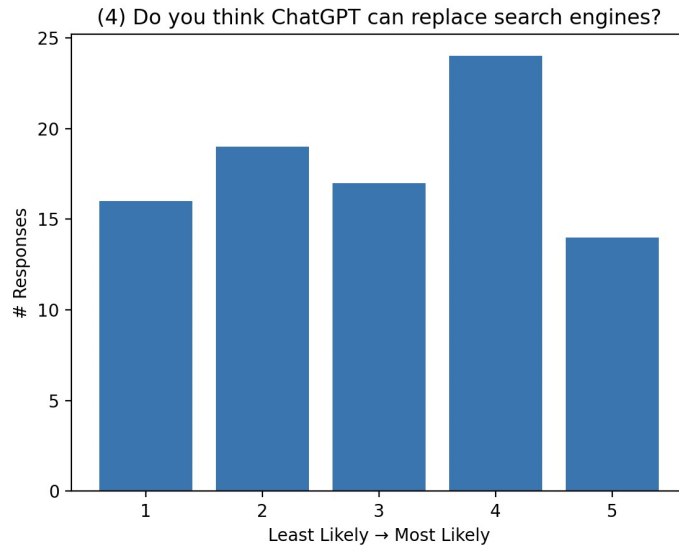
Based on the results of the survey, it is seen that approximately one-third of the participants are willing to utilize ChatGPT for academic purposes (Figure 5, page 4). Yet, roughly 35% of respondents indicated a lack of interest in using ChatGPT in their academic work (Figure 1), and about 52% claimed that ChatGPT had not impacted their studies in any noticeable way (Figure 2). These findings imply that while ChatGPT has not had a complete influence on a student's academic work needs, it has the potential to do so, considering the level of interest and popularity it has gained this far.

(1) How likely are you to use ChatGPT on an assignment?

(2) Has ChatGPT had any affect on your studies?

It is worth noting that the impact of ChatGPT has on students also depends on which faculty the students are in. Upon analyzing the survey data presented in Figure 3, it is evident that students enrolled in technology-related programs have experienced improvements in their academic performance with the assistance of ChatGPT. Conversely, students in non-technical programs reported minimal to no effects on their academic outcomes attributed to ChatGPT.
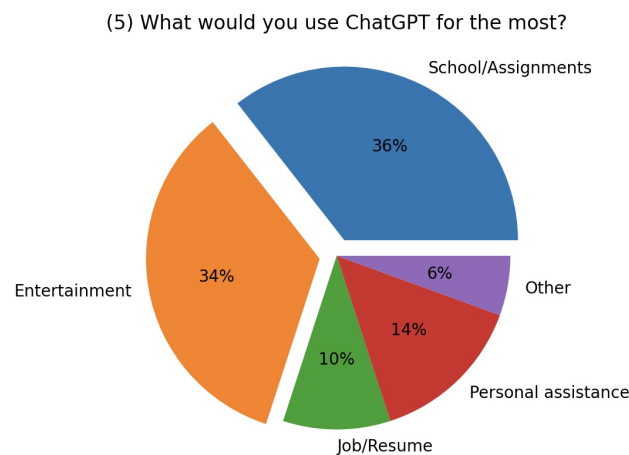

(3) Student Faculty VS. ChatGPT Effect on Studies

The survey findings indicated in Figure 4 imply that students are slightly doubtful of the potential of ChatGPT compared to popular search engines like Google or Bing. However, the majority of them continue to perceive it as a viable substitute.

(4) Do you think ChatGPT can replace search engines?

With any new technology, it may take some time for ChatGPT to gain greater traction and acceptance among a wider audience, particularly as people become more accustomed to its features and functionalities. Nevertheless, students can see ChatGPT as an alternative to popular search engines, showing its potential use in academia.

The degree of ChatGPT's mainstream popularity is limited, as its predominant usage currently has been towards academic work and/or leisure activities (Figure 5). Its adoption by the general population is still in process. However, it is plausible that ChatGPT may experience a surge in popularity and emerge as a prominent search engine for the general public in the future.

(5) What would you use ChatGPT for the most?

It is important to note that surveys can be subject to respondent errors, sampling errors, and other potential sources of bias, which may impact the accuracy and reliability of the data collected. However, to further the general understanding of ChatGPT's impact on academia, it is recommended that a broader demographic is surveyed, including a diverse cohort of students across various programs and schools. This approach will allow for more comprehensive and precise results.

ChatGPT comes with many advantages for students in academia. One of the most significant advantages is its quick and accurate responses to questions (Mallow, 2023). ChatGPT allows students to swiftly and easily obtain knowledge on a wide range of topics, from homework assignments to research projects. This can save students a lot of time and effort, especially when they need to obtain information quickly.

ChatGPT's customized responses are another advantage for university students. ChatGPT may learn from prior conversations and tailor its responses to individual needs. This means that as a student interacts with ChatGPT, its responses will become more personalized and accurate.

However, ChatGPT does have significant restrictions. One of the most significant drawbacks is its inaccuracy as it only dates information up to 2021. While ChatGPT is a sophisticated language model, it is not flawless, and it may deliver incorrect or partial information at times (Johnson, 2023). This might be especially troublesome for university students who need reliable information for their studies.

While ChatGPT has a number of benefits for university students, it is important to be aware of its limitations as well. Students should use ChatGPT as a tool to supplement their studies, but should also be aware of its drawbacks and use it with caution.

The future potential of ChatGPT as a tool for individualized learning is significant. ChatGPT may offer a detailed explanation, comments, and resources to support each student's independent learning as it continues to get better at identifying unique learners and their requirements. Furthermore, ChatGPT might serve as a virtual tutor, responding to queries and offering in-depth assistance outside of the classroom. Given how much tuition costs, many students would benefit from having access to a virtual tutor who is mostly reliable and free rather than having to worry about the cost of a real tutor.

Another potential for ChatGPT is utilizing it as a language learning tool. International students might practice their language abilities through chats and interactive exercises because to ChatGPT's ability to recognize and generate natural language in several languages.

ChatGPT is a valuable educational resource with quick responses and the ability to recall previous conversations. Despite its limitations in post-2021 knowledge and occasional inaccuracies, it is still beneficial for students. Additionally, based on the results from the survey, ChatGPT has a positive impact on academic performance, especially for those in technology-related fields compared to those in non-technical disciplines. Finally, As technology advances, ChatGPT may evolve into a virtual tutor with more detailed responses, explanations, and resources, along with utilizing it as a language learning tool for international students. It is crucial to remember that ChatGPT does not take the place of actual teachers or the social and emotional learning opportunities provided by conventional classroom settings (California Business Journal, 2023). Instead, it ought to be viewed as a useful tool to supplement and improve both students' and teachers' educational experiences.

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