Exploring Gender Disparities in Perceived ChatGPT Usefulness

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Abstract

The aim of this paper is to observe and analyse whether there are gender discrepancies in the perception of ChatGPT's usefulness in the educational context. We were interested to observe how male and female students perceive the usefulness of ChatGPT as a learning assistant. The experiment was conducted during the winter semester of 2023 at the University of Belgrade (UB) – Faculty of Organizational Sciences (FOS). FOS is the leading institution at the UB that specialises in teaching engineering management and IT engineering. The student cohort we focused on were students of the IT programme as we perceived them as more prone to using new technologies, such as ChatGPT, for educational purposes. The participants who took part in the experiment were third-year students attending the course Computer Networks. Of around 500 enrolled students, 205 students who used ChatGPT to learn theoretical and practical parts of the exam were surveyed. The survey contained 15 statements about the perceived satisfaction, ease of use, and usefulness of ChatGPT's assistance. Regarding the preparation for the theoretical part, gender differences were found for three statements: Using ChatGPT improved my competence, Using ChatGPT increased my productivity, and Using ChatGPT was useful. Regarding the preparation for the practical part, gender differences were found for one statement: Using ChatGPT for educational purposes allows me to complete tasks more quickly. Regarding the preparation for the exam, gender differences were found for two statements: Using ChatGPT improved my competence, and Using ChatGPT increased my productivity. For all six statements, the male students perceived ChatGPT more positively and thought that the usage of ChatGPT had an impact on their learning outcomes related to the theoretical part, practical part and the exam.

Keywords: ChatGPT, engineering education, gendered perceptions, student perceptions