



From novice to navigator: Students' academic help-seeking behaviour, readiness, and perceived usefulness of ChatGPT in learning

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Abstract

The emergence of chatbots and language models, such as ChatGPT has the potential to aid university students' learning experiences. However, despite its potential, ChatGPT is relatively new. There are limited studies that have investigated its usage readiness, and perceived usefulness among students for academic purposes. This study investigated university students' academic help-seeking behaviour, with a particular focus on their readiness, and perceived usefulness in using ChatGPT for academic purposes. The study employed a sequential explanatory mixed-method research design. Data were gathered from a total of 373 students from a public university in Malaysia. SPSS software version 27 was used to determine the reliability of the research instrument, and descriptive statistics was used to assess the students' readiness, and perceived usefulness of ChatGPT for academic purposes. Responses in the open-ended questions were analysed using a four-step approach with ATLAS.ti 22. Research data from both the quantitative and qualitative methods were integrated. Findings indicated that students have the proficiency, willingness, and the requisite technological infrastructure to use ChatGPT, with a large majority attesting to its ability to augment their learning experience. The findings also showed students' positive perception of ChatGPT's usefulness in facilitating task and assignment completions, and its resourcefulness in locating learning materials. The results of this study provide practical implications for university policies, and instructor adoption practices on the utilisation of ChatGPT, and other AI technologies, in academic settings.

Keywords Help-seeking behaviours · ChatGPT · Self-regulated learning · Students · Higher education

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1 Introduction

Artificial intelligence (AI) is transforming the way university students learn and understand new things (Ifenthaler & Schumacher, 2023; Rawas, 2023). However, unlike face-to-face lectures where instructors can support university students in regulating their own learning, the use of chatbots, powered by artificial intelligence, provides learners with high levels of autonomy, and low levels of instructor presence (Jin et al., 2023). Students can now tailor and adapt their learning to their individual needs, goals, and abilities. This decreases opportunities for student-instructor face-to-face interactions (Adams et al., 2020). Consequently, a type of interaction that is potentially under threat is help-seeking. Academic help-seeking behaviour is an important self-regulated learning strategy (Won et al., 2021), which is critical to a student's academic success (Adams et al., 2021; Yan, 2020).

University students seek help from their instructors and friends for a variety of purposes, such as obtaining course advice and information, navigating course content and resources, verifying their understanding on the subject matter, or discussing personal matters (Broadbent & Lodge, 2021). In the usage of chatbots, and language models like ChatGPT, university students commonly seek help to answer questions, provide explanations, and create study materials (Foroughi et al., 2023). ChatGPT can also enhance students' educational experience (Kuhail et al., 2023) by simulating conversations, and providing immediate support and feedback to students (Pillai et al., 2023). Its other capabilities include providing students with personalised learning experiences, and automating administrative tasks, contributing to enhanced student engagement (Foroughi et al., 2023; Mijwil & Aljanabi, 2023). However, there are concerns regarding the accuracy of the information and advice given. Some believe that relying solely on it could disrupt genuine learning experiences particularly in the context of self-regulated learning (Wu et al., 2023). Ray (2023) highlighted this potential drawback, emphasizing the need for users to cross-reference and critically evaluate the information provided.

This raises the question of how university students' help-seeking behaviours can be supported in using ChatGPT. This is a timely issue as the number of students using ChatGPT is on the rise ("Students Turn to ChatGPT for Learning Support," 2023). While past studies have revealed the benefits of using AI-based chatbots for learning (e.g., Al-Sharafi et al., 2022; Hwang & Chang, 2021), a growing number of studies have also highlighted that many students grapple with effective self-regulation when using them (Gupta et al., 2019; Sáiz-Manzanares et al., 2023; Tsvitanidou & Ioannou, 2021). University students' help-seeking behaviour in the usage of AI-based chatbots can be influenced by factors such as readiness (Hammad & Bahja, 2023; Uren & Edwards, 2023), and perceived usefulness (Kasneji et al., 2023). Thus, to support help-seeking behaviours in the long term, it is necessary to investigate students' readiness, and perceived usefulness of ChatGPT.

With the ability to adapt and improvise in the long term, ChatGPT could revolutionize education by potentially enhancing its effectiveness and accessibility for students worldwide (Mijwil et al., 2023; Rawas, 2023). However, despite its potential, ChatGPT is relatively new. There are limited studies that have investigated its usage readiness, and perceived usefulness among students for academic purposes. In