https://llrjournal.com/index.php/11

The Perceptions of ChatGPT and Academic Integrity among Teachers: A Case Study of University Faculty in Pakistan





- \*1Dr. Abdur Rehman Butt
- <sup>2</sup>Adeel Ahmed
- <sup>3</sup>Dr. Muhammad Ahmad

<sup>1</sup>Lecturer, Department of Media and Communication, University of Management and Technology, Sialkot Campus. Corresponding Author Email: abdur.rehman@skt.umt.edu.pk

<sup>2</sup>PhD, Department of political science, University of Gujrat, Pakistan. <u>ahmedwarraich40@yahoo.com</u>

<sup>3</sup>Assistant Professor, Department of Management & Administrative Sciences, University of Narowal. m.ahmad@uon.edu.pk

### **Abstract**

The present study examines the use of ChatGPT and its impact on academic honesty by university teachers. It uses the Uses and Gratifications Theory to investigate the perspectives of teachers regarding the use of ChatGPT, its potential overreliance, and the effects it has on academic stability. Data were gathered by applying qualitative design methods in which semi-structured interviews with purposely chosen teachers of universities were conducted and analyzed thematically. The results show that educators view ChatGPT as an effective learning resource that helps to optimize work and facilitate the teaching and research processes. They however raise concerns regarding overdependence on AI by students, lack of critical thinking, and threats to originality and authenticity. Respondents note that not only is ethical training required, but also institutional policies are necessary to help guide the responsible use of AI. The paper concludes that ChatGPT can be used intelligently in the academic field-innovation with maintaining academic integrity and trust.

**Keywords**: ChatGPT, scholastic dishonesty, perception of educators, artificial intelligence, higher education.

### Introduction

Artificial intelligence (AI) is rapidly becoming a part of the higher education sector, which can provide many opportunities and completely reinvent the experiences of teaching and learning (Essien et al. 2020; Kuka et al. 2022). Scholars have been investigating how artificial intelligence (AIEd) can be created and used in education. It enhances the creation of adaptive learning environment and other AIEd-efficient tools through the integration of AI and the learning sciences (Luckin et al., 2016). The expectation of education revolution through the creation of adaptive learning systems that could make learning personalized has come true over the last few years due to rapid AI development. Generative Pre-trained Transformer (GPT) is a virtual assistant that was developed by AI to assist users in language learning and content generation. According to Ray (2023), Chat GPT has its roots in the Natural Language Processing (NLP) branch of Artificial Intelligence (AI) which seeks to allow machines to understand and produce human language. The improved version of GPT-3 model,

GPT-3.5, which was launched in 2020, was created to produce responses resembling those of a human. It assists in different duties that include translation, data analysis and text creation. It can help students and teachers: it can be used in writing practice and writing about the lesson. It is also common among journalists, researchers and writers.

Research and development of AI is essential to higher education. This involves investigating the effects of AI models on learning outcomes of students, creating bias detection and mitigation algorithms, integrating AI models with human expertise and discussing ethical frameworks of AI application in education. It is admitted already that AI can change the way we live our lives and the world around us more than any other technology ever did and does it both in a positive and negative way (Dignum, 2023). In order to comprehend this effect to the fullest extent, universities ought to measure the application of AI tools such as ChatGPT by teachers and students, measure the impact on academic performance, and obtain the overall views of the stakeholders in order to establish the implications of AI in academics on a broader scale.

Its rapid proliferation following its opening to the general population in November 2022 created new interest and the demand to learn more about AI. Soon after, individuals in every aspect of higher education started to ask the question concerning the possible impact of ChatGPT and other generative AI systems (McMurtie, 2023). The innovative technology that questions the existing approaches in the higher education process can often revive the process as well (Christensen & Eyring, 2011). The ChatGPT paradox, in this case, can transform education opportunities and kill the previously existing forms of teaching (Lim et al., 2023).

Academic reliability, a multi-dimensional construct encompassing accuracy of the information, credibility of the content, prevention of plagiarism, and consistency of academic output, is extremely important to integrity and effectiveness of academic institutions. Although the practice of the application of AI tools, such as ChatGPT, is becoming more common in the education sector, the literature remains quite deficient in terms of comprehending the impact of these tools on the academic integrity of practices by students and instructors. The generative capability of AI brings about the issues of fake references, excessive use, content imagining, and unreferenced use of

information (Garousi, 2024; Li et al., 2023).

ChatGPT has been reported to enhance efficiency in the design of instruction, with teachers stating that it is applicable in content development and curriculum modification (Montenegro-Rueda et al., 2023). This usage also raises the issue of dependency and the dwindling need of traditional pedagogical planning. The study also suggests that faculty training and clear institutional policies are required in order to ensure meaningful integration.

Although ChatGPT can potentially reduce the amount of work, there is a concern that it is going to impact the role of a teacher in some way. Some of the concerns include the fear of being replaced or perceived as being inferior to the automated tools, especially in content-rich fields (Montenegro-Rueda et al., 2023). According to one of the teachers, ChatGPT could be a helpful tool that teachers and educators use to remember what they should include in their curriculum by providing them with a outline. (Tlili et al., 2023). Megahed et al. (2023) prompted ChatGPT to design the syllabus of a statistics course in the undergraduate level and discovered that the teaching recommendations would not require significant modifications. Equally, Zhai (2023) found that ChatGPT could recommend different information to the special education, and concluded, "These recommendations are useful with students with special learning needs.

In research by Dorgbefu (2024), the participants of the survey expressed concerns regarding the proficiency, cohesiveness, coherence, precision, and accuracy of the information provided by ChatGPT and stated that the mentioned problems might undermine the authenticity of the information. The respondents also focused on the flaws in the educational process and stressed the necessity to offer students (including faculty) proper guidance and training and to demonstrate how it should be used and how it should be integrated into the classroom. Faculty and students may say that the tool is beneficial to generate ideas and brainstorming, but they also believe that simplicity might promote plagiarism and have a detrimental effect on people, especially on the students in terms of developing a critical thinking skill and writing skills. Other people, however, perceived ChatGPT as a convenient educational resource and called upon spreading awareness and understanding of it in the educational setting.

### **Research Objectives**

- 1. To investigate the perceptions of university teachers about the application of ChatGPT in education.
- 2. To evaluate the opinions of teachers regarding the excessive reliance on AI tools and its effects on academic activities.
- 3. To investigate the effect of ChatGPT on higher education academic reliability and integrity.
- 4. To determine the necessity to teach and raise awareness of using AI tools in an ethical manner among teachers and students.
- 5. To explore how the role of institutional policies can be used to inform the proper and ethical use of ChatGPT.
- 6. To determine how to strike a balance between the advantages and disadvantages of ChatGPT to have responsible academic practices.

### **Research Questions**

- 1: How do university teachers perceive the application of ChatGPT in educational contexts?
- 2: What are teachers' views on the excessive reliance on AI tools and its effects on academic activities?
- 3: In what ways does ChatGPT influence academic reliability and integrity in higher education?
- 4: What is the perceived need for teaching and raising awareness about the ethical use of AI tools among teachers and students?
- 5: How do institutional policies guide or influence the proper and ethical use of ChatGPT in academia?
- 6: What approaches can be adopted to balance the advantages and disadvantages of ChatGPT for promoting responsible academic practices?

### **Uses and Gratification Theory**

The uses and gratifications theory is one of the most valuable theories that researchers use to understand the media consumption (Malik et al., 2016). Despite the initial ideas on this point in the 1940s (Chen et al., 2023), the theory was developed in the late 1950s when researchers began studying the impact of mass media campaigns (Blumler, 1979). The influence of the mass media, according to the studies that were

carried out at the time would be similar among all the audiences of the mass media. However, theory considers viewers as dynamic as opposed to passive (Katz et al., 1973). Therefore, the uses and gratification are that the impact will be different to every individual. UGT has come in handy since the emergence of new media in determining why individuals utilize it. It is an indication that individuals utilize the media in diverse ways. Since the rise of internet, the uses and gratifications theory has been applied even on the internet based technologies (Papacharissi & Rubin, 2000).

Blumler and Katz (1974). According to the uses and gratification theory, consumers of the media actively selected and consumed media. Users also take an active part in the communication and utilize media in order to achieve specific goals. According to the theorists, a media consumer searches the media source that effectively meets his or her needs. The uses and gratifications assume that the user has other sources of getting what he or she needs.

The reasons behind using media by the audiences have been studied over 60 years using the uses and gratifications tradition (Rubin, 1981). To find out the influence of media on us, we need to find out why we use it in the first place and watch certain kinds of content. The theory claims people are self-conscious and can defend their use of the media. According to (Katz, Blumler & Gurevitch, 1973), our media preferences are dependent on our wants. According to, (McQuail, Blumler, and Brown, 1972), these needs might be categorized into four types namely surveillance (information that assist an individual to do something) personal relationships (companionship through the media) diversion (respite of everyday problems) and personal identity (affirmation of values). Denis McQuail (2010, p. 427) has enumerated the following 16 benefits that can be achieved through media to users and audiences: knowledge, guidance, direction, advice, distraction, relaxation, social interaction, value reinforcement, cultural fulfillment, emotional release, identity formation, identity confirmation, lifestyle expression, security, sexual arousal and time filling.

According to (McQuail,2010), studies in the field are increasing and the uses and gratifications paradigm is best suited in the new media studies especially in the aspects of definition and comparison. To describe how individuals utilize the social media, these studies result in the introduction of additional gratifications. A new type

of satisfaction is virtual communities, which were proposed to explain the compatibility with people who are being contacted through the Internet (Song, LaRose, Eastin, and Lin, 2004). There have also been changes in the significance of certain gratifications due to the use of the social media. As an example, a number of individuals utilize the social networking sites to maintain relations yet most individuals watch TV to gain knowledge or fulfill their entertainment ambitions (Sheldon, 2008).

Uses and Gratification theory which was initially suggested by (Katz, Blumler, and Gurevitch, 1973) is the view that users are active agents whose selection of technologies such as ChatGPT depends on their perceptions of gratifications including information seeking, problem solving or efficiency. Both students and teachers can also engage with ChatGPT in the context of this study to address an academic need that can be writing support and content creation, explanations of challenging concepts, or even more efficient work process. These gratifications are directly connected to the four main dimensions of academic reliability studied in this paper, which include the first four dimensions of reliability that are accuracy, reliability, plagiarism, and credibility. Additionally, as noted by McQuail (2010), the use of the media is often driven by the need to gain knowledge and develop identity and socialize, and all these can be witnessed during the use of AI tools in educational institutions. The benefits are also likely to affect the behaviour of people when they view ChatGPT as beneficial to their academic performance or in support of learning processes. Consequently, U&G offers a powerful theoretical foundation upon which the research on stakeholder engagement with ChatGPT can be conducted to determine the manner and motives of such interaction along with the impact that it has on the perception of stakeholders towards academic integrity and production.

Although there are many possible designs and methodologies of research that can be utilized in an inquiry, the researcher is expected to select a systematic structure of every project.

### **Research Methodology**

In this work, the qualitative research design was used based on semi-structured interviews to examine the views of university teachers about ChatGPT and its effects on academic reliability. The qualitative methodology was selected since it provides an

opportunity to gain a profound insight into the perceptions, experience, and issues of the participants, especially when the research aims at investigating new phenomena like the introduction of AI tools in academia (Creswell & Poth, 2018). Semi-structured interview is a qualitative form of data collection, a combination of both the structured and unstructured approach to interview. It consists of preset questions or themes that serve as a guide to the talk and leave a certain degree of freedom to the interviewer to ask questions, clarify, or bring up new ideas in the dialogue (Kallio et al., 2016). The approach allows the researcher to collect detailed information about the perceptions and experiences and attitudes of the participants, which is why it is especially appropriate to conduct studies on complicated social or academic phenomena, including the perceptions of teachers towards AI tools like ChatGPT. The semi-structured approach (as opposed to the structured one) allows a two-way communication, allowing the participants to elaborate on their opinion without losing focus of the research (Adams, 2015).

### **Participants**

The respondents of the research are the university teachers who are selected in various departments within the institutions of higher learning. Purposive sampling was used to select the participants who needed to have at least some familiarity with ChatGPT and how it is used in an academic context. This criterion made the participants able to offer pertinent information about the possible advantages and issues of ChatGPT in higher education (Etikan, Musa, and Alkassim, 2016).

### **Data Collection**

The data is obtained via the semi-structured interviews with the help of the interview schedule, based on the objectives of the research. The questions were structured in such a way that they covered such hot topics as the usefulness of ChatGPT in academic activities, its effects on the learning and originality of students, the worries about academic reliability, and the necessity of institutional policies. As an example, teachers were questioned: 1) as to whether, in their opinion, ChatGPT influences the learning processes or not among students; and 2) whether or not the use of ChatGPT undermines academic reliability or integrity.

The semi-structured interviews, which were flexible, allowed the researcher to inquire more of the teachers as a way of seeking more insights on the use of ChatGPT,

### Liberal Journal of Language & Literature Review Print ISSN: 3006-5887

Online ISSN: 3006-5895

overdependence, academic reliability, ethical issues, institutional policies and balancing the benefits and risks. The interviews were carried out face-to-face and online (lasting around 30-45 minutes) and each was based on the availability of the participants. The interviews were recorded with the consent of the participants and transcribed to be analyzed later.

### **Data Analysis**

Thematic analysis was used to analyze the data based on the six-phase model of Braun and Clarke (2006). The data were familiarized with the researcher by reading the transcripts severally. The meaningful units of information that were captured using codes were grouped into larger themes. The themes were aligned with the key issues that were revealed in the answers of teachers, such as:

- 1. Use of ChatGPT
- 2. Overdependence on AI
- 3. Influence on Academic Reliability.
- 4. Need for Ethical Training
- 5. Institutional Policies
- 6. Weighing Costs and Dangers.

The thematic analysis was necessary to make sure that the voices of the teachers are represented as well as offer a systematic way of interpretation.

### **Ethical Considerations**

Data collection was preceded by ethical approval of the concerned university review board. The research participants were informed of the study objective, and the confidentiality and anonymity of the answers were guaranteed to them. The involvement was voluntary and the participant could opt out of the research at any point.

### **Interpretation of Themes**

### 1. Use of ChatGPT

The reactions show that educators note that ChatGPT is a useful academic aid tool. It is mostly seen as a way of saving time, which eases the workload like summarising research papers and coming up with fresh ideas to be used in assignments and classroom discussions. Educators find it useful as it gives guidance and it gives various ways of looking at a subject. This is indicative of faculty receptivity to

implement AI in academic activities, provided that it does not lead to a lack of efficiency in academic purposes.

### 2. Overdependence on AI

One of the issues that teachers are strongly worried about is how students increasingly rely on ChatGPT. Educators observed that although students may end up with refined work with the assistance of AI it may often come at the expense of their critical thinking and creativity. The issue brings up what is perceived to be a loss of originality and independent problem-solving. This is supposed to imply that although ChatGPT can be used to get students to be more productive academically, it can also lead to the deterioration of intellectual development of students when overused.

### 3. Effects on Academic Reliability

Academic reliability and integrity were constantly presented by teachers as being under threat because of misusing ChatGPT. They pointed out that the work of AI created is not original and does not require individual academic contribution. Others have termed the risk as diluting originality and authenticity of scholarship. This interpretation reveals that ChatGPT disputes the classical principles of academic reliability, and institutes will need to discover methods of preservations of the integrity of academic work in the era of AI.

### 4. Need for Ethical Training

The results are highly indicative of the fact that educators are of the opinion that the students should be educated on the ethical application of AI in an organized manner. Unless instructed correctly, students can abuse ChatGPT, which causes the problem of plagiarism and academic dishonesty. Teachers contended that misuse could be reduced through awareness programs and structured workshops to make the students realize the boundaries and the responsibilities of using AI. This theme emphasizes the need to take initiative in academic interventions in order to make sure ChatGPT is applied responsibly.

### 5. Institutional Policies

The other theme that has re-emerged is the demand to have clear institutional policies on the use of AI in academia. The teachers claimed that the policies must establish the levels of AI that are permissible in course works, give directions on originality, and use detector devices to check the overuse of AI. These answers show that without

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

well-defined responses, students and teachers will be confused regarding the degree to

which they can use ChatGPT. Therefore, strategic plans at the institutional level are

considered critical to ensuring academic practices are fair, consistent and reliable.

6. Weighing of Benefits and Risk.

Lastly, educators pointed out the necessity to weigh the positive sides of ChatGPT and

its possible dangers. They did not propose the tool to be banned but proposed a

mindful and controlled introduction. To exemplify, they advised universities to raise

awareness, add filters, and track usage to ensure that ChatGPT is used in a productive

way that does not harm the values of academia.

Theme 1: ChatGPT in Scholarly Writing

Educators admitted that ChatGPT has become one of the tools that have gained

widespread usage in the academic field. Most of them reported on their use or their

observability of its use by students. They emphasized its value in brainstorming ideas,

summary and workload reduction.

Sample Responses:

•I chat-bot (ChatGPT) to get alternative directions of an area.

•It assists in the summarization of research papers.

•It provides ideas in order to perform particular academic activities.

Interpretation:

ChatGPT is viewed as an academic support that saves time and offers help in research

and teaching-related issues.

Theme 2: Over Sensitization and Fall in Critical Thinking

Although educators saw some positive outcomes in the application of ChatGPT, they

were worried about the overuse of this tool by students. Educators were sure that

students tend to replace their thoughts with the results of AI.

Sample Responses:

It saves time but it also results in overdependence of students.

•It deems down their own thinking.

Interpretation:

It is considered that the excessive use of ChatGPT is a hindrance to thinking

independently and creating something new. This brings the question of the impact on

the academic development of students in the long run.

307

### Liberal Journal of Language & Literature Review Print ISSN: 3006-5887

Online ISSN: 3006-5895

### Theme 3: Academic Reliability and Integrity

Teachers have always emphasized that ChatGPT threatens academic reliability. They claimed that innovation and true scholarly work is threatened when the students are very excessive in the use of AI-generated materials.

Sample Responses:

•It undermines originality and creativity and lowers the efforts in academics.

Yes, since people are fully reliant on ChatGPT.

•It burns the brain, the students are not thinking anymore.

Interpretation:

Teachers are viewed to be endangering academic integrity and linking ChatGPT to plagiarism, non-authenticity, and a lower degree of academic value.

Theme 4: The issue of Ethics and the necessity of Training.

Teachers were a concern on ethical issues. They thought that learners should be trained on the responsible use of ChatGPT.

Sample Responses:

- •The students should be trained to use it ethically.
- •Introduction of awareness programs should be made.

Interpretation:

Educators proposed official education and awareness sessions to avoid the misuse of ChatGPT. Ethical principles were perceived as necessary in making AI adoption in academics responsible.

### Theme 5: Policies and Regulation in the Institution

The teachers were very much favoring the formulation of institutional policies to control the usage of ChatGPT. They insisted on the need to balance the advantages and the protection.

Sample Responses:

Filtering Detection tools should be utilised by institutions.

- •The assignments must not be fully AI written.
- •Ensure that the projects are not AI written.

Interpretation:

It is believed that clear rules are required to sustain the academic reliability and at the same time permit the constructive utilization of AI tools.

Theme 6: Choosing between Benefits and Risk

Teachers admitted the possibilities of ChatGPT, yet demanded some limits in its application in education. They supported the policies, according to which it is possible

to use the tool in the positive way and reduce the dangers to originality and integrity.

Sample Responses:

•Bring awareness on responsible use.

•Introduce filters and monitoring mechanisms.

Interpretation:

The results show that there is an agreement between teachers that ChatGPT cannot be prohibited or unregulated. Rather, innovation and integrity should be struck as the principle.

**Discussion** 

The results of this research are very useful in understanding the perceptions of teachers towards ChatGPT and how it affects the reliability of academic performance. The answers underline two sides of the coin: the teachers admit that ChatGPT is quite helpful as an academic tool, but there is a great concern about the impact of this tool on the learning process, originality, and academic integrity of the students in the long-term perspective.

To begin with, educators had always acknowledged the increased efficacy of ChatGPT in the scholarly assignments. It not only offers guidance and saves time but also helps a teacher and students to create ideas, summarize information and make the complex academic procedures simple. This can be seen as a positive attitude towards AI as a tool that can enhance productivity and academic interaction.

Nevertheless, in addition to these advantages, educators were also raised with serious concerns about overdependence. They noted that a big number of students are inclined to replace their own creativity and critical thinking with AI generated material. This dependency was observed to undermine the old research capabilities, critical thinking, and innovation which is the basis of higher education. One of the main problems that were found was that ChatGPT is a threat to academic reliability and integrity. Instructors underlined that AI-generated material is not always original and authentic, which devalues academic work. They also noted that ChatGPT promotes plagiarizing and decreases individual academic endeavor, which undermines

the validity of academic performance, when abused.

In order to solve these problems, teachers ensured that ethical training and institutional policies were highly promoted. They thought that students should be officially educated on how to use ChatGPT responsibly, and universities take an active part in the campaign of awareness, workshops, and skill-building. In addition, they suggested the implementation of transparent policies and oversight systems to control the use of ChatGPT. These policies ought to establish the extent of acceptable AI integration, originality, and lead students and the faculty towards academic standards.

Altogether, the research concludes that ChatGPT cannot be considered a harmful or a beneficial tool per se. Rather, it is a two edged technology whose usefulness is determined by its intended use. The educators pointed to the necessity of a balance between advantages and precautions: to implement ChatGPT as a part of the academic field to facilitate efficiency and innovation, and also to ensure that the principles of originality, ethics, and academic integrity are not violated. This conclusion shows the significance of adopting AI in education responsibly. It urges teachers, students, and institutions to conduct a collective effort to create a framework that could utilize the potential of ChatGPT and still not undermine the fundamental attributes of higher education.

### Conclusion

The research question on the study was to examine how teachers saw ChatGPT and its impact on academic reliability. The results are quite fair and rather careful: educators admit that ChatGPT can be an effective academic resource, which can make the work more productive, capable of generating more ideas and being more efficient, but there is also a risk of losing academic honesty, originality and critical thinking.

Some of the key points were identified by the teachers:

ChatGPT can be used in academic work by saving time and making it easier.

- •The overreliance on AI can be perceived as an obstacle to the ability to think independently and conduct research.
- •The academic reliability is also seen to be threatened when students use chatGPT too much without exerting their intellectual work.
- .Sensitization and ethical training are immediately required to inform students of the

responsible usage of AI.

Individual institutional policies should be made to govern the application of ChatGPT in academia.

•There should be a compromise concerning the utilization of the advantages of AI and the preservation of the values of academia.

The concluding remarks are , ChatGPT itself is not harmful to academia, but its effects determine the success of its implementation. Teachers have insured that universities do not simply prohibit AI tools but should not also allow their unrestrained use. They ought instead to encourage ethical integration which maintains originality and reliability and also adopt innovation.

### References

- Adams, W. C. (2015). Conducting semi-structured interviews. *Handbook of Practical Program Evaluation*, 492–505.
- Alabrak, M. M. A., Megahed, M., Alkhouly, A. A., Mohammed, A., Elfandy, H., Tahoun, N., & Ismail, H. A. R. (2023). Artificial intelligence role in subclassifying cytology of thyroid follicular neoplasm. *Asian Pacific Journal of Cancer Prevention: APJCP*, 24(4), 1379.
- Blumler, J. G. (1979). The role of theory in uses and gratifications studies. *Communication Research*, 6(1), 9–36.
- Blumler, J. G., & Katz, E. (1974). *The uses of mass communications: Current perspectives on gratifications research.* Sage Annual Reviews of Communication Research (Vol. III).
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Chen, C., Lee, S., & Sundar, S. S. (2023). Interpassivity instead of interactivity? The uses and gratifications of automated features. *Behaviour & Information Technology*, 1–19. <a href="https://doi.org/10.1080/0144929X.2023.2184174">https://doi.org/10.1080/0144929X.2023.2184174</a>
- Christensen, C. M., & Eyring, H. J. (2011). *The innovative university: Changing the DNA of higher education from the inside out.* John Wiley & Sons.
- Dignum, V. (2023). Responsible artificial intelligence: Recommendations and lessons learned. In D. O. Eke, K. Wakunuma, & S. Akintoye (Eds.), *Responsible AI in Africa* (pp. [pages missing]). Palgrave Macmillan. <a href="https://doi.org/10.1007/978-3-">https://doi.org/10.1007/978-3-</a>

### 031-08215-3 9

- Dorgbefu, E. A. (2024). *Investigating teacher and student perceptions of the impact of ChatGPT in the classroom* (Master's thesis, Northern Illinois University).
- Essien, A., Chukwukelu, G., & Essien, V. (2020). Opportunities and challenges of adopting artificial intelligence for learning and teaching in higher education (pp. 67–78). <a href="https://doi.org/10.4018/978-1-7998-4846-2.ch005">https://doi.org/10.4018/978-1-7998-4846-2.ch005</a>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Garousi, V. (2024). How reliable are large language models like ChatGPT in generating technical content? A systematic mapping study. *arXiv*. <a href="https://arxiv.org/abs/2504.18858">https://arxiv.org/abs/2504.18858</a>
- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37(4), 509–523. https://doi.org/10.1086/268109
- Kuka, L., Hörmann, C., & Sabitzer, B. (2022). Teaching and learning with AI in higher education: A scoping review. Springer Science Business Media Deutschland GmbH, 456, 551–571. <a href="https://doi.org/10.1007/978-3-031-04286-726">https://doi.org/10.1007/978-3-031-04286-726</a>
- Li, X., Ding, L., Tlili, A., & Yang, Y. (2023). Ethical challenges of ChatGPT in education: A scoping review. *arXiv*. <a href="https://arxiv.org/abs/2311.14378">https://arxiv.org/abs/2311.14378</a>
- Lim, W., Gunasekara, A., Pallant, J. L., Pallant, J. I., & Pechenkina, E. (2023). Generative AI and the future education: Ragnarök or reformation? A paradoxical perspective from management educators. *International Journal of Management Education*, 21(2). <a href="https://doi.org/10.1016/j.ijme.2023.100790">https://doi.org/10.1016/j.ijme.2023.100790</a>
- Luckin, R., & Holmes, W. (2016). *Intelligence unleashed: An argument for AI in education*.
- Malik, A., Dhir, A., & Nieminen, M. (2016). Use and gratifications of digital photo sharing on Facebook. *Telematics and Informatics*, 33(1), 129–138. <a href="https://doi.org/10.1016/j.tele.2015.06.009">https://doi.org/10.1016/j.tele.2015.06.009</a>

- McCormack, M. (2023). EDUCAUSE QuickPoll: Adopting and adapting to generative AI in higher education technology. *EDUCAUSE*. <a href="https://er.educause.edu/articles/2023/2/educause-quickpoll-results-did-chatgpt-write-this-report">https://er.educause.edu/articles/2023/2/educause-quickpoll-results-did-chatgpt-write-this-report</a>
- McQuail, D. (2010). The future of communication studies: A contribution to the debate. *Media and Communication Studies: Interventions and Intersections*, 27.
- Montenegro-Rueda, M., Fernández-Cerero, J., Fernández-Batanero, J. M., & López-Meneses, E. (2023). Impact of the implementation of ChatGPT in education: A systematic review. *Computers*, 12(8), 153. <a href="https://doi.org/10.3390/computers12080153">https://doi.org/10.3390/computers12080153</a>
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet use. *Journal of Broadcasting & Electronic Media*, 175–196.
- Rubin, A. M. (1981). An examination of television viewing motivations. Communication Research, 8(2), 141–165.
- Sheldon, P. (2008). The relationship between unwillingness-to-communicate and students' Facebook use. *Journal of Media Psychology*, 20(2), 67–75.
- Song, I., Larose, R., Eastin, M. S., & Lin, C. A. (2004). Internet gratifications and Internet addiction: On the uses and abuses of new media. *CyberPsychology & Behavior*, 7(4), 384–394.
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, 10(1), 15.
- Zhai, X. (2023). ChatGPT and AI: The game changer for education. In X. Zhai (Ed.), *ChatGPT: Reforming education on five aspects* (pp. 16–17). *Shanghai Education*.