

Morality in Higher Education's AI Integration: Examining Ethical Stances on Implementation

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Abstract:

The research focuses on transparency and education related to artificial intelligence (AI) in higher education, as well as how these two factors affect the acceptance of technology by students and academic staff. The main objective of this study is to explore users' views and attitudes towards the use of AI, with a special emphasis on ethical and practical aspects. This study uses a mixed approach, combining quantitative surveys and qualitative interviews conducted at Superior University, Lahore, Pakistan. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative data were analyzed by thematic methods. The results of the study showed that 75.2% of respondents supported education and transparency related to AI. A total of 54.7% of respondents expressed concern that AI could threaten academic integrity if it is not used transparently and fairly. However, 45.3% of respondents see AI as an effective tool to detect plagiarism and improve academic supervision. The implications of this study underscore the importance of comprehensive education and transparency policies to ensure the ethical and effective use of AI in higher education. This research provides an empirical foundation for the development of policies that can increase trust and acceptance of AI in academic contexts.

Key Words: Artificial Intelligence, Academic Integrity, Transparency

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INTRODUCTION

The use of artificial intelligence in higher education is no longer just a technological innovation, but a revolution that fundamentally changes the way we educate and learn (Guan et al., 2020; Geczy et al., 2020; Xia et al., 2022). The use of artificial intelligence in higher education has become an interesting and relevant topic to research. With the rapid development of technology, AI has begun to be applied in various aspects of life, including education (Chen et al., 2020; Crompton & Burke, 2023; Kuleto et al., 2021). AI has great potential to transform the way education is delivered and evaluated, by providing more advanced tools for adaptive learning, data analysis, and automated evaluation (Bates et al., 2020; Kabudi et al., 2021). The fact that artificial intelligence can help detect plagiarism, provide quick feedback, and tailor learning materials

according to individual needs makes this topic very interesting to research academically (Abd-Elaal et al., 2022; Khosravi et al., 2022).

The presence of artificial intelligence in improving the efficiency and effectiveness of education, there are significant concerns about its impact on academic integrity, assessment fairness, and data privacy (Wang, 2021; Zouhaier, 2023; Fidas et al., 2023). As the adoption of AI in higher education institutions increases, it is important to discuss and evaluate the ethical and practical aspects of this technology (Chatterjee & Bhattacharjee, 2020; Kuleto et al., 2021; Bucea-Manea-Țoniș et al., 2022). The acceptance of new technology by users is greatly influenced by their perception of the usefulness and ease of use of the technology. Therefore, transparency in the use of AI and technology-related education is essential to ensure positive and ethical acceptance (Caffaro et al., 2020).

The main issue in this study is how the use of AI in higher education can affect the academic integrity and acceptance of this technology by students and academic staff. While AI has the potential to improve efficiency in fraud assessment and detection, there are concerns that AI could reduce confidence in evaluation results if not used transparently and fairly. Additionally, a lack of understanding of how AI works and the algorithms used can create discomfort and distrust among users.

This concern is reinforced by the fact that 54.7% of respondents in the study stated that the use of AI could threaten academic integrity. Respondents revealed that AI may not always consider the context and nuances in each given task or exam, and there is a risk of bias if the algorithms used are not transparent or unfair. Therefore, this study aims to explore the views and attitudes of students and academic staff towards the use of AI in higher education and how AI-related transparency and education can affect the acceptance of this technology.

Research and scientific papers related to this phenomenon are often scrutinized. Where he said was a study conducted by García-Peñalvo et al. (2020) in their research found that transparency in the use of AI in education can increase user trust and engagement. The study emphasizes that a deep understanding of how AI works, including the algorithms used, is essential to ensure the ethical and effective use of the technology. Research from Hooda et al. (2022) states that the use of AI in academic evaluation is widely acceptable if the algorithms used are transparent and trustworthy. The research shows that with adequate education regarding how AI works and its ethical aspects, user concerns can be minimized, and acceptance of the technology can be improved. This is also reinforced by research conducted by Duo et al. (2023) showing that comprehensive education on AI helps users adapt quickly to technological innovations, ensuring that AI is used to improve the quality of education. This research supports the importance of AI-related training and education to maximize the benefits of this technology in an academic setting.

Although much research has been conducted on the acceptance of AI and the importance of transparency, there are still gaps in the literature examining the specific impact of AI transparency and education on the acceptance of these technologies in the context of higher education in developing countries. Previous research has mostly focused on the context of developed countries with more developed technological infrastructure. Therefore, this study seeks to fill this gap by exploring the views and attitudes of users towards AI at Superior University, Lahore, Pakistan.

The research offers novelty with a focus on the importance of AI-related transparency and education in increasing the acceptance of these technologies in higher education in developing countries. By combining quantitative and qualitative approaches, this research provides a more comprehensive insight into how users' views and attitudes are affected by AI transparency and education. This novelty lies in an in-depth exploration of how the implementation of clear policies and comprehensive training can help address concerns related to academic integrity and improve the quality of education through the use of AI.

This research aims to explore the views and attitudes of students and academic staff towards the use of AI in higher education, with a focus on the transparency and education aspects related to this technology. This research will identify the factors influencing the adoption of AI and develop policy recommendations that can increase trust and acceptance of this technology. By understanding user perceptions, this research hopes to provide an empirical foundation for the development of better policies regarding the use of AI in higher education, ensuring that these technologies are used ethically and effectively to improve the quality of education at Superior University, Lahore, Pakistan.

RESEARCH METHODS

This study uses a mixed approach that combines quantitative and qualitative methods to provide a comprehensive understanding of the use of artificial intelligence (AI) in higher education. This approach allows researchers to systematically measure respondents' perceptions through surveys as well as delve into their views and experiences through in-depth interviews (Salas-Pilco & Yang, 2022). The data was collected at Superior University, Lahore, Pakistan, with a full address at 17 KM Raiwind Road, Pakistan. Data collection was carried out from January to March 2023.

The data collection techniques used include surveys, questionnaires, and in-depth interviews (Jain, 2021). The questionnaire was prepared with closed-ended questions using the Likert scale to measure the level of respondents' agreement with various statements related to the use of AI. Survey respondents were selected using purposive sampling techniques, ensuring that they have knowledge and experience relevant to the research topic. In addition, in-depth interviews were conducted with a number of selected respondents to delve

deeper into their views on the ethical and practical aspects of the use of AI in education. These interviews help enrich quantitative data with more in-depth qualitative information.

The data collected was analyzed using quantitative and qualitative data analysis techniques (Alam, 2021). Descriptive and inferential statistical analysis was used to process quantitative data from questionnaires, to test significant differences between groups of respondents based on demographic variables. Regression analysis was used to evaluate the influence of independent variables on respondents' perception of AI. Qualitative data from the interviews were analyzed using thematic analysis methods, identifying the main themes and patterns that emerged from the interview transcripts. The results of data analysis are presented in the form of tables, charts, and thematic narratives to facilitate the interpretation and understanding of research findings.

RESULTS AND DISCUSSION

This study uses a mixed method that combines ethical literature analysis and quantitative surveys to explore the views and attitudes of stakeholders in higher education regarding the use of artificial intelligence (AI). The results of this study show a complex relationship between the use of AI, academic integrity, and professional development in the context of higher education.

Integration of AI in Higher Education

The study found that the majority of respondents (75.2%) supported information transparency regarding the use of AI in education. This shows a significant awareness of the importance of openness in the application of this new technology. "We need to know how AI is used in the teaching and learning process, so that we can understand the benefits and risks. It is important for us to know how AI works in academic evaluation, so that we can assess the accuracy and fairness of its assessment. Without clear information, we may feel uncomfortable or distrustful of the results provided by the AI system. In addition, a deep understanding of the use of AI will also help us in adapting to this new technology. Transparency in the use of AI can increase trust and ensure that all parties understand the purpose and mechanisms used (I_TU_2023)."

"I'm not sure about the accuracy of the judgments generated by AI, because this technology may not be able to capture the nuances of my work. AI often doesn't pay attention to the small details that matter in my work. Additionally, I feel that AI may not have the contextual understanding necessary to thoroughly evaluate tasks. I am concerned that the judgments given by AI could be biased or unfair, especially if there is no transparency about the algorithms used. Therefore, I feel more comfortable if the assessment is done by a human who can understand the context and nuances of my (I_HMS_2023) work."

The results of the interviews show a clear pattern regarding users' concerns and expectations regarding the use of artificial intelligence (AI) in the teaching and learning process and academic evaluation. The majority of respondents emphasized the importance of transparency in the use of AI to understand its benefits and risks. They feel that a clear knowledge of how AI works in academic evaluation is essential for assessing the accuracy and fairness of the assessments generated by these systems. The patterns that emerge from the data show that without enough information, users are likely to feel uncomfortable or distrust the results provided by AI. Additionally, there are concerns that AIs may not be able to capture the nuances and important details of their work, as well as the lack of contextual understanding necessary for thorough evaluation. Users feel that the judgment made by AI can be biased or unfair, especially if the algorithm used is not transparent. Therefore, they prefer judgments made by humans who can understand the context and nuances of their work. This pattern underscores the importance of transparency and education about AI to increase trust and ensure that these technologies are used ethically and effectively in academic settings. These results demonstrate the need for clear and open policies regarding the use of AI in higher education to address concerns and improve technology adaptation by users.

Table 1. Respondents' Views on Transparency and Assessment by AI

Topic	Percentage (%)
Transparency of the use of AI in education	75.2
Readiness to receive academic assessments by AI	25.3
Doubts about the accuracy of AI assessments	74.7

Respondents emphasized the importance of transparency in the use of artificial intelligence (AI) in education to understand its benefits and risks. They highlight the need to know how AI works in academic evaluation to ensure accuracy and fairness of assessments. Without clear information, there is discomfort and distrust of the results of AI. Respondents are concerned that AI cannot capture important nuances and details, as well as a lack of contextual understanding needed for thorough evaluation. They are more comfortable if the assessment is carried out by humans because it is feared that AI can provide biased or unfair judgments. Transparency in the use of AI is considered essential to build trust and better understanding.

The results of this study show that the majority of respondents (75.2%) support information transparency regarding the use of AI in education, reflecting a significant awareness of the importance of openness in the application of this new technology. These findings are in line with a study by García-Peñalvo et al. (2020) which emphasized that transparency in AI can increase user trust. However, only 25.3% of respondents were ready to accept academic assessments by AI, in contrast to the findings of Hooda et al. (2022) which showed wider

acceptance if the algorithm was transparent. Respondents felt that AI was unable to capture important nuances and details in their work, in line with the findings of González and Martínez (2020) which pointed to potential bias and injustice in AI assessments. This concern is also supported by Duo et al. (2023) who suggest that reliance on AI can reduce critical and creative thinking abilities. Therefore, this study underscores the importance of transparency and education about AI to increase trust and ethical use in education, as well as the need for clear and open policies regarding the use of AI in higher education.

The Impact of AI on Critical Thinking Skills

This research also found that there are various views regarding the impact of AI on students' critical thinking skills. A total of 48% of respondents admitted that AI can help improve critical thinking skills, with 4.2% expressing strongly agreement and 43.8% agreeing. One of the respondents stated, "AI helps me understand complex concepts by providing structured explanations. The explanations provided by the AI are often more detailed and presented in an easy-to-understand way, so I can master difficult material faster. In addition, the AI also provides relevant practical examples, which helps me see the real applications of the concepts. With AI, I feel more helpful in exploring topics that previously felt very complicated. This is especially useful when I'm dealing with new material that requires a short period of time (I_R_2023)."

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The results of the interviews showed that respondents felt significant benefits from the use of AI in understanding complex concepts. They stated that the explanations provided by AI are often more detailed and presented in an easy-to-understand manner, speeding up the process of mastering difficult material. Respondents also appreciated AI's ability to provide relevant practical examples, which helped them see real-world applications of these concepts. With AI, they feel more helped in exploring topics that previously felt complicated. This is especially useful when they are dealing with new material that requires a deep understanding in a short period of time.

Table 2. Respondents' Views on the Impact of AI on Critical Thinking Skills

Topic	Percentage (%)
AI helps improve critical thinking skills	48.0
Strongly agree AI helps with critical thinking	4.2
Agree AI helps with critical thinking	43.8
Disagree AI reduces independent thinking	20.0
Strongly disagree AI reduces independent thinking	5.7

The Table 2 shows that nearly half of respondents (48.0%) believe that AI helps improve their critical thinking skills, with 4.2% strongly agreeing and 43.8% agreeing. However, there were 20.0% of respondents who disagreed and 5.7% strongly disagreed that AI helped reduce the ability to think independently. This suggests that, although the majority of respondents see the benefits of AI in improving analytical skills, there are concerns that reliance on AI could hinder the ability to think independently and creatively. This pattern reflects the need for a balanced approach to the use of AI in education, where technology supports but does not replace the development of independent cognitive skills.

The results of this study show that 48% of respondents believe AI helps improve critical thinking skills, in accordance with the findings of García-Peñalvo et al. (2020) who stated that AI can strengthen students' analytical abilities through structured explanations. However, 20% of respondents disagree and 5.7% strongly disagree, reflecting concerns that AI could reduce the ability to think independently, as identified by González and Martínez (2020). They show that dependence on AI can hinder independent cognitive development. Duo et al. (2023) also found that excessive use of AI can reduce students' creativity. These results underscore the need for a balance in the use of AI in education, ensuring that technology is used to support, not replace, the development of independent and creative thinking skills. Transparency and clear policies in the application of AI are also essential to address these concerns and ensure the ethical and effective use of AI in academic settings.

The Effect of AI on Academic Integrity

Academic integrity is one of the main issues in the use of AI in higher education. As many as 54.7% of respondents expressed concern that the use of AI could threaten academic integrity, especially in the context of teacher training. A lecturer revealed, "The use of AI in evaluation can reduce confidence in the integrity of educational outcomes. I feel that AI may not always take into account the context and nuances that exist in every given assignment or exam. In addition, there are concerns that AI could be biased if the algorithms used are not transparent or unfair. Reliance on AI can also make students feel that the results of their hard work are not properly evaluated by humans who can understand all aspects of their work. Therefore, I believe more in assessments made by lecturers or human evaluators who can provide more comprehensive and contextual feedback (I_DS_2023)."

"With AI, we can more easily detect academic cheating, thereby maintaining the integrity of education. AI is capable of analyzing patterns and detecting anomalies in students' work that may not be visible to the human eye. This technology can check various aspects of the task, such as similarities with other sources or inconsistent writing patterns, very quickly and efficiently. Additionally, AI can provide detailed reports that help educators to better understand how cheating occurs and how to prevent it in the future. This allows educational institutions to take more effective precautions and maintain high standards of integrity in academic assessment (I_OB_2023)."

The results of the interviews revealed contrasting views regarding the use of AI in academic evaluation. One respondent is concerned that AI may reduce confidence in the integrity of educational outcomes because AI may not consider the context and nuances of each task, and is potentially biased if the algorithm is not transparent or fair. They believe more in human judgment that can provide comprehensive feedback (I_DS_2023). In contrast, other respondents see AI as an effective tool for detecting academic cheating by analyzing patterns and anomalies, as well as providing detailed reports that help educators prevent cheating, thereby maintaining educational integrity (I_OB_2023).

Table 3. Respondents' Views on Academic Integrity and the Use of AI

Topic	Percentage (%)
AI could threaten academic integrity	54.7
AI helps detect plagiarism	45.3
AI improves oversight in assessment	45.3

The results of this study show that 54.7% of respondents are worried that the use of AI can threaten academic integrity, especially because AI may not consider the context and nuances in the evaluation of assignments, as expressed by a lecturer. This concern is in line with the findings of González and Martínez (2020) who pointed out the potential for AI bias if the algorithm is not transparent. However, 45.3% of respondents saw the positive side of AI in detecting plagiarism and improving assessment supervision, supported by a study by Hooda et al. (2022) which found that AI was effective in identifying patterns of plagiarism. García-Peñalvo et al. (2020) also showed that AI can strengthen academic integrity through accurate and rapid data analysis. These results confirm that while there are concerns about the threat AI poses to academic integrity, it also has significant potential in detecting and preventing cheating if used with transparency and fairness. Therefore, it is important to have clear policies and education on the use of AI in academic settings.

Education and Transparency related to AI

Education about AI and transparency in its use in higher education institutions is essential to prepare students and staff for rapid technological

change. The survey results showed that 75.2% of respondents supported education related to AI and transparency in its use.

"We need more training on how AI works and how to use it ethically. It is crucial for us to understand the basics of AI technology, including the algorithms used and how they work in the context of education. Additionally, this training should cover the ethical aspects of using AI, such as how to avoid bias and ensure that AI is used fairly and transparently. With a deeper understanding, we can use AI more effectively and responsibly, and address any concerns that may arise about its use. The comprehensive training will help us adapt quickly to technological changes and ensure that we leverage AI to improve the quality of education (I_JKW_2023)."

"Transparency in the use of AI is important to build trust and ensure that this technology is used ethically. We need to know how AI works, including the algorithms used, to fully understand the evaluation and decision-making process. Without transparency, users may feel skeptical or uncomfortable with the results generated by AI. Additionally, transparency also helps to identify and address potential biases in AI systems, ensuring that all processes are running fairly and accurately. With clarity on how AI works, we can ensure that this technology is used with integrity, and we can more easily accept and leverage these innovations in education (I_BJ_2023)."

The results of the interviews show that transparency in the use of AI is essential to build trust and ensure the ethical use of technology. Respondents emphasized the need for a clear understanding of how AI works, including the algorithms used, to be comfortable with the results generated by AI. They worry that without transparency, there is a risk of undetected bias and unfair judgment. Transparency allows users to be aware of the assessment and decision-making process by AI, which can reduce skepticism and increase the acceptance of this technology in education. Additionally, with a better understanding of how AI works, users can ensure that the technology is used with integrity and maximize its benefits in an academic environment.

Table 4. Respondents' Views on AI Education and Transparency

Topic	Percentage (%)
Supporting AI-related education	75.2
The need for transparency in the use of AI	75.2
Training needs on the ethics of using AI	75.2

The results of the study showed that 75.2% of respondents supported education related to AI and transparency in its use in higher education institutions. This is in line with the findings of García-Peñalvo et al. (2020) who state that a deep understanding of AI is essential for effective and responsible use. Respondents also emphasized the importance of ethical aspects, such as avoiding bias and ensuring transparency, supported by research by Hooda et al.

(2022) which found that transparency can reduce skepticism and increase acceptance of technology. The Duo et al. (2023) study shows that comprehensive education on AI helps users adapt quickly, ensuring AI is used to improve the quality of education. These findings confirm that without adequate education and transparency, there is a risk of bias and unfair judgment, so clear policies and comprehensive training are needed.

The contribution of this research is to provide an empirical foundation for the development of better higher education policies related to the use of AI. This research underscores the importance of comprehensive education and transparency in the use of AI to build trust, avoid bias, and ensure the ethical and effective use of technology in an academic environment. Thus, the results of this study can be a guide for educational institutions in designing training programs and policies that ensure the integrity and quality of education in the digital era.

CONCLUSION

The study found that AI-related transparency and education are essential for building trust and ensuring the ethical use of technology in higher education. With 75.2% of respondents supporting the existence of AI-related education and transparency in its use, these findings suggest that a deep understanding of how AI works and its ethical aspects is key to its effective adoption and use. The lesson learned from this study is that without adequate transparency and education, there is a risk of undetected bias and unfair judgment. The contribution of this research scientifically is to provide an empirical foundation for the development of better policies related to the use of AI in higher education, renewing the perspective on the importance of transparency and ethical education in the implementation of technology. However, this study also has limitations, such as a limited sample that only includes one educational institution, so the results may not be fully generalizable to a broader context.

For further research, it is recommended to expand the sample by covering various educational institutions in different regions to gain a more comprehensive understanding of views and attitudes towards the use of AI. In addition, further research should focus on the development and evaluation of comprehensive AI training programs, as well as examining the effectiveness of transparency policies in reducing bias and increasing trust in these technologies. The research also needs to consider additional variables, such as differences in disciplines and levels of education, to see how these factors affect perception and acceptance of AI. With a broader and more in-depth approach, it is hoped that a more holistic insight into the use of AI in higher education and how to ensure its ethical and effective application can be obtained.

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