

Ethical Commitment in Generative AI: Examine the Influence on the Quality of Graduate Academic Research

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Abstract: Objectives: The perspective on the use of Generative AI (GAI) in higher education at King Abdulaziz University is balanced yet cautious. Professors recognize GAI's potential for education but are concerned about originality, academic integrity, and ethics. Faculty believe GAI can enhance analysis and clarity in research writing, but maintaining ethical compliance and oversight is crucial to uphold originality and scholarly standards. The study aims to explore ethical concerns and their impact on the quality of graduate students' academic submissions. It seeks to promote responsible use of GAI, thereby strengthening academic integrity and fostering innovation in graduate research. The research emphasizes the importance of ethical training, clear institutional policies, and transparent guidelines to responsibly incorporate GAI into research and teaching. Increasing awareness and developing robust ethical frameworks are essential to ensure GAI serves as a tool for innovation, not academic compromise. Methods: A quantitative approach was used, with a questionnaire to collect data on professors' assessments of graduate students' research quality and their adherence to GAI ethics. 29 participants, including full professors, associate professors, assistant professors, and lecturers. Purposive sampling was used, with significant experience in evaluating research integrating GAI tools, to ensure participants are well-versed in assessing GAI-augmented academic research. Results: The findings show a cautious yet balanced view of Generative AI in higher education. Professors at the Department of Information Science at King Abdulaziz University see GAI's benefits but worry about its impact on originality, integrity, and ethics. Faculty view GAI as a helpful research tool but emphasize ethical compliance and supervision to maintain standards. Conclusions: The study highlights the need for ethical training, policies, and clear guidelines to ensure responsible use of GAI, promoting innovation while safeguarding academic values.

Keywords: Ethical Commitment, Integrity and Accountability, Intellectual Ownership, Originality, Rigor.

1. INTRODUCTION

This study is crucial for investigating the ethical commitment required when using Generative Artificial Intelligence (GAI) in academic research among graduate students, with a specific focus on its potential to significantly enhance the quality of academic work. As AI technologies, particularly Generative AI, become more prominent in academic settings, the ethical challenges related to their use are becoming increasingly critical. Key concerns include intellectual ownership, authorship rights, algorithmic bias, data privacy, plagiarism, and moral integrity. The urgency of this study is underscored by the fact that, without a robust ethical framework to guide its use, GAI could lead to unintended, unethical practices, thereby compromising the integrity and quality of academic research. By developing a comprehensive ethical model tailored to the academic research environment, this research offers a thorough and reliable approach. By examining the impact of ethical commitment on academic research quality, the study aims to elucidate the relationships between various ethical factors and their effects on academic research outcomes. The model will offer valuable insights for academic institutions, researchers, and policymakers, helping foster ethical practices, transparency, and accountability when using GAI for academic research. Ultimately, this study will contribute to ensuring that GAI's integration into academic research enhances, rather than undermines, the ethical and research standards of the academic community, thereby mitigating the potential risks of unethical GAI usage.



2. Research Problem:

As Generative AI (GAI) becomes increasingly integrated into academic research, questions arise regarding the ethical use of these technologies and their impact on the quality of academic research. Thus, adherence to ethical principles is crucial in ensuring integrity in GAI-assisted research. This study explores how ethical practices such as intellectual ownership, accountability, originality, and responsibility affect key research outcomes, including academic integrity, methodological rigor, innovation, and research clarity. Understanding these pathways will provide insights into the role of ethical AI use in maintaining and enhancing academic standards, offering a foundation for guiding ethical frameworks in AI-assisted research. Accordingly, the problem statement revolves around:

How do various dimensions of using Generative AI (GAI) ethical commitment impact the quality of graduate students' academic research?

3. Research Objectives:

To study graduate students' current level of commitment to the ethical use of Generative AI in writing academic research.

To assess the quality of academic research submitted by graduate students from the perspective of faculty members.

To examine the impact of ethical commitment using GAI on academic research quality among graduate students.

4. Research Questions:

RQ1: What is the current level of commitment among graduate students to the ethics of using Generative AI in writing academic research?

RQ2: How do faculty members perceive the quality of academic research submitted by graduate students?

RQ3: How does adherence to ethical guidelines in using Generative AI influence the quality of academic research submitted by graduate students?

5. Literature Review:

Salman et al. (2025) presented a systematic literature review of applications of GAI tools across various tasks in the academic research workflow, emphasizing transparency from GAI providers to build trust. They stressed the need for clear guidelines to prevent unethical practices like plagiarism and for training in ethical use. Verifying AI-generated content is essential to ensure accuracy and reduce bias, and measures are in place to prevent misuse. The study emphasized that academic institutions are responsible for developing tools and guidelines to promote responsible AI use, and that researchers and reviewers should be trained in AI ethics, including prompt engineering, to improve the quality of outputs. The paper also warned against over-reliance on AI, which could harm critical thinking and creativity, calling for policies to ethically integrate AI into research and peer review to preserve scholarly integrity. This study identified measures and recommendations to use these tools better and overcome their limitations. Resnik & Hosseini (2025) argued that AI doesn't require a radical overhaul of ethics but needs tailored guidance to address unique challenges. The paper introduced key AI concepts, such as narrow AI, machine learning, neural networks, and generative AI, and examined ethical issues, including error and bias, distinguishing random errors from systemic bias, and noting that AI can reproduce both. The black box problem undermines transparency and trust, complicating the diagnosis of failures. Regarding moral agency, AI can't be authors or copyright holders, as authorship demands accountability, consciousness, and intentionality, none of which AI has. The authors warned that sharing sensitive data with tools like ChatGPT poses a risk of privacy breaches and that AI misuse may constitute misconduct. Their nine recommendations covered bias, transparency, stakeholder engagement, handling synthetic data, rejection of AI authorship, confidentiality, and ethics education. The paper noted that if AI develops moral agency, these frameworks will need to be revised.

Hegazy et al. (2024) study examining the ethical awareness and commitment of postgraduate students at King Faisal University regarding the use of AI in scientific writing. It identifies a moderate level of moral awareness among the students and explores their understanding and application of ethical standards when utilizing AI tools. The research involved a survey of 68 students, which revealed no significant differences in ethical commitment across demographics, including age, gender, or academic level. The findings highlight the need for enhanced training and

awareness programs focused on ethical AI use to improve academic integrity and ensure responsible research practices. The study emphasizes the importance of integrating ethical considerations into educational policies and curricula to better prepare students for the challenges posed by AI technologies in their academic work. Bolaños et al. (2024) highlighted that the academic sector is a significant producer of tools to promote ethical AI development. However, it noted that while academia generates a considerable number of resources, many of these tools are at intermediate to high levels of development. The review emphasized the importance of integrating ethical principles into AI education and training for technical personnel, as there is often a gap in understanding the ethical implications of AI technologies. This lack of education can hinder the effective application of ethical standards in AI development. The findings suggest that enhancing academic training and fostering collaboration between academia and other sectors can help bridge the gap in operationalizing AI ethics. Qadhi et al. (2024) examined the ethical considerations of integrating Artificial Intelligence into higher education, focusing on critical areas such as ethical integration, academic integrity, governance, and the balance of risks and benefits. The study emphasized the need for ethical frameworks and transparent policies to guide the use of AI, particularly in academic writing and scholarly communication. The study explored the ethical integration of AI in higher education, revealing a balance between technological potential and responsibility. It stressed the need for strong ethical frameworks, transparent policies, and human-centered AI to strengthen academic integrity and improve education. Authors highlighted AI's role in reshaping higher education and underscored the importance of awareness in protecting scholarly standards. As academia enters an AI-driven era, it must navigate this landscape responsibly, balancing AI's promise with ethical and human-centric considerations. Efforts are needed to harness AI's benefits while addressing ethical challenges to ensure academia's continued growth in the age of AI.

Drolet et al. (2023) used a phenomenological approach to explore ethical issues in research, capturing perspectives from researchers, REB members, and ethics experts. Concerns in higher education included plagiarism, data falsification, and ghost authorship, driven by the "publish or perish" culture. They identified ten critical ethical concerns (research integrity, conflicts of interest, supervision issues, and injustice, etc.). The analysis emphasized the need for ethical frameworks and transparent policies, especially in managing AI integration in academia to maintain integrity and ethical standards. The study highlighted AI literacy, governance, ethical guidelines, and human-centered AI tools to mitigate risks. It used a mixed-methods approach to conduct a comprehensive analysis of AI's ethical challenges, balancing the benefits and risks of misuse. Vainio-Pekka et al. (2023) emphasized that transparency, accountability, and fairness are essential for ethical AI, advocating for clear definitions, structured approaches, responsible practices, and comprehensive training. While current frameworks serve as a foundation, they lack actionable steps for implementation. The authors urge more empirical research on XAI and collaboration among researchers, practitioners, and policymakers to develop trustworthy AI aligned with societal values. Ethical use of AI in research raises concerns about data accuracy, bias, and plagiarism, requiring verification to ensure integrity. Friederich & Symons (2023) argue that as AI advances, academic norms must evolve to address issues like accountability and transparency. Current standards are inadequate and require a new system that clarifies human and AI contributions to uphold ethics. They suggest four goals: proper attribution, encouraging innovation, preventing harm, and creating practical norms. Accepting unlimited AI use conflicts with these goals; a total ban is unfeasible, and recognizing AI as a co-author complicates accountability. Expanding plagiarism rules to include AI is promising but hard to enforce. Instead, they propose a signed document detailing contributions, supported by regulatory systems. Though full adoption isn't urgent now, discussions should begin to prepare for future developments.

Khan et al. (2022) conducted a systematic review to identify key AI ethics principles and the challenges hindering their adoption. The study aims to fill a research gap by providing a knowledge base on AI ethics to help practitioners implement ethical practices. It also proposes a maturity model to evaluate organizations' ethical capabilities and promote responsible AI. The study found that despite attention to AI ethics, comprehensive standards and frameworks are lacking. The identified principles and challenges serve as initial inputs for the maturity model, emphasizing the importance of addressing these issues to ensure AI is ethical and trustworthy.

6. Methodology:

This study investigates the influence of ethical commitment to GAI on the quality of academic research among graduate students specializing in Information Management (Master's) and Knowledge Management (Ph.D.) within the Department of Information Science at King Abdulaziz University, utilizing a questionnaire. By focusing on professors' perspectives, this research adopts a structured and empirical methodology to elucidate the relationship between ethical GAI practices and graduate students' research quality.

Research Design:

A quantitative approach will be used, with a questionnaire to collect data on professors' assessments of graduate students' research quality and their adherence to GAI ethics. To design the questionnaire, including its domains and items, the scholarly literature related to the field of study was reviewed, and the questionnaire was designed based on the work of Amani et al. (2023) and White et al. (2024). The questionnaire was adapted to suit the context of the current study. Furthermore, the items were formulated using a 5-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree). The data collected will be analyzed using SPSS 25.0, with descriptive statistics and reliability testing to evaluate the relationships between ethical commitment, GAI integration, and research quality.

Population and Sample:

Population:

Professors and academic supervisors from the Department of Information Science in the College of Arts & Humanities at King Abdulaziz University who regularly assess graduate academic research (Master's and Ph.D.).

Sample Size: (29) Participants will include full professors, associate professors, assistant professors, and lecturers.

Sampling Method: Purposive sampling will be used to select professors and supervisors with significant experience in evaluating research integrating GAI tools, ensuring participants are well-versed in assessing GAI-augmented academic research.

Variables:

Independent Variables:

The independent variables collectively represent an ethical commitment to utilizing GAI tools in academic research writing.

Intellectual Ownership: To measure commitment through the following:

Respect for intellectual property

Proper citation

Avoiding plagiarism

Integrity and Accountability: Assess this through:

Transparency

Honesty or trustworthiness

Adherence to ethical principles in research

Originality: Focus on the effort made to ensure unique and creative contributions without excessive reliance on AI-generated content.

Responsibility to the Research Community: Measure the community's awareness of the impact of generative AI. Specifying the relevant community, including data privacy considerations and measures to avoid algorithmic bias.

Dependent Variables:

The dependent variables focus on elements and dimensions related to the quality of academic research produced using Generative AI tools.

Rigor: Emphasize the quality of methodological approaches and the comprehensiveness of the completed research.

Originality and Innovation: To measure the degree of uniqueness and new contributions in the research work.

Academic Integrity: This reflects adherence to academic standards as perceived by faculty members.

Impact and Clarity: Refers to the effectiveness of communication and the depth of addressing research questions. For example, has adherence or non-adherence to ethical AI usage influenced these aspects?

Data Collection Methods:

Quantitative Data Collection (Evaluation Questionnaire)

Instrument: After reviewing graduate students' research, professors will complete a structured evaluation form. The form will assess critical metrics, including;

Quality of research: Originality, depth, clarity, and rigor.

GAI integration: Whether GAI tools improved or hindered the research process.

Ethical adherence: Professors will rate the students' adherence to GAI ethics (e.g., transparency, fairness, intellectual ownership).

Scale: A Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) will be used to capture professors' evaluations.

Data Analysis

Quantitative Analysis

Descriptive statistics summarize professors' evaluations of academic research quality, GAI usage, and GAI ethical commitment.

Correlation analysis: To assess relationships between the ethical commitment of graduate students (as examined by professors) and the quality of their academic research.

Regression analysis: To investigate the influence of ethical GAI commitment on academic research quality, controlling for factors such as discipline and level of GAI integration.

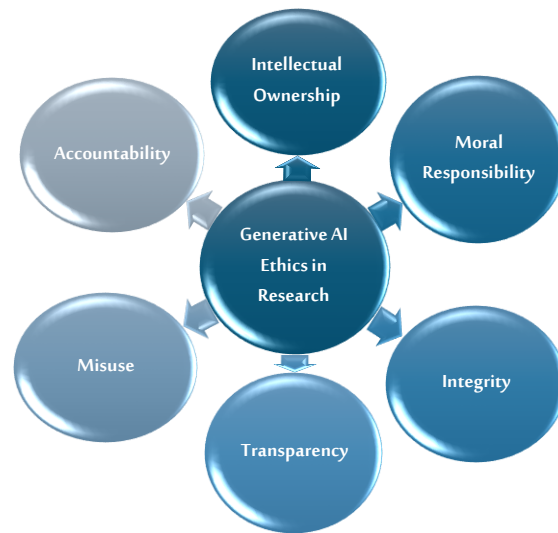


Figure 1: GAI ethics in academic research

7. Analysis and Results

This study aims to examine professors' perspectives on the use of GAI among graduate students, assess graduate students' ethical commitment to its use, and explore faculty perceptions of the quality and integrity of AI-augmented academic research. As universities adopt GAI technologies, understanding ethical implications, attitudes, and institutional preparedness becomes critical to maintaining academic integrity and promoting responsible AI use. The research focuses on academic staff at King Abdulaziz University, where GAI's academic implications are increasingly evident across disciplines. This report presents the results of the data analysis.

Data Analysis Method

The collected data were analyzed using SPSS 25.0, with descriptive statistics and reliability testing to evaluate the consistency and validity of the survey instruments. Cronbach's alpha coefficients were calculated for each construct—professors' viewpoints on GAI use, graduate students' ethical commitment, faculty perceptions of GAI-augmented research quality, and the impact of ethical GAI use on academic quality—to determine internal reliability.

Values above 0.70 were considered acceptable, ensuring measurement accuracy. Descriptive analysis included computing means and standard deviations for each questionnaire item to summarize respondents' attitudes and perceptions. Likert scale data (ranging from 1 = strongly disagree to 5 = strongly agree) were used to assess overall agreement. Demographic data were analyzed using frequency and percentage distributions to describe participant characteristics. Together, these analyses provided a comprehensive understanding of the dataset's patterns, reliability, and trends.

Table 1. The Cronbach alpha

Variable	Number of items	Cronbach alpha
Professors' viewpoints on the use of Generative AI (GAI) in academia among graduate students	12	0.82
Graduate Students' Commitment to the Ethical Use of GAI	11	0.85
Faculty Perceptions of the Quality of GAI-Augmented Academic Research	14	0.91
Impact of Ethical GAI Use on Academic Research Quality	11	0.94

Table 1 presents the internal consistency reliability of the study instruments, as measured by Cronbach's alpha coefficients. The results show that all variables demonstrated acceptable to excellent reliability levels, indicating that the items within each construct consistently measured the intended concept. The construct Professors' Viewpoints on the use of Generative AI (GAI) in academia among graduate students (12 items) obtained a Cronbach's alpha of 0.82, reflecting good internal consistency. The variable Graduate Students' Commitment to the Ethical Use of GAI (11 items) showed a slightly higher reliability coefficient of 0.85, also indicating strong internal consistency. Faculty Perceptions of the Quality of GAI-Augmented Academic Research (14 items) achieved a Cronbach's alpha of 0.91, suggesting excellent reliability. The highest reliability coefficient was observed for Impact of Ethical GAI Use on Academic Research Quality (11 items), with a Cronbach's alpha of 0.94, demonstrating outstanding internal consistency.

Overall, all four constructs exceeded the minimum acceptable threshold of 0.70, confirming that the measurement scales used in this study were reliable and internally consistent.

Table 2. The demographic information

Factor	Group	N	%
The position or status at King Abdulaziz University	Instructor	1	3.85
	Assistant Professor	9	34.62
	Associate Professor	6	23.08
	Professor	10	38.46
made an account and used Generative AI	Yes	18	69.23
	No	8	30.77
Are you familiar with the ethical knowledge to use GAI tools?	Extremely familiar	9	26.92
	Very familiar	7	34.62

Factor	Group	N	%
	Moderately familiar	4	15.38
	Slightly familiar	6	23.08
In what ways do you use Generative AI? (select all that apply)	Ask general knowledge questions	16	40
	Preparing materials for coursework	8	20
	Grading writing assignments	5	12.5
	Research-related activities	6	15
	Creating Exam materials	5	12.5
How frequently do you assess academic work that incorporates GAI?	Never	4	15.38
	Rarely	4	15.38
	Sometimes	12	46.15
	Often	5	19.23
	Always	1	3.85
Have you received any training in evaluating GAI-augmented academic research?	Yes	6	23.08
	No	20	76.92
Are you familiar with the ethical considerations for using GAI tools?	Yes	21	80.77
	No	5	19.23
Have you reviewed the guide and policies for using artificial intelligence in education, research, and science at King Abdulaziz University?	Yes	16	61.54
	No	7	26.92
	I never heard about it	3	11.54

Table 2 presents the demographic information and responses of academic staff at King Abdulaziz University regarding their use and familiarity with Generative Artificial Intelligence (GAI). 26 academic ranks participated in the current study, with 38.46% being professors, 34.62% assistant professors, 23.08% associate professors, and 3.85% instructors. Regarding experience with GAI, 69.23% of respondents reported creating an account and using generative AI tools, while 30.77% had not. In terms of familiarity with the ethical knowledge related to GAI use, 26.92% were extremely familiar, 34.62% very familiar, 15.38% moderately familiar, and 23.08% slightly familiar. Participants used generative AI for various purposes. The most common use was to ask general knowledge questions (40%), followed by preparing materials for coursework (20%), research-related activities (15%), grading writing assignments (12.5%), and creating exam material (12.5%), when asked how frequently they assess academic work incorporating GAI, 15.38% reported “never,” 15.38% “rarely,” 46.15% “sometimes,” 19.23% “often,” and 3.85% “always.” Only 23.08% of respondents had received any training in evaluating GAI-augmented academic research, while the majority (76.92%) had not.

Regarding ethical considerations, 80.77% reported familiarity with ethical guidelines for using GAI tools, whereas 19.23% were not. Furthermore, 61.54% reported having reviewed the university’s guide and policies for using AI in education, research, and science; 26.92% had not, and 11.54% mentioned they had never heard about it.

Table 3. Professors' viewpoints on the use of Generative AI (GAI) in academia among graduate students

o	Statement	ean	M D
	How comfortable would you be with your graduate students using Generative AI in your coursework?	.38	3 .94
	Do you agree with this statement: "Students should be allowed to utilize resources not provided by the instructor of a course." (Ex, ChatGPT, deepseek)?	.54	3 .86
	Do you think your students would violate the ethics of using GAI?	.73	3 .78
	Using generative AI in academic writing raises concerns about originality and intellectual ownership	.27	4 .72
	Over-reliance on AI-generated content may reduce students' ability to develop problem-solving and analytical skills	.42	4 .81
	Using generative AI in student assignments could compromise academic integrity and ethical research practices	.27	4 .83
	GAI-generated content should be appropriately cited and disclosed when used in academic writing	.50	4 .81
	Generative AI lacks emotional intelligence and may provide insensitive or inappropriate responses in certain contexts	.08	4 .80
	Generative AI can produce a fake citation	.50	4 .65
0	I acknowledge that generative AI systems can exhibit biases and generate unfair or misleading output	.12	4 .82
1	Using generative AI technologies such as ChatGPT to complete assignments undermines the value of a university education purpose	.19	4 .90
2	The extent to which graduate students utilize GAI tools, such as ChatGPT, may be associated with changes in how they approach and develop transferable skills, including critical thinking and problem-solving	.35	4 .89
Total mean		.11	4 .37

Table 3 summarizes professors' viewpoints regarding the use of Generative Artificial Intelligence (GAI) in academia, particularly among graduate students. The overall mean score was 4.11 (SD = 0.37), indicating a high level of concern and awareness about the implications of GAI use in academic settings. Among the items, the highest mean scores were recorded for the statements "GAI-generated content should be appropriately cited and disclosed when used in academic writing" and "Generative AI can produce a fake citation", both with a mean of 4.50 (SD = 0.81 and 0.65, respectively). These findings indicate a strong agreement among professors on the importance of transparency and ethical citation when using AI-generated materials. Similarly, professors expressed strong concern about the risks associated with GAI use. High mean scores were reported for statements such as "Over-reliance on AI-generated content may reduce students' ability to develop problem-solving and analytical skills" (M = 4.42, SD = 0.81) and "Using GAI in student assignments could compromise academic integrity and ethical research practices" (M = 4.27, SD = 0.83). These results highlight faculty apprehensions regarding the potential negative impact of GAI on students' intellectual development and academic honesty. In addition, participants agreed that "Generative AI lacks emotional intelligence and may provide insensitive or inappropriate responses in certain contexts" (M = 4.08, SD = 0.80) and that "Using generative AI in academic writing raises concerns about originality and intellectual ownership" (M = 4.27, SD = 0.81). However, moderately lower mean scores were found for items reflecting openness to GAI use. For instance, "Students should be allowed to utilize resources not provided by the instructor of a course (e.g., ChatGPT,

DeepSeek)” recorded a mean of 3.54 (SD = 0.86), and “Professors’ comfort level with students using GAI in coursework” scored 3.38 (SD = 0.94). These indicate that while professors acknowledge the educational potential of GAI, their acceptance remains cautious.

Overall, the results demonstrate that professors at King Abdulaziz University generally support the ethical use and transparency in the employment of GAI tools but express substantial concern about their impact on academic integrity, critical thinking, and originality. This highlights a need for clearer institutional guidelines and training to ensure responsible GAI integration in higher education.

Table 3. The descriptive information of Graduate Students’ Commitment to the Ethical Use of GAI

o	Statement	ean	D
	Graduate students properly cite and acknowledge AI-generated content in their academic research	.81	.02
	Students demonstrate an understanding of ethical guidelines for using GAI in academic writing	.00	.06
	I have observed students taking measures to avoid plagiarism when using AI-generated content	.27	.92
	Students ensure transparency by explicitly disclosing their use of GAI in research	.96	.87
	Graduate students take responsibility for verifying the accuracy and credibility of AI-generated content before including it in their work	.12	.95
	Do you think your students will violate the ethics Honor Code now that GAI is released to the public?	.38	.75
	Faculty members receive adequate information from graduate students about using GAI in research	.92	.20
	Ethical training on the use of GAI is necessary to improve students’ adherence to academic integrity	.69	.55
	The university has a clear institutional policy guiding graduate students on the ethical use of GAI in academic writing	.12	.82
0	Graduate students’ use of Generative AI in research writing must be strictly monitored	.62	.64
1	The ethical commitment of graduate students toward Generative AI has improved over time	.00	.80
Total mean		.63	.43

Table 4 presents descriptive statistics on respondents’ perceptions of graduate students’ commitment to the ethical use of Generative Artificial Intelligence (GAI) in academic research and writing. The overall mean score was 3.63 (SD = 0.43), indicating a moderate to high level of ethical commitment among graduate students. Among the individual statements, the highest mean score was recorded for “Ethical training on the use of GAI is necessary to improve students’ adherence to academic integrity” (M = 4.69, SD = 0.55), suggesting a strong agreement on the importance of providing ethical training. Similarly, respondents agreed that “Graduate students’ use of Generative AI in research writing must be strictly monitored” (M = 4.62, SD = 0.64) and that “Graduate students take responsibility for verifying the accuracy and credibility of AI-generated content before including it in their work” (M = 4.12, SD = 0.95). The statement “The ethical commitment of graduate students toward Generative AI has improved over time” also received a relatively high rating (M = 4.00, SD = 0.80), indicating a positive perception of progress in ethical behavior related to AI use. Conversely, lower mean scores were observed for statements of citation and acknowledgment practices. For example, “Graduate students properly cite and acknowledge AI-generated content in

their academic research” received the lowest mean ($M = 2.81$, $SD = 1.02$), followed by “Students ensure transparency by explicitly disclosing their use of GAI in research” ($M = 2.96$, $SD = 0.87$). These results indicate areas where ethical compliance may still be lacking or inconsistent among graduate students. Overall, the findings highlight that while respondents generally perceive graduate students as increasingly aware of and committed to the ethical use of GAI, there remains a need for stronger institutional policies, training programs, and monitoring mechanisms to ensure the responsible and transparent integration of AI in academic research.

Table 4. Faculty Perceptions of the Quality of GAI-Augmented Academic Research

o	Statement	ean	D
	Students effectively balance GAI-generated content with their critical thinking and analysis in academic writing	.04	.92
	Students ensure that research submissions integrate GAI tools and maintain a high standard of originality and intellectual contribution	.35	.06
	GAI tools enhance students' ability to synthesize diverse perspectives in their academic research	.04	.82
	Students understand the ethical obligation to use GAI, so AI-augmented academic research submitted by graduate students demonstrates strong methodological rigor	.19	.06
	Graduate students' understanding of the ethical use of GAI, I have noticed an improvement in the structure and coherence of academic research work due to AI-assisted writing	.54	.90
	The overall quality of academic research submitted by graduate students meets institutional and scholarly standards	.69	.79
	Research papers incorporating GAI submitted by graduate students maintain high academic rigor	.23	.86
	I can quickly identify when GAI has had a significant influence on a research paper	.04	.96
	GAI has enhanced the clarity and coherence of graduate students' research writing	.58	.03
0	Research submissions relying on GAI demonstrate a balance between AI-generated content and original student contributions	.42	.99
1	The originality of graduate student research has been affected by increased reliance on GAI	.08	.80
2	Faculty members trust the credibility of research submissions that include GAI-assisted writing	.08	.13
3	Research work assisted by GAI is generally well-cited and appropriately referenced	.00	.02
4	GAI in academic writing requires additional verification to ensure research validity	.31	.97
Total mean		.54	.65

Table 5 presents faculty perceptions regarding the quality of academic research augmented with Generative Artificial Intelligence (GAI). The overall mean score was 3.54 ($SD = 0.65$), indicating moderate agreement among faculty members regarding the positive impact and quality of GAI-enhanced research. Among individual items, the highest mean was observed for the statement “GAI in academic writing requires additional verification to ensure

research validity” ($M = 4.31$, $SD = 0.97$), reflecting faculty members’ strong belief that AI-assisted work should undergo rigorous validation to maintain scholarly standards. Similarly, high ratings were reported for “The originality of graduate student research has been affected by increased reliance on GAI” ($M = 4.08$, $SD = 0.80$) and “GAI tools enhance students’ ability to synthesize diverse perspectives in their research” ($M = 4.04$, $SD = 0.82$). These results suggest that while faculty recognize certain benefits of GAI in supporting analytical synthesis, they remain concerned about its influence on originality. Moderate agreement was expressed for items such as “The overall quality of academic research submitted by graduate students meets institutional and scholarly standards” ($M = 3.69$, $SD = 0.79$) and “GAI has enhanced the clarity and coherence of graduate students’ research writing” ($M = 3.58$, $SD = 1.03$). These findings indicate that faculty perceive some improvement in organization and presentation, but not a consistent enhancement in overall research quality. Conversely, relatively lower means were found for statements like “Students effectively balance GAI-generated content with their critical thinking and analysis in academic writing” ($M = 3.04$, $SD = 0.92$) and “Research work assisted by GAI is generally well-cited and appropriately referenced” ($M = 3.00$, $SD = 1.02$). These results suggest that faculty members remain cautious about students’ ability to critically engage with AI-generated content and uphold academic citation standards. Overall, the data indicate that while faculty acknowledge the potential of GAI to enhance academic writing and analytical synthesis, they emphasize the need for verification, ethical oversight, and improved balance between AI assistance and original intellectual contribution to preserve research quality and integrity.

Table 5. Impact of Ethical GAI Use on Academic Research Quality

o	Statement	ean	M	D
	An ethical commitment to GAI usage positively influences the credibility of graduate students’ research	.58	4	.58
	Submitted academic research that adheres to GAI ethics demonstrates higher academic integrity	.35	4	.75
	I have observed that the ethical use of GAI improves the depth and clarity of students’ research findings	.38	4	.80
	The responsible use of GAI tools enhances students’ ability to develop innovative and original research contributions	.35	4	.69
	Ethical GAI practices lead to a more transparent and trustworthy academic research environment	.38	4	.75
	Adherence to ethical principles in the use of GAI enhances academic integrity in research writing	.38	4	.70
	Graduate students who adhere to ethical guidelines in the utilization of General Artificial Intelligence (GAI) exhibit enhanced research capabilities	.19	4	.80
	Submissions utilizing Generative AI ethically demonstrate greater innovation and originality	.00	4	.94
	Ethical accountability in the use of GAI enhances the methodological rigor of graduate students’ research	.35	4	.75
0	Faculty members tend to favor research that adheres to stringent ethical standards in AI-assisted writing	.38	4	.75
1	The research community’s responsibility significantly influences the ethical application of Generative AI by graduate students	.35	4	.75
2	Ethical violations in GAI-assisted writing compromise the credibility of academic research	.12	4	.91
Total mean		.32	4	.55

Table 6 presents respondents' perceptions of how the ethical use of Generative Artificial Intelligence (GAI) affects the quality of academic research. The overall mean score was 4.32 (SD = 0.55), indicating strong agreement that ethical GAI practices positively influence various aspects of research credibility, integrity, and innovation. Among the individual statements, the highest mean value was found for "An ethical commitment to GAI usage positively influences the credibility of graduate students' research" (M = 4.58, SD = 0.58). This demonstrates a strong consensus that maintaining ethical standards while using GAI tools enhances the trustworthiness and reliability of academic work. Similarly, participants strongly agreed that "Ethical GAI practices lead to a more transparent and trustworthy academic research environment" (M = 4.38, SD = 0.75) and that "Adherence to ethical principles in the use of GAI enhances academic integrity in research writing" (M = 4.38, SD = 0.70). These findings underscore the perceived importance of ethics as a foundation for ensuring research quality when integrating AI technologies. Moreover, high levels of agreement were also recorded for statements emphasizing the role of ethics in improving research rigor and clarity, such as "Ethical accountability in the use of GAI enhances the methodological rigor of graduate students' research" (M = 4.35, SD = 0.75) and "The responsible use of GAI tools enhances students' ability to develop innovative and original research contributions" (M = 4.35, SD = 0.69). These results highlight that ethical adherence not only supports academic integrity but also promotes originality and innovation. In contrast, slightly lower yet positive responses were observed for "Submissions utilizing Generative AI ethically demonstrate greater innovation and originality" (M = 4.00, SD = 0.94) and "Ethical violations in GAI-assisted writing compromise the credibility of academic research" (M = 4.12, SD = 0.91). These responses suggest that while the participants largely view ethics as a key factor in ensuring high-quality outcomes, they also acknowledge that breaches in ethical conduct can significantly undermine the credibility of AI-assisted academic work. Overall, these results demonstrate that respondents strongly believe that the ethical use of GAI enhances research credibility, transparency, originality, and methodological rigor. The findings reinforce the notion that institutions should emphasize ethical guidelines and accountability mechanisms to maximize the benefits of GAI in academic research.

8. Conclusion

The findings reveal a balanced yet cautious perspective toward the use of Generative AI in higher education. Professors at King Abdulaziz University recognize the educational potential of GAI but express concern over issues of originality, academic integrity, and ethical conduct. Graduate students exhibit moderate to high ethical commitment toward responsible GAI use, though citation and disclosure practices remain inconsistent. Faculty perceptions suggest that while GAI can enhance analytical synthesis and clarity in research writing, ethical adherence and oversight are crucial to preserving originality and scholarly standards. Overall, the study underscores the importance of ethical training, institutional policies, and transparent use guidelines to support the responsible integration of GAI into academic research and teaching. Strengthening awareness and establishing robust ethical frameworks will be vital to ensure that GAI technologies serve as tools for innovation rather than sources of academic compromise.

Implications for Policy and Practice:

KAU has just released the "Guide to Policies for the Use of Artificial Intelligence in Education and Scientific Research." Therefore, the study expects all professors to disseminate this guide to graduate students to spread awareness and ensure that students use correct and ethical methods when conducting GAI academic research. The guide also evaluates students' research quality in the context of GAI integration and serves as a foundation for policymakers to develop robust ethical governance frameworks for GAI in academia.

Limitations:

Professors' refusal to allow graduate students to use artificial intelligence in academic research may negatively affect the study's results.

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