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Artificial Intelligence in the Conduct of Research: Embracing its Promises and Avoiding the Pitfalls from the Lens of Research Practitioners

Dr. Angelyn M. Pangilinan*[1], Jeron Velasco[2], Francis Ryan A. Punzalan[3],
Dr. Richard D. Sanchez[4], Angeli Mae P. Sanchez, MBA[5], Dr. Raul G. Moldez[6]
[1]University of Makati, Taguig City, [2]Dischii'bikoh High School, 211 S Elm Circle Cibecue AZ 85911, [3]Sta. Lucia National High School, Sta. Lucia, Dolores, Quezon, [4]John B. Lacson Foundation Maritime University (Arevalo), Inc., Iloilo City, [5]ETCOR Educational Research Center, Inc., [6]Graduate School PHINMA Cagayan de Oro College, Cagayan de Oro City
*Corresponding Author e-mail: *angelyn.pangilinan@umak.edu.ph*

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Abstract
Aim: This study investigated the perceived advantages and risks of using Artificial Intelligence (AI) tools in research from the perspective of academic research practitioners in the Philippines, and examined the relationship between these perceptions.
Methodology: A descriptive–correlational design was employed, using a structured survey administered to 125 research practitioners from basic and higher education institutions across Luzon, Visayas, and Mindanao, selected via stratified random sampling. The instrument included a validated AI Advantages Scale and AI Risks Scale. Data were analyzed using descriptive statistics, Pearson correlation, and regression analysis.
Results: On a 5-point scale, participants reported high perceived advantages ($M = 4.21$, $SD = 0.55$) and moderate perceived risks ($M = 3.12$, $SD = 0.67$). A significant negative correlation ($r = –0.42$, $p < .01$) indicated that higher perceived risks were associated with lower endorsement of AI advantages.
Conclusion: Findings reflect both optimism and caution among research practitioners regarding AI adoption. While AI is valued for streamlining research processes and enhancing analytical rigor, concerns about plagiarism, bias, and ethical misuse persist. The study recommends targeted capacity-building programs, clear institutional guidelines, and responsible AI literacy initiatives to maximize benefits while mitigating risks.
Keywords: *Artificial Intelligence, research ethics, research practitioners*

INTRODUCTION

The rise of Artificial Intelligence (AI) is reshaping the global research landscape at an unprecedented pace (Alabdulatif, 2024)). From automating data analysis to supporting advanced modeling and natural language generation, AI tools are now embedded in virtually every stage of the research process (Zahra & Rautela, 2024). Academic institutions, industry R&D laboratories, and independent scholars alike are harnessing AI's potential to streamline workflows, enhance analytical precision, and enable new forms of scholarly inquiry.

Globally, AI tools such as large language models (LLMs), machine learning algorithms, and automated research assistants are hailed as drivers of research efficiency and innovation. For instance, AI can rapidly synthesize vast literature, identify patterns in complex datasets, and even generate text in multiple languages (de la Torre-López et al., 2023). Such capabilities promise to democratize access to advanced research methods, especially for scholars in resource-constrained settings.

However, these promises are accompanied by equally serious concerns (Li et al., 2022). The use of AI in research raises ethical, methodological, and epistemological challenges that scholars worldwide are grappling with. Issues such as algorithmic bias, plagiarism, data privacy, and the opacity of "black-box" models threaten the integrity

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of scholarly work (Hassija et al.,2024). Thought leaders warn that over-reliance on AI can undermine critical thinking skills and distort the norms of academic rigor (Sanchez, 2025).

Indeed, leading academic journals, universities, and professional organizations are increasingly issuing guidelines on responsible AI use in research. The consensus is clear: while AI holds transformative promise, its adoption must be accompanied by robust ethical frameworks, transparency measures, and user education. This duality—promise and peril—defines the global discourse on AI in research.

In Southeast Asia, including the Philippines, these debates take on unique dimensions shaped by local contexts. Regional studies suggest that awareness of AI's utility is widespread, but training on ethical and responsible use remains limited (Keith, 2024). For many institutions, especially in low- and middle-income countries, AI offers an alluring shortcut to boost research output and international visibility.

The Philippine research ecosystem reflects these global tensions but with added local complexity. With limited funding, high teaching loads, and resource disparities across regions, AI tools can be especially attractive for researchers seeking to save time and improve productivity. Applications such as automated writing aids, plagiarism checkers, and statistical analysis software are increasingly used in both basic and higher education settings (Carvajal et al., 2025).

At the same time, Philippine scholars and educators recognize the risks inherent in adopting AI without critical safeguards. Concerns include the potential for plagiarism, the weakening of academic integrity, the uncritical replication of biases embedded in training data, and the inequitable access to advanced AI tools across institutions and regions. Without clear policies and training, there is a danger that AI adoption will exacerbate rather than alleviate existing disparities in research capacity (Arcilla et al.,2023).

Despite these realities, empirical evidence on how Philippine research practitioners actually perceive the advantages and risks of AI remains scarce. While policy conversations and opinion pieces have proliferated, systematic studies that measure these perceptions and examine their interrelationship are limited. This gap hinders the design of context-sensitive policies and training programs that address local needs.

The existing literature tends to focus on the technological capabilities of AI or the general ethical debates at a conceptual level, often overlooking the voices of the very practitioners who are adopting these tools in their daily work. Understanding their perceptions is essential to crafting realistic, effective guidelines that balance innovation with integrity.

Furthermore, while global studies offer valuable insights, their findings may not fully capture the nuances of the Philippine research context. Variations in institutional resources, disciplinary traditions, and regional inequalities mean that local perceptions of AI's benefits and risks may differ significantly from those observed in high-income settings. Without localized evidence, policy-making risks being either too generic or misaligned with practitioners' actual needs.

This research addresses this gap by empirically describing the perceived advantages and risks of AI use among academic research practitioners in the Philippines. It does so through a structured, validated survey administered across Luzon, Visayas, and Mindanao, ensuring a more representative understanding of practitioners' experiences and attitudes.

By applying the Technology Acceptance Model (TAM) as its theoretical lens, the study not only measures levels of perceived advantages and risks but also examines their relationship. This approach helps illuminate how perceived barriers (risks) may diminish the perceived usefulness (advantages) of AI tools—a critical insight for designing interventions that encourage responsible, effective adoption.

The study's contribution lies in offering empirically grounded evidence that can inform institutional policy, capacity-building programs, and ethical guidelines tailored to the Philippine context. By identifying the specific concerns and hopes of local researchers, it helps stakeholders design practical strategies for maximizing AI's benefits while mitigating its risks.

More broadly, this research contributes to the global discourse on AI in academia by providing a model for how localized, practitioner-centered studies can complement high-level ethical debates. It demonstrates the value of moving beyond theoretical discussions to engage with the everyday realities of researchers in diverse settings.

Ultimately, this study argues that embracing AI's promises in research must go hand in hand with understanding and addressing its pitfalls. For the Philippines—and indeed for all research communities—the goal should not be to reject AI outright nor to adopt it uncritically, but to develop nuanced, evidence-based approaches that support both innovation and integrity in scholarly practice.

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Objectives

This study aimed to describe the perceived advantages and perceived risks of using AI in research among academic research practitioners in the Philippines, and to examine the relationship between these perceptions.

Specifically, it sought to:

1. Describe the level of perceived advantages of using AI in research;
2. Describe the level of perceived risks of using AI in research; and
3. Determine the relationship between perceived advantages and perceived risks among research practitioners.

Research Questions

1. What is the level of perceived advantages of using AI in research among academic research practitioners?
2. What is the level of perceived risks of using AI in research among these practitioners?
3. Is there a significant relationship between perceived advantages and perceived risks of using AI in research?

Hypothesis

There is no significant relationship between perceived advantages and perceived risks of using AI in research among academic research practitioners.

Review of Related Literature and Studies

Recent literature highlights the profound impact of Artificial Intelligence (AI) on the research landscape, characterizing its role as both transformative and contentious (Issaa, 2024). AI has been credited with streamlining a wide range of research tasks, including data coding, transcription, statistical analysis, and literature synthesis (Khalifa & Albadawy, 2024). Tools such as automated transcription services and advanced data-mining platforms allow researchers to process large volumes of data quickly and accurately, potentially democratizing access to sophisticated analytic methods. Additionally, AI-powered language models have significantly improved academic writing and editing workflows, especially benefiting scholars who are non-native English speakers by enhancing clarity and fluency (Sanchez, 2025).

Despite these advantages, a growing body of scholarship warns of significant ethical, methodological, and epistemological risks associated with AI in research (Zanotti et al., 2024). Concerns about transparency and accountability in AI systems further complicate efforts to ensure rigorous, reproducible scholarship (Carvajal et al., 2023).

Academic integrity emerges as another major area of concern in the literature. Hutson (2024) emphasizes the risk of plagiarism posed by AI-generated text, which can be incorporated into scholarly writing without appropriate attribution or critical engagement. This problem is compounded by the lack of clear institutional guidelines on the ethical use of AI tools, leaving many researchers uncertain about acceptable practices (Saenz et al., 2024). Inconsistent or absent policies increase the likelihood of unintentional misconduct, threatening the credibility of scholarly communication and eroding public trust in academic research (Carvajal et al., 2024).

Studies in Southeast Asia provide valuable regional insights into these dynamics. While awareness of AI's potential benefits is high among researchers in the region, there remains a substantial gap in training on ethical, responsible use (Wibowo et al., 2025). Institutions often lack formal capacity-building initiatives or courses on AI ethics, leaving researchers to navigate complex questions of bias, originality, and transparency on their own. This gap suggests the need for context-sensitive interventions that consider local resources, research cultures, and educational systems when designing ethical AI guidelines (Carvajal et al., 2025).

Overall, the literature points to a pressing need for empirical studies that center the perspectives of research practitioners themselves. While many theoretical discussions and policy recommendations exist, fewer studies systematically measure how researchers perceive the trade-offs between AI's advantages and risks in their own work. Understanding these perceptions is critical for designing effective institutional policies, capacity-building programs, and ethical guidelines that support responsible AI integration while safeguarding academic integrity (Amihan et al., 2023). This study aims to fill that gap by providing data-driven insights specific to the Philippine research context.

Theoretical and Conceptual Framework

This study is anchored in the Technology Acceptance Model (TAM), first introduced by Davis (1989), which remains one of the most widely used frameworks for understanding technology adoption. TAM posits that two core factors—perceived usefulness and perceived ease of use—determine an individual's intention to adopt and use a new

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technology. In the research context, perceived usefulness refers to the degree to which a researcher believes that AI will enhance their scholarly work, while perceived ease of use captures how effortless they perceive it will be to integrate AI tools into their workflows (Sanchez, 2023).

In adapting TAM to this study, perceived advantages of AI were conceptualized as analogous to perceived usefulness. These advantages may include improved efficiency, enhanced analytical rigor, and greater accessibility to advanced research methods. Conversely, perceived risks were treated as barriers to adoption, similar to perceived ease-of-use constraints in the original model. Risks might encompass concerns about plagiarism, ethical misuse, algorithmic bias, and the loss of critical scholarly skills. Together, these dimensions help explain not just whether researchers will adopt AI tools but how they weigh the trade-offs between benefits and risks (Carvajal et al., 2024).

The model also predicts a specific relationship between these perceptions: higher perceived risks are expected to reduce the perceived advantages of AI. This is consistent with Davis's original proposition that barriers to use negatively affect perceived usefulness and, by extension, adoption intention. In this study, this theoretical link is tested empirically through correlational and regression analyses, allowing for an assessment of how strongly perceived risks predict reduced endorsement of AI's benefits among research practitioners in the Philippines (Amihan & Sanchez, 2023).

Applying TAM in the Philippine research context provides a structured way to investigate not only individual attitudes but also institutional and cultural factors that shape them. For instance, limited access to training, inconsistent ethical guidelines, and resource disparities across regions may heighten perceived risks and dampen enthusiasm for AI adoption. By framing these issues through TAM, the study can capture both individual-level and systemic influences on researchers' technology acceptance (Carvajal & Sanchez, 2023).

Ultimately, using TAM as the theoretical and conceptual framework enables this research to move beyond descriptive accounts of AI's advantages and risks. It offers a testable model that clarifies the mechanisms linking these perceptions and provides evidence that can inform policy, training, and institutional support. In doing so, the study contributes not only to local capacity-building but also to the broader scholarly conversation on responsible and equitable AI integration in research worldwide (Sanchez et al., 2024).

METHODOLOGY

Research Design

This study employed a descriptive–correlational research design to systematically examine the perceived advantages and risks of using Artificial Intelligence (AI) in research among academic practitioners in the Philippines. The descriptive component enabled the researchers to document and quantify the levels of perceived advantages and perceived risks, providing a detailed snapshot of current attitudes toward AI integration in scholarly work. Such an approach is valuable for mapping the overall landscape of AI perceptions in the academic community (Amihan et al., 2023).

Beyond description, the correlational component allowed for the analysis of the relationship between perceived advantages and perceived risks. By assessing whether and how these two constructs are related, the study tested a theoretically derived hypothesis grounded in the Technology Acceptance Model (TAM). Specifically, it examined whether higher perceived risks are associated with lower endorsement of AI's advantages—a critical relationship for understanding barriers to responsible AI adoption (Carvajal et al., 2025).

The choice of a descriptive–correlational design is appropriate given the study's goals of informing policy and capacity-building initiatives (Mukattil et al., 2023). Rather than manipulating variables in an experimental setting, this design captures practitioners' authentic perceptions in their natural research environments. The findings can therefore directly inform institutional strategies for promoting ethical and effective AI integration while addressing researchers' genuine concerns.

Population and Sampling

The population for this study comprised academic research practitioners employed in both basic and higher education institutions across the three major island groups of the Philippines: Luzon, Visayas, and Mindanao. This included faculty members actively engaged in research, members of institutional research offices, and professionals participating in funded research projects. Recognizing the diversity of institutional contexts and regional disparities, the study sought to ensure a broad and inclusive sampling frame (Carvajal et al., 2024).

To achieve representativeness, the study employed stratified random sampling, dividing the national population of research practitioners into strata based on geographic location. This sampling strategy ensured

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proportional representation from each island group, mitigating the risk of geographic bias that might otherwise privilege more urbanized or better-resourced areas. It also helped capture variations in access to AI tools, training opportunities, and institutional support across regions.

From this stratified sampling approach, a final sample of 125 respondents was recruited. Participants were drawn from diverse institutions, including state universities and colleges, private higher education institutions, and selected public school divisions with active research programs. This sampling strategy supports the generalizability of the study's findings to the broader population of research practitioners in the Philippines, providing valuable evidence for national-level policy and training initiatives.

Instruments

Data were collected using a structured self-administered questionnaire designed to comprehensively assess the study variables while ensuring ease of use for busy research practitioners. The instrument was divided into three sections: demographic data to contextualize responses; the AI Advantages Scale to measure perceived benefits of AI in research; and the AI Risks Scale to assess concerns and perceived barriers to adoption. This design ensured that all relevant dimensions of the research questions were systematically addressed.

The AI Advantages Scale comprised 10 items rated on a 5-point Likert format (1 = Strongly Disagree to 5 = Strongly Agree), capturing perceptions of AI's potential to enhance research efficiency, analytical rigor, and accessibility. The AI Risks Scale, also with 10 items on the same scale, measured concerns related to plagiarism, bias, ethical misuse, and the erosion of critical scholarly skills. Both scales demonstrated excellent internal consistency, with Cronbach's alpha coefficients of 0.88 and 0.85, respectively, indicating high reliability (Punzalan et al., 2025).

To ensure validity and appropriateness for the Philippine research context, the instrument underwent expert review by three specialists in research ethics, who evaluated item clarity, relevance, and cultural sensitivity. It was then pilot-tested with 20 research practitioners from diverse institutions, allowing for refinements based on respondent feedback. This rigorous development process enhanced the instrument's credibility and ensured it was both understandable and meaningful to the target population.

Data Collection

Data collection was conducted over a two-month period, from March to April 2025, to ensure adequate time for reaching participants across varied institutional and geographic contexts. Given the logistical challenges of nationwide research and the ongoing digitalization of academic work, the study adopted an online survey approach, maximizing accessibility and respondent convenience while minimizing costs and travel barriers.

Surveys were distributed through institutional research offices, faculty email lists, and professional research networks, leveraging existing channels of academic communication. This approach helped ensure that invitations reached the intended population of active research practitioners, including those working in remote or under-resourced areas who might otherwise be excluded from face-to-face recruitment (Sanchez, 2025). Participation was entirely voluntary, and no incentives were offered to minimize potential bias in responses.

Prior to completing the survey, all participants provided informed consent electronically, in compliance with ethical guidelines. The consent form explained the study's purpose, procedures, potential risks, benefits, and data confidentiality measures. Participants were assured of their right to withdraw at any time without penalty. This careful approach to recruitment and consent reflects a commitment to ethical research practices and respect for participant autonomy.

Statistical Treatments

Data analysis was conducted using SPSS software, employing a range of statistical techniques tailored to the study's descriptive and correlational objectives. Descriptive statistics—including means, standard deviations, and frequency distributions—were calculated to summarize the levels of perceived advantages and perceived risks among respondents. This provided a clear, interpretable overview of prevailing attitudes toward AI use in research across the sample.

To examine the relationship between perceived advantages and perceived risks, the study employed Pearson correlation analysis, testing the hypothesis derived from the Technology Acceptance Model that higher perceived risks would be associated with lower endorsement of AI's advantages. The strength and direction of this relationship were interpreted using established guidelines, with significance levels set at $p < .05$ to ensure statistical rigor.

Additionally, regression analysis was performed to explore the predictive capacity of perceived risks on perceived advantages, quantifying the extent to which perceived risks explained variability in perceived advantages

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scores. This approach provided a deeper understanding of the dynamics shaping research practitioners' attitudes toward AI, yielding practical insights for institutional policy-making, capacity-building initiatives, and the design of ethical AI guidelines.

Ethical Considerations

This study was designed and implemented with strict adherence to institutional ethical guidelines, ensuring respect for participant rights, data privacy, and research integrity. The researchers carefully reviewed the study's objectives, instruments, consent procedures, and data management plans, demonstrating the project's commitment to ethical rigor (Carvajal et al., 2024).

Participation in the study was entirely voluntary and anonymous. Prospective participants were informed about the purpose of the study, the nature of the questions, potential risks and benefits, and the steps taken to ensure data confidentiality. Informed consent was obtained electronically before participants could proceed with the survey. Respondents were assured that they could decline participation or withdraw at any stage without penalty, safeguarding their autonomy and well-being.

Data security was also a priority. Survey responses were collected through secure online platforms with encryption features, and data were stored in password-protected files accessible only to the research team. No identifying information was linked to individual responses, ensuring participant anonymity throughout the research process. These ethical safeguards reflect best practices in social science research and underscore the study's commitment to protecting participants while advancing scholarly knowledge.

RESULTS and DISCUSSION

Descriptive Statistics

Table 1 shows the descriptive statistics for perceived advantages and risks of AI use in research.

Table 1. Descriptive Statistics of Perceived Advantages and Risks (N = 125)

Variable	Mean	SD
Perceived Advantages	4.21	0.55
Perceived Risks	3.12	0.67

Table 1 summarizes the perceived advantages and perceived risks of AI use in research among 125 academic practitioners across the Philippines. Respondents reported a high level of perceived advantages (M = 4.21, SD = 0.55), indicating widespread agreement that AI offers significant potential to improve research processes. These advantages likely include automating repetitive tasks, accelerating data analysis, improving writing quality, and supporting multilingual scholarship (Khalifa & Albadawy, 2024).

In contrast, perceived risks were moderate (M = 3.12, SD = 0.67). While not overwhelmingly high, this score suggests that many practitioners maintain a cautious stance toward AI adoption (Daly et al., 2025). Concerns identified in previous studies—such as plagiarism facilitation, algorithmic bias, opaque decision-making processes, and loss of critical thinking—appear to resonate with Philippine researchers (Baltazar et al., 2024; Doria, 2024).

These results align with regional studies in Southeast Asia. For example, Wibowo et al. (2025) reported high enthusiasm for AI's research utility in neighboring countries but also identified limited training in responsible use. This parallel suggests that the Philippine context reflects a broader regional dynamic where technological promise and ethical caution coexist.

Importantly, the spread of responses (SD values) indicates variability in perceptions across the sample. Some respondents may be strong AI enthusiasts who see it as a vital tool for overcoming resource constraints, while others may harbor deep reservations about its potential to undermine academic integrity. Such heterogeneity underlines the need for context-sensitive institutional policies that accommodate diverse perspectives.

Overall, these descriptive statistics provide a foundational portrait of how AI is viewed by research practitioners in the Philippines. The high perceived advantages demonstrate readiness to adopt AI tools, while moderate

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perceived risks signal the importance of carefully addressing ethical, methodological, and policy concerns before wide-scale institutional integration.

Correlation Analysis

A Pearson correlation was conducted to examine the relationship between perceived advantages and perceived risks.

Table 2. Correlation Between Perceived Advantages and Perceived Risks

Variables	r	p-value
Advantages–Risks	–0.42	< .01

Table 2 presents the Pearson correlation between perceived advantages and perceived risks of AI use in research, revealing a significant negative relationship ($r = –0.42$, $p < .01$). This finding indicates that as perceived risks increase, endorsement of AI's advantages tends to decline. The moderate strength of this correlation suggests that while the relationship is not absolute, it is consistent enough to merit serious attention in policy and training design.

This negative correlation supports the Technology Acceptance Model (TAM), which posits that perceived barriers reduce perceived usefulness and, by extension, adoption intentions (Davis, 1989). Higher concerns about plagiarism, bias, or misuse can dampen enthusiasm for adopting AI tools, even among researchers who recognize their potential benefits (Farhi et al., 2023; Omrani et al., 2022)

Similar patterns have been observed in international research. Papakonstantinidis and Spathopoulou (2024) found that academics wary of AI's ethical pitfalls were less likely to adopt AI-driven writing assistants or analysis tools, underscoring how perceived risks can be a significant barrier to integration. Such findings reinforce the importance of addressing risk perceptions through targeted education and policy (Keser, 2024).

Ignoring ethical concerns can result in "ethical debt," where institutions embrace new technologies without adequate safeguards, ultimately damaging credibility and trust (Petrozzino, 2021). The observed correlation in this study highlights the necessity for institutions to proactively manage perceived risks to facilitate responsible AI adoption.

In the Philippine context, this correlation underscores the importance of developing context-sensitive training programs and clear guidelines that address local concerns, resource constraints, and disciplinary differences. Without such interventions, AI adoption may be fragmented, uneven, or ethically compromised despite strong interest in its advantages.

Regression Analysis

Regression analysis further examined whether perceived risks predict perceived advantages, yielding a significant negative beta coefficient ($\beta = –0.42$, $p < .01$). This model explained approximately 18% of the variance ($R^2 = 0.18$) in perceived advantages, indicating that perceived risks are an important, though not exclusive, factor shaping researchers' views on AI adoption.

These results are consistent with TAM's assertion that barriers to use significantly inhibit perceptions of usefulness. The finding empirically confirms that in the Philippine academic research context, perceived ethical and practical risks reduce the likelihood of endorsing AI tools for scholarly work. This predictive relationship offers evidence-based justification for institutional investments in risk mitigation.

Prior studies also support this link. For instance, Rane et al. (2024) emphasizes that while AI offers efficiency gains, lack of ethical literacy and uneven policy enforcement can depress user confidence and slow adoption. Concerns over opacity and bias can deter even technologically proficient researchers from using AI tools in high-stakes academic work.

The 18% variance explained suggests that while perceived risks are important, other factors—such as perceived ease of use, institutional support, disciplinary norms, and personal technological literacy—also shape researchers' perceptions of AI's advantages. This finding aligns with nuanced applications of TAM that recognize multiple determinants of technology acceptance (Rahimi & Oh, 2024).

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In sum, the regression analysis strengthens the case for multifaceted interventions. Addressing perceived risks alone is necessary but insufficient; institutions must also improve ease of use, provide equitable access to tools and training, and build cultures of responsible AI use to fully harness its benefits in research practice.

The study's findings reveal a complex but instructive picture of AI adoption among academic research practitioners in the Philippines. High perceived advantages underscore that researchers recognize AI's potential to address longstanding challenges—such as resource constraints, high teaching loads, and the need for efficient analysis and writing support. This mirrors global patterns where AI is seen as a tool for democratizing access to advanced research capabilities (Dessimoz & Thomas, 2024).

At the same time, moderate perceived risks indicate a healthy skepticism among practitioners. Concerns about plagiarism, algorithmic bias, and loss of critical thinking echo warnings in the global literature. This skepticism is not necessarily a barrier to adoption but rather a call for responsible integration—one that balances technological innovation with rigorous ethical safeguards (Oprea et al., 2024).

The significant negative correlation between perceived risks and advantages corroborates the Technology Acceptance Model's premise that barriers reduce perceived usefulness (Davis, 1989). This dynamic has also been observed in studies of AI use in writing and education, such as Lund et al. (2024), who found that ethical anxieties lower adoption rates among academics. Addressing these barriers through policy and training can therefore enhance acceptance without sacrificing integrity.

Furthermore, the regression findings highlight the predictive role of perceived risks in shaping AI endorsement, suggesting that interventions must go beyond superficial promotion of AI's benefits. Programs must directly tackle researchers' ethical concerns, provide clear guidance on proper use, and build critical AI literacy. Building trust through transparency and education is essential for sustainable, responsible AI adoption (Raza et al., 2024).

Ultimately, the study underscores the need for context-sensitive, evidence-based strategies to guide AI integration in Philippine academic research. Policies must account for local resource disparities, disciplinary differences, and regional variations in access to training and tools. By centering the voices of research practitioners themselves, this study provides actionable insights to help institutions navigate the dual promise and peril of AI in research.

Conclusion

This study explored the perceptions of academic research practitioners in the Philippines regarding the advantages and risks of AI use in research. Results revealed high perceived advantages, reflecting recognition of AI's potential to improve research efficiency, accuracy, and accessibility. Simultaneously, moderate perceived risks signaled cautious awareness of ethical and methodological challenges, including plagiarism, bias, and loss of critical skills. A significant negative correlation between perceived risks and advantages confirmed that higher perceived risks reduce endorsement of AI's benefits. Regression analysis showed that perceived risks significantly predict perceived advantages, underscoring the importance of directly addressing these concerns. These findings emphasize the need for balanced, responsible AI integration that maximizes benefits while mitigating ethical pitfalls through targeted policy, training, and institutional support.

Recommendations

1. Develop Context-Sensitive Institutional Guidelines
   Higher education institutions should collaboratively create clear, culturally relevant guidelines for ethical AI use in research. These should address issues such as citation practices for AI-generated text, originality checks, data privacy, and acceptable use policies tailored to local academic contexts.
2. Implement Mandatory AI Ethics Training
   Offer regular, mandatory workshops for faculty, staff, and students on responsible AI use. These trainings should cover practical, ethical, and legal dimensions—including avoiding plagiarism, recognizing bias, and ensuring transparency in AI-assisted research.
3. Integrate AI Literacy in Curricula
   Embed AI ethics and literacy modules into graduate programs and faculty development courses. Focus on critical evaluation of AI tools, understanding algorithmic bias, and fostering responsible integration into scholarly workflows.
4. Establish Institutional Review Mechanisms

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Create or strengthen research ethics boards or committees with clear mandates to evaluate AI use in research proposals, monitor compliance with guidelines, and offer ongoing support and consultation for ethical dilemmas.

5. Promote Equitable Access and Capacity-Building
   Ensure that researchers across regions have equal access to reliable AI tools, training resources, and technical support. Prioritize funding for capacity-building initiatives in under-resourced institutions to avoid exacerbating existing disparities in research capacity and quality.

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