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Mustafa Taktak
Istanbul Gelisim University, Türkiye

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Mustafa Taktak

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Abstract

This study examines the potential and challenges of artificial intelligence applications like ChatGPT in higher education, drawing on the experiences of 24 academics from eight countries: Turkey, Sweden, Canada, Iran, Kenya, Pakistan, Afghanistan, and Japan. Employing the content analysis method, the findings reveal that ChatGPT provides significant opportunities, including enhancing text writing skills, saving time, facilitating translations, inspiring creative ideas, and offering personalized responses tailored to users' needs. These advantages highlight its potential as a transformative tool in academic and pedagogical contexts. However, the study also identifies notable challenges, such as the risk of legitimizing plagiarism, concerns about source reliability, the impact of digital dependency on productivity, a lack of cultural and social contextualization, and the potential for bias and discrimination. Furthermore, participants envision artificial intelligence driving digital transformation in higher education through developments like virtual university models, interactive educational materials, advancements in research and analysis methods, improved accessibility to information, and greater inclusiveness. These findings emphasize the need for comprehensive, interdisciplinary research to better understand both the opportunities and the limitations of ChatGPT's integration into educational settings, as well as to establish ethical guidelines and practical strategies for its responsible and effective use in higher education.

Introduction

Artificial intelligence (AI) has advanced swiftly in recent years, bringing about profound changes across various sectors. ChatGPT, developed by OpenAI as an artificial intelligence application and launched in November 2022, has astonishing speed, reaching one million users in just two days. This user application is the fastest growing application in the history of the internet so far. Because even the most spread at an popular applications could reach one million users in 300 days on Facebook, 720 days on Twitter, and 75 days on Instagram (Biswas, 2023). It currently has approximately 1.6 billion website visitors per month (Similarweb, 2024).

ChatGPT (Chat Generative Pretrained Transformer) is a technology that is based on an innovative language model and uses deep learning techniques to interact with people, answer questions, inspire users and make inferences

(Lo, 2023; Farrokhnia et al., 2023). The fact that this technology facilitates the work in different fields and offers new possibilities of use brings exciting discussions about the future of artificial intelligence technology. ChatGPT, one of the leading applications of artificial intelligence, is one of the most talked about topics in higher education with the features it offers. Some researchers suggest that artificial intelligence based applications such as ChatGPT have the potential to create a paradigmatic transformation in education (Khan, 2023; Sallam, 2023). However, some researchers draw attention to ethical problems regarding the use of ChatGPT and argue that this technology may threaten the integrity of education (Haque et al., 2023 ; Alabool, 2023). These criticisms highlight that ChatGPT carries significant risks regarding issues such as data privacy, biased information presentation, and student privacy. Therefore, a careful balance needs to be struck between the potential benefits of AI supported educational technologies and ethical and security concerns. In this context, although the use of ChatGPT in education brings with it many debates, comprehensive theoretical knowledge and empirical findings that reflect the views of practitioners about the applicability of artificial intelligence technology in education, its potential benefits and harms, and its ethical and legal dimensions still seem to be lacking. In this study, we aimed to systematically evaluate the effects of ChatGPT on education, research and academic publication processes by examining the ChatGPT experiences of academics in universities. This study will provide important contributions to the research on university synchronization and AI interaction by examining the impact of AI technology on higher education in detail.

Impact of ChatGPT on Higher Education

Artificial intelligence is a rapidly developing field in recent years and plays an important role in higher education. In particular, it offers significant potential in providing personalized learning experiences and enriching course materials. Chan and Hu (2023), in their research on the use of artificial intelligence, stated that university students have the opportunity to understand complex subjects and learn in depth. In addition, ChatGPT makes the learning process more effective by providing content suitable for students' individual needs (Ali et al., 2023). ChatGPT has a significant role in academicians' research studies. It helps researchers in stages such as conducting literature reviews, formulating research questions, and analyzing large data sets (Lund & Wang, 2023). Furthermore, ChatGPT supports academics by improving drafts of scientific publications through language and style suggestions, as well as correcting spelling errors (Salvagno, Taccone & Gerli, 2023). Additionally, it inspires researchers to develop new ideas and contributes to the creation of original research (Alabool, 2023). As a result, the importance of ChatGPT in academic publication processes continues to grow. However, despite these benefits, there are limitations and concerns regarding the use of ChatGPT. For instance, uncertainties about its reliability and accuracy have been noted (Farrokhnia et al., 2023). Moreover, ethical issues arise due to its potential to produce misleading or erroneous outputs. These challenges raise critical questions about how such technologies might impact the research and learning processes in universities.

In particular, concerns about the reliability and ethical implications of AI tools like ChatGPT could affect the integrity of research and the trust placed in academic outputs. For students, reliance on AI might influence their ability to develop critical thinking and independent problem-solving skills. On the other hand, insufficient understanding of these tools could lead to either underutilization or misuse, hindering their potential to enhance

education and research outcomes. Therefore, it is essential to develop a deeper understanding of the role of AI technologies in higher education (Zeb el at., 2024). This involves evaluating not only their potential benefits and risks but also considering how their limitations and ethical challenges may shape the future of academic research and learning processes. By addressing these aspects, universities can better harness the advantages of AI while mitigating its potential drawbacks.

Therefore, researchers who want to conduct empirical studies to investigate the role of ChatGPT in higher education should examine the experiences of academics with ChatGPT. This research provides an in-depth analysis of the experiences of academics with ChatGPT in different academic positions at universities in many countries. The aim of interviewing academics from different countries is to explore the diversity of perceptions regarding the use of ChatGPT in various cultural and academic contexts. This approach aims to provide a comparative perspective on the role of AI technologies in higher education and to evaluate the opportunities and challenges in different environments. It is thought that such empirical studies will be an important resource for both better understanding the impact of ChatGPT in higher education, increasing its effectiveness, and shedding light on academics' perspectives on ChatGPT.

Method

In this study, a case study approach was adopted to deeply explore and explain user experiences with ChatGPT. A case study is a research method that involves the detailed and systematic examination, interpretation, and description of a phenomenon in its context (Yin, 2013). Criterion sampling was used to select participants who were compatible with the objectives of the study. Criterion sampling allows for a more targeted sample to be created by selecting participants who meet certain criteria (Patton, 2002). In this context, participants were selected from academics who were working at various universities in Istanbul and who agreed to participate in the interviews due to their easy accessibility. The participant selection process aimed to obtain a variety of perspectives and experiences regarding the use of ChatGPT in different academic disciplines and cultural contexts. Ensuring this diversity allows for a more in-depth analysis of interdisciplinary and cultural differences. Within the scope of the study, 24 participants who met the criteria and agreed to participate voluntarily were selected from 73 academics invited to the study. The demographic information and details regarding the fields of study of all participants are presented in Table 1.

Table 1. Participant Demographic Information

Code	Gender	Experience	Education D.	Profession	Country
P1	Male	19	PhD	Health Sciences	Turkey
P2	Male	4	PhD	Health Sciences	Turkey
P3	Female	5	PhD	Health Sciences	Turkey
P4	Male	15	PhD	Health Sciences	Turkey
P5	Female	21	PhD	Sociology	Turkey
P6	Male	11	PhD	Sociology	Turkey
P7	Female	14	PhD	Economics and Finance	Turkey

Code	Gender	Experience	Education D.	Profession	Country
P8	Male	3	PhD	Economics and Finance	Turkey
P9	Male	4	PhD	English Language and Literature	Turkey
P10	Female	2	PhD	English Language and Literature	Kenya
P11	Female	14	PhD	Management Information Systems	Afghanistan
P12	Female	10	PhD	Management Information Systems	Iran
P13	Female	9	PhD	Psychology	Turkey
P14	Male	7	PhD	Psychology	Iran
P15	Male	12	PhD	Psychology	Iran
P16	Female	1	PhD	Dentistry	Afghanistan
P17	Female	3	PhD	Dentistry	Pakistan
P18	Female	4	PhD	Social Work	Pakistan
P19	Female	6	PhD	Banking and Insurance	Sweden
P20	Male	2	PhD	Tourism Guidance	Kenya
P21	Female	2	PhD	Aviation Management	Afghanistan
P22	Female	7	PhD	Political Science	Canada
P23	Female	9	PhD	Child Development	Iran
P24	Male	3	PhD	Interior Architecture	Japan

A total of 24 academic staff participated in the study, representing eight different countries. These are: Turkey, Sweden, Canada, Iran, Iran, Kenya, Pakistan, Pakistan, Afghanistan and Japan. 14 of the participants were women. In general, it can be stated that the academic units where the participants work show diversity.

Data Collection and Analysis

The data collection process was conducted in two phases to explore ChatGPT's role in higher education and its impact on research activities. In the initial phase, individuals who utilize the ChatGPT application and are employed across various academic departments were selected to ensure a broad perspective. During this phase, a form outlining the research objectives and content, confirming the use of artificial intelligence tools, and inquiring about their willingness to participate was distributed to 73 international academics from different university departments in Istanbul. Following this, 24 participants, who expressed interest by completing the form, confirmed their use of AI applications, and voluntarily agreed to take part in the study, leading to the commencement of the second phase.

In the second stage, data were collected from 24 participants using one-to-one interviews (FTF) and a semi-structured interview form was used in these interviews. One-on-one interviews are a social research method often used to analyse people's thoughts in detail and to obtain high quality data (Schober, 2018). Before the interviews, a detailed explanation of the research was given and the participants confirmed that they wanted to participate in the research. During the one-on-one interviews, participants were asked 3 open-ended questions focusing on their ChatGPT usage experiences. The face-to-face interviews were shaped around recent technological developments

and issues related to ChatGPT applications. It was observed that this situation attracted the participants' attention and their concentration was high. For qualitative data analysis, the participants were made aware that each sentence was of great importance for the research and permission for voice recording was requested. As some participants did not give permission for audio recording, their statements were quickly transferred to the semi-structured interview form. After all interviews and transcriptions were completed, the data were analyzed by the researcher.

To enhance the reliability of qualitative findings, the member checking method recommended by Merriam (2015) was rigorously applied. Through this process, participants were asked to provide feedback to ensure that their views were accurately represented in the data. Consistency between the researcher's interpretations and participants' intended meanings was carefully maintained to reinforce the credibility of the findings. For instance, during member checking, one participant clarified the context of a statement made during the interview, contributing to the coherence and depth of the dataset. To ensure transferability, detailed information was provided to readers regarding the sample selection process, the demographic and academic characteristics of participants, the contextual framework of the research, and direct quotations from the data (Sharts-Hopko, 2002). This approach facilitated readers' ability to relate the findings to similar contexts. For example, providing comprehensive participant profiles allowed readers to assess the applicability of the results to other settings with comparable characteristics.

Further, multiple strategies to enhance the trustworthiness of the study were adopted, as suggested by Gelesne (2011) and Merriam (2015), including prolonged engagement, participant validation, and peer debriefing. The researcher established long-term interactions with participants, fostering a trustworthy and open interview environment. Following the initial analysis, a focus group discussion with three participants was conducted to explore the findings in greater depth. This allowed for the validation of individual data within a group context and provided additional layers of insight.

To strengthen the integrity and impartiality of the qualitative data analysis, two independent experts volunteered to participate in the process. These experts reviewed the coded data and provided constructive feedback on the interpretation and categorization of themes. For example, one expert suggested reclassifying a specific theme under a broader category, which added a nuanced perspective to the findings. Finally, the results were refined based on feedback from both participants and experts, ensuring that the conclusions drawn were robust and reflective of multiple viewpoints. These comprehensive validation strategies significantly bolstered the study's reliability and validity.

Findings

The research findings were obtained by content analysis of the answers given to three open- ended questions posed to the participants. The analysis conducted in line with one of these questions, "What do you think about the potential opportunities offered by ChatGPT to academics?", led to the emergence of six themes. The frequencies of the themes presented in Table 2 represent the participant opinions and comments shaped around each theme.

Table 2. Opportunities Offered by the Use of ChatGPT in Academia

Themes	Theme description	Frequency
Text writing skills	*Helping academics to create fast and effective texts*	24
Time saving	*Saving time for academicians by accelerating the research process*	15
Inspiration	*Providing new ideas and enabling researchers/academics to look from different perspectives*	7
Language translation	*Multilingual support, enabling access to and translation of esources in different languages*	6
24/7 feedback opportunity	*Providing continuous feedback and digital partnership.*	3
Personalized response	*Providing personalized solutions based on user needs*	2

According to the data presented in Table 2, it is seen how academics evaluate the potential opportunities related to the integration of technologies such as artificial intelligence and ChatGPT into educational processes. Participants generally evaluated the potential opportunities offered by ChatGPT as follows: Increased text writing skills, reduced time spent on research, ease of language translation, providing inspiration and personalized responses. Some of the direct quotations related to these themes are as follows:

> *"For me, the ability to write texts is a fundamental challenge. Because researching is one thing, writing is another. AI tools like ChatGPT make this process easier."*
>
> *"...I received a very negative e-mail from the university administration. I was very demoralized. I thought that I would make a mistake if I responded with the emotional intensity of the moment. I immediately opened ChatGPT. I asked him to write a reply stating my feelings, the situation and the addressee. If he had been a friend who knew me well and was skilled in administrative relations, he would probably not have responded like that."*
>
> *"I have been working as an academician in the sociology department for 3 years. I had a disorganized way of lecturing my lessons. With ChatGPT, I saw that I started to make lessons with clear frames and high achievement."*

Another question posed to the participants within the scope of the research is "What do you think about the difficulties ChatGPT brings to academics?" The analysis conducted in line with this question led to the emergence of five themes. Table 3 shows the frequencies of the themes presented in Table 3 and the participant opinions shaped around each theme.

Table 3. Challenges of Using ChatGPT in Academia

Themes	Theme description	Frequency
Legitimizing plagiarism	*Texts produced by artificial intelligence systems such as ChatGPT normalize such behavior by increasing the risk of plagiarism.*	18
Source reliability problem	*Since the sources of the texts produced by ChatGPT are unclear, this makes it difficult to verify the sources in research.*	11
Digital addiction and	*Academics' over-reliance on ChatGPT, reducing original thinking*	*10*

Themes	Theme description	Frequency
productivity	*and productivity.*	
Lack of cultural and social context	*Demonstrate limitations in understanding cultural and social contexts, resulting in gaps in diversity and inclusion*	5
Discrimination and prejudice	*Artificial intelligence systems, such as ChatGPT, risk reflecting bias and discrimination by manipulating data sets*	3

Based on the data in Table 3, it is seen how academics evaluate the difficulties they face with the inclusion of technologies such as artificial intelligence and ChatGPT in educational processes. These challenges include legitimization of plagiarism, source reliability problem, technological dependency and productivity, lack of cultural and social context, discrimination and prejudice. Some of the direct quotations related to these themes are as follows:

> *"Regarding the use of artificial intelligence tools such as ChatGPT in education, I have some major concerns. Firstly, I think that such technologies may increase plagiarism tendencies. The easy generation of texts may reduce researchers' motivation to do original work and research and encourage plagiarism behaviors."*
>
> *"ChatGPT is an application released by a for-profit company. It definitely plans to make a financial gain from here. I do not think that it will make this financial gain only by being satisfied with the subscription fee. There is a risk of natural advertisements in the text. For example, the fact that he explained most of the questions I asked by linking them to global warming and climate issues gives me the impression that he is presenting a biased advertisement."*
>
> *"I teach a number of courses in the context of language translation. Students use artificial intelligence applications because it is easier for them. I agree that it is a facilitating process, but the popularity of mechanical translation ignoring diversity, culture and social contexts is becoming widespread. I am frankly worried about the colors turning into one color."*

The third question asked to academics was "How do you evaluate the future effects of artificial intelligence (AI) technology in higher education?" Five themes emerged in line with this question. These themes are given in Table 4 with their frequencies.

Table 4. The Effects of Artificial Intelligence (AI) Technology on the Future of Academia

Themes	Theme description	Frequency
Virtual University	*Artificial intelligence can increase online education opportunities by supporting the concept of virtual university.*	6
Interactive training materials	*Tools such as ChatGPT, interactive training may allow the creation of materials more effectively*	13
Research and analysis	*Artificial intelligence, research and analysis processes can contribute to scientific discoveries by accelerating them*	9
Overcoming language barriers	*AI translation tools can improve and facilitate access to education for international students by removing language barriers.*	5

Themes	Theme description	Frequency
Accessibility and inclusion	*Tools such as ChatGPT can increase user inclusiveness by making training materials more accessible*	3

In Table 4, academics evaluated the effects of artificial intelligence applications in the future of higher education under different themes. These themes are virtual university, interactive educational materials, research and analysis, overcoming language barriers, accessibility and inclusiveness. Some of the direct quotations related to these themes are as follows:

> *"By optimizing research and analysis processes, artificial intelligence can contribute to the acceleration of scientific discoveries and bring a new dimension to academic studies."*
>
> *"Artificial intelligence could pave the way for virtual universities in the future, offering students greater flexibility and accessibility in online education."*
>
> *"For 10 years, I have been an academician at this university. He can say that students' perceptions have changed very clearly with the digital age. For example, they understand very quickly and get bored. They see long listening as unnecessary. Therefore, AI tools such as ChatGPT can encourage engagement by making interactive learning materials more impressive and engaging."*

Discussion

Artificial intelligence-supported language models, especially advanced tools such as ChatGPT, have attracted great attention in the academic world by providing significant advantages in areas such as academic content creation, accessibility, collaboration, and evaluation. While these technologies have brought a new dimension to the production and sharing of academic research, they have also led to discussions of academic honesty, plagiarism, and ethical issues (Taktak el at., 2024). In this context, a study conducted on the ChatGPT usage preferences of 24 academics from 8 different countries has examined in detail the potential opportunities and challenges that this technology offers in the academic world. Studies show that ChatGPT helps academics get rid of routine work and save significant time. Studies such as Fırat (2023), Rudolph et al. (2023), and Sardana et al. (2023) reveal that artificial intelligence applications increase the opportunity to be more efficient in academic research processes, allowing academics to focus on more qualified studies. Similarly, studies by Sullivan et al. (2023) highlight that ChatGPT has the potential to improve student performance, retain information more effectively, and provide personalized learning opportunities. These findings provide a strong argument that strengthens the role of AI-powered tools in education and supports the concept of personalized learning.

Advances in artificial intelligence technologies, especially the development of language processing models such as ChatGPT, have significant impacts in academic environments. Such technologies have the potential to improve academic writing skills thanks to the high accuracy and speed they provide in understanding and producing human language (Malinka et al., 2023). Research findings emphasize that ChatGPT is used as an effective tool in academic writing processes and that faculty members discover different perspectives by using this technology efficiently. Similar results have been revealed in studies such as Aslanyan (2024) and Almogren et al. (2024). These studies show that faculty members see ChatGPT as a helpful tool to accelerate writing processes as well as

to evaluate and expand their students' work more deeply. Similarly, Yifan et al.'s (2023) study with university students revealed that ChatGPT is perceived by students as a friend and used as an inspiring source in creative processes. Students use ChatGPT not only as a tool for acquiring information, but also as an interactive tool that contributes to their intellectual development. Other studies conducted in academic circles emphasize the great time savings that ChatGPT provides with features such as language translation, academic text summarization, and personalized responses (Sun & Hoelscher, 2023). In fact, some faculty members in the study stated that they see ChatGPT as having a large number of experienced assistants and that it increases the efficiency of academic work. These findings reveal that ChatGPT can be an important support tool in the academic world and provides a valuable resource for both faculty members and students. However, the use of these technologies also raises academic integrity and ethical concerns, which indicates that the use of artificial intelligence should be handled more carefully and responsibly. Especially in higher education, there are increasing concerns that these technologies can undermine the integrity of assessment procedures, undermine students' academic integrity, and reduce the importance of traditional methods (Rudolph et al., 2023).

While large language models such as ChatGPT create new opportunities for both students and academics with the advantages they offer in education, the ethical issues and pedagogical effects brought about by these technologies are intensively discussed in the literature. The use of these tools in universities has led to significant discussions, especially on the reliability of assessment processes and academic honesty. Willems (2023) drew attention to the potential of artificial intelligence tools to threaten exam security and the complexity of ethical issues. Similarly, Halaweh (2023) and Abdelaliem, Dator, and Sankarapandian (2023) stated that artificial intelligence can increase digital addiction, cause concentration problems, and cause loss of productivity. Farrokhnia et al. (2023) emphasized the serious risks of artificial intelligence, such as the production of false information, prejudices, and privacy violations, while Fırat (2023) examined the negative effects of ChatGPT on students' learning motivation in higher education. In this context, the academics participating in the research drew particular attention to the weakening of productivity and changes in learning efficiency. Although there are studies in the literature indicating that artificial intelligence increases productivity (Firaina & Sulisworo, 2023), Kobiella et al. (2024) state that productivity and learning processes in higher education have evolved to a different dimension than the traditional understanding. This situation shows that artificial intelligence should be considered not only as a tool in educational processes, but also as an element that reshapes pedagogical paradigms. Developing comprehensive strategies, especially for solving ethical problems, is of critical importance for the beneficial integration of these technologies. Therefore, it is a necessity to carefully evaluate the pedagogical, ethical and social effects in the implementation of tools such as ChatGPT in universities and to use these technologies consciously.

The participants of the study made important predictions about the role of ChatGPT and similar artificial intelligence tools in the future of higher education, especially drawing attention to the proliferation of interactive educational materials and the increase in virtual university trends. The participants also emphasized the potential of artificial intelligence to transform research methods and analysis techniques, and stated that a radical change in academic processes is on the way. Similar predictions were reached in the study conducted by Neumann et al. (2023) on the future of higher education from the perspective of artificial intelligence, and it was stated that the effects of artificial intelligence in education will inevitably grow. In addition, Sankey et al. (2023) emphasized

that virtual learning environments have become as important as physical learning environments in parallel with the development of technological materials. The opportunities offered by artificial intelligence tools in terms of inclusiveness and accessibility, from overcoming language barriers to eliminating spatial restrictions, increase the likelihood that many innovations that seem like theoretical predictions today will come true in the near future. In this context, it is envisaged that artificial intelligence-supported educational tools will reshape the dynamics of higher education both pedagogically and technically and provide more flexible, accessible, multilingual and individualized learning opportunities.

The integration of artificial intelligence technologies into higher education has the potential to transform teaching processes, but it requires a comprehensive evaluation due to ethical, pedagogical, and practical challenges. These technologies, especially large language models such as ChatGPT, offer significant opportunities in terms of individualizing learning, providing materials suitable for different learning styles of students, and increasing academic productivity. However, the use of such tools also brings with it various risks such as digital addiction, production of misinformation, ethical violations, and artificialization of learning processes. The opinions of academicians evaluated within the scope of the research indicate that artificial intelligence will play a greater role in higher education in the future. Participants predicted that educational materials will become more interactive, research methods and analysis processes will transform, and virtual university models will become widespread. In line with the findings of Sankey et al. (2023), it was stated that virtual learning environments will gain equal importance to physical environments. However, the adoption of such technologies in higher education remains limited due to structural challenges encountered in research processes such as sample diversity. 73 academicians were invited to this study, but only 24 participated; This highlights the importance of broad participation in AI research. More research based on empirical methods is needed to understand the potential impacts of ChatGPT and other AI tools in a broader context. These methods will allow for a more objective assessment of the impacts of AI on pedagogical processes and will enable the development of more concrete proposals for the integration of these technologies into educational policies. As a result, the role of AI-enabled tools in higher education will be central to the reshaping of future educational policies and teaching strategies.

Limitations and Recommendations for Future Studies

This research investigates academics' perspectives on the possible application of ChatGPT in higher education, yet it is important to recognize several significant limitations. First, the study is based on open-ended interviews with twenty-four academics from eight different countries. To assess the effects of ChatGPT and artificial intelligence on higher education more comprehensively, it is recommended to employ quantitative and mixed-methods approaches with a larger participant pool from diverse countries. The integration of quantitative and mixed methods would enhance the objectivity of the data, thereby providing more robust findings. Therefore, future studies should use larger sample sizes and methodological diversity to increase the validity of research findings and ensure that the conclusions are based on a solid foundation.

Secondly, the main aim of this study was to identify academics' experiences of using ChatGPT. However, detailed studies focusing on the way administrative staff and students in universities use artificial intelligence tools may

provide more concrete results on the role of ChatGPT in higher education. Finally, the individuals who participated in this study experienced the use of existing AI tools (such as GPT-3.5 and GPT-4). It is foreseen that the advantages and challenges that future versions of ChatGPT will bring to higher education may be different. For this reason, it is suggested that researchers should follow the evolution of artificial intelligence technologies and examine these changes when new versions are introduced.

Finally, it is of great importance to establish strategic policies for the responsible and effective inclusion of AI tools in universities. These policies should include basic principles such as academic ethics, data security and privacy, and should be supported by awareness and training programs for academics, students and administrative staff. In addition, interdisciplinary collaboration and methodologically diverse research should be encouraged to understand the impact of AI on all stakeholders. Policies should be flexible and updatable to adapt to the rapid development of technology. This approach will maximize the opportunities of AI technologies in higher education while minimizing their risks.

Conclusion

This study, based on a comprehensive analysis involving 24 academics from eight different countries, provides a significant contribution to the literature by examining the role of ChatGPT in higher education and exploring the experiences of academics with this technology. Distinguishing itself from previous research, the study presents empirical evidence on both the positive and negative aspects of artificial intelligence usage, spanning research processes and learning activities in higher education. Furthermore, the analysis of academics' perspectives on the future implications of AI technologies in higher education adds a unique dimension to the study's significance. Unlike recent works by Sullivan et al. (2023) and Zeb et al. (2024), which primarily focus on the benefits of AI technologies, this study delves deeply into both the potential advantages and the pedagogical, ethical, and practical challenges associated with ChatGPT usage. The findings offer a critical and novel perspective on the classroom applications of AI tools, providing a robust foundation for future research in this domain. In this regard, the study not only highlights the opportunities afforded by AI-supported learning in higher education but also addresses its limitations, thereby contributing to a more responsible and effective integration of these technologies into educational practices.

Our research demonstrates that ChatGPT, when strategically utilized by academics in higher education, can significantly enhance educational processes. Particularly in the context of text generation, ChatGPT provides academics with unique opportunities for writing practice and serves as a cognitive partner by offering both analytical support and creative inspiration during the research process. Participants highlighted that the rapid feedback mechanism of ChatGPT, coupled with its availability as a personalized, 24/7, and highly experienced assistant, provides substantial time-saving advantages. Moreover, it was noted that ChatGPT is not only instrumental in language instruction but also effective in diversifying instructional strategies across various theoretical courses. This capacity allows educators to innovate in curriculum design and develop interactive teaching methodologies. By enabling faster content development and fostering creativity, ChatGPT emerges as a transformative tool for enhancing academic productivity. Consequently, its integration into higher education

presents immense potential for broader and more dynamic applications, solidifying its role as a valuable resource in modern academia.

However, our research has also revealed that the use of ChatGPT poses certain challenges for academics. These challenges include legitimization of plagiarism, source credibility issues of the information presented, the impact of technological dependency on productivity, lack of cultural and social context, and risks of discrimination and bias. Academics have emphasized that these limitations of AI should be considered not only at the individual level, but also at the institutional and ethical level. In light of these findings, it can be said that three main strategic approaches stand out in the integration of ChatGPT and similar AI tools into higher education: increasing ethical awareness, encouraging innovative practices in education, and developing digital literacy. Increasing ethical awareness requires setting standards, especially on plagiarism and information reliability, and disseminating these standards among faculty members and students. Innovative practices in education should aim to increase inclusiveness by using AI in virtual and interactive learning environments. Developing digital literacy will support academics and students to use AI tools consciously and responsibly, ensuring that they get the most out of these tools. In addition, the faculty members' predictions about the future of ChatGPT in higher education included the development of virtual university models, the proliferation of interactive educational materials, the effective use of artificial intelligence in research and analysis processes, and overcoming language barriers. These themes point to the potential of artificial intelligence to both increase quality in education and transform academic processes if it is integrated responsibly and carefully. As a result, our study provides a strategic roadmap for the effective integration of ChatGPT into pedagogical and academic processes in higher education. Being aware of ethical risks and developing comprehensive policies to eliminate them will enable AI to be adopted not only as a technology but also as a part of the transformation in education. In this context, conducting more comprehensive and interdisciplinary research on the effects of ChatGPT in higher education will contribute to the development of more in-depth understandings at both academic and societal levels.

Notes

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Ethics Statement: This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Approval for the research was obtained from the Istanbul Gelişim University Scientific Research and Publication Ethics Committee, on 24.06.2024, with the reference number E-68465814-302.08.01-128431.

Informed Consent: All participants provided informed consent after being fully informed about the research objectives, their rights, and the confidentiality of their data.

Data Availability: The data generated and analyzed during this study are available from the corresponding author upon reasonable request.

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Author Information

Mustafa Taktak

https://orcid.org/0000-0003-2784-1574

Istanbul Gelisim University

Türkiye

Contact e-mail: *mtaktak@gelisim.edu.tr*