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Artificial Intelligence Adoption Practices in Scholarly Publishing of Early-Stage Academic Researchers

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Abstract

Background. Artificial intelligence has drastically changed work environments, resulting in skill shifts in the workforce.

With catch-up formal instructions on AI utilisation, adult learners rely on self-directed and experiential learning for upskilling and reskilling of technology adoption in their workflows. In higher education, students and faculty employ various strategies for adopting AI technology in academic course requirements and research undertakings. Developing a theory of planned behaviour for the adoption of generative AI in an educational setting requires an investigation of perceived and actual behavioural controls of non-users and users of AI applications.

Objectives. This study investigated the AI adoption practices of early-stage academic researchers in a teaching-focused institution for scholarly publishing.

Materials and methods. The intention and behaviour of AI adoption and utilisation were examined for 50 graduate students and 50 academic faculty from a teaching-focused higher education institution. An AI utilisation framework was adapted to investigate the four components of scholarly publishing: research conception, academic writing, editing and proofreading, and academic publishing. Descriptive statistics were used to present and analyse AI adoption and utilisation patterns in scholarly writing and publishing.

Results. Findings show that only half of the respondents used AI for idea extraction, grammar checking, and paraphrasing. Furthermore, there was a general perception of satisfactory ability for the planned and actual utilisation of AI for research conception, academic writing, editing, and proofreading.

Conclusions. As an implication of adult learning theory and methodology, the study provides valuable insights for integrating AI literacy into contemporary educational frameworks.

Keywords: AI adoption strategies, early-stage academic researchers, scholarly publishing.

Introduction

Artificial intelligence (AI) is one of the technologies that has rapidly diffused and disrupted multiple industries, businesses, and societies over a short period. For many years, leading experts have projected that AI will continue to shape the nature of future work in the upcoming decades (Butler, 2016; De Sio et al., 2021, Liu & Siau, 2023; Le et al., 2025). Intelligent systems have been shown to enhance work productivity, efficiency, and participation beyond human abilities (Ansari & Ahmed, 2024; Kassa & Worku, 2025; Gowda et al., 2025). In particular, integrating generative AI in work environments replaces the human workforce with the following mechanical and routine tasks: documentation, scheduling, data collection, and preliminary analysis (Huang et al., 2019). However, AI has drastically changed work environments, resulting in skills shifts among the workforce (Jaiswal et al., 2021; Morandini et al., 2023; Pradhan & Saxena, 2023; Bodea et al., 2024). Emphasis on the upskilling and reskilling of social and decision-making skills, which are non-replicable by intelligent systems (Chuang, 2022) and for human-AI augmentation (Nguyen & El-Banna, 2025). Furthermore, the workforce needs to train in technical proficiency and adaptability for AI integration to adapt to the age of the fourth industrial revolution (Babashani et al., 2024).

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For the educational sector, higher education is facing challenges in preparing students for a fast-changing and evolving market landscape with integration into AI and automation (Faraj, 2022; Santos et al., 2023). There is a need to develop teaching and learning processes for AI utilisation. However, higher education institutions face multiple challenges in developing and implementing AI-driven student learning outcomes. Reported challenges from the systematic literature review of generative AI in education are as follows: costly infrastructure investment for educational tools, lack of actionable guidelines in integrating AI in education, limited AI expertise of educators, and weak data governance framework (Alsharahni et al., 2024). In addition, research collaboration on pedagogical theories for AI utilisation is reported to be limited in various countries (Lopez-Regalado et al., 2024). Moreover, older academic faculty have been observed to contribute less to AI-based educational innovations (Villegas-Jose & Delgado-Garcia, 2023). In higher education, students and faculty employ various strategies to adopt AI technology in academic course requirements and research. In this circumstance of catch-up formal instructions on AI utilisation, adult learners rely on self-directed and experiential learning to upskill and reskill technology adoption in their workflows. It was reported that AI-supported self-directed learning may provide autonomy and competence needs for learners (Younas et al., 2025). However, facilitation with an educator is still ideal for students' self-directed learning with AI utilisation (Yildirim et al., 2023).

Integrating generative AI applications in academic course requirements and scholarly publishing has raised concerns with higher education institutions (Lund et al., 2023; Han et al., 2025; Kovari, 2025). Although AI tools assist students and faculty in academic writing, ethical issues emerge from copypasted and paraphrased AI-generated content (Alasadi & Baiz, 2023; Cui & Zhang, 2025; Chemaya & Martin, 2024; Nguyen, 2025). It was argued that AI utilisation should be integrated ethically into the academic culture instead of relying on AI-generated content detection applications (Otterbacher, 2023). Thus, there is a need for pedagogical orientation of academic faculty in the ethical use and deep learning with AI to encourage higher-order thinking skills in students (Villegas-Jose & Delgado-Garcia, 2023). AI adoption strategies in academic writing should be studied for pedagogical theories on teaching and learning AI utilisation. There are several models for technology adoption in educational settings. For example, the technology acceptance model (TAM) on generative AI in academic writing was used to probe active learning (van Niekerk et al., 2025). TAM was utilised for a series of interventions to address the over-reliance and inappropriate utilisation of generative AI. On the other hand, the diffusion of innovation (Doi) theory was used to investigate the adoption of AI tools for journalism writing (Mariani, 2024). However, TAM and Doi do not account for the subjective norms such as peer influence, administrative support, and policy constraints that may affect AI utilisation (Ajibade, 2018; Al-Bukhrani et al., 2025).

The theory of planned behaviour (TPB) and the theory of reasoned action (TRA) may incorporate external factors in adopting generative AI in academic writing. TRA has been used to investigate the adoption strategies of academic faculty in various disciplines and career stages with AI writing tools for academic writing (Al Bukhrani et al., 2025). However, no study compares the adoption strategies of early-stage academic researchers in graduate programs or serving as academic faculty in a teaching-focused institution. Investigating early-stage researchers or early-career academics in a teaching-focused environment is imperative for higher education institutions in the Global South to transition to a research-intensive orientation (Rosario et al., 2025). Developing a TPB model for adopting generative AI in this academic setting requires an investigation of perceived and actual behavioural controls of non-users and users of AI applications. Thus, this study reports on the behavioural control of adult learners in integrating AI technology into academic research. It was reported that perceived behavioural control significantly influences students in adopting AI tools (Chang et al., 2024). The intention and behaviour of AI adoption and utilisation were examined for graduate students and academic faculty from a teaching-focused higher education institution. An AI utilisation framework (Zoherty, 2023) was adapted to investigate the four components of scholarly publishing: research conception, academic writing, editing and proofreading, and academic publishing.

Materials and Methods

Study Participants

For this study, one hundred (100) participants were recruited from a teaching-focused higher education institution: fifty (50) graduate students and fifty (50) faculty members. The participants included academics and graduate students identified as early-stage researchers. The sample was purposively selected to represent various disciplines within the institution. 50 faculty members represent 30% of the full-time faculty members in the academic organisation.

Study Organisation

The Philippine State College of Aeronautics (PhilSCA) is the only local state university and college (SUC) with baccalaureate and graduate programs in aeronautics and aviation. For the faculty cohort, the online survey was distributed during the RDLead mentoring program at the following four (4) campuses of PhilSCA, which are located in various regions of the country. For the cohort of graduate students, an online survey was distributed to the Institute of Graduate Studies (IGS) of PhilSCA. The students are enrolled in the Master of Education in Aeronautical Management (MEAM) and Master of Public Administration (MPA) Programs. PhilSCA has been identified as a teaching-focused institution at the SUC level and stage of organisational research productivity (Rosario et al., 2025).

Research Instrument

An online survey was developed from the AI utilisation framework on the application of AI in the academic writing and publishing of Zohery (2023). The four elements of the AI utilisation framework are the following: research conception, editing and proofreading, academic writing, and academic publishing. Various tasks with AI assistance for scholarly writing and academic publishing have been identified in the framework. Descriptive information, demographic profiles

and AI utilisation patterns and behaviour in academic writing and publishing were collected. In this study, individual behaviours on using AI assistance for scholarly writing and academic publishing were categorised depending on three phases: (a) perceived, (b) planned, and (c) actual utilisation. Firstly, perceived AI utilisation is the potential behaviour in utilising AI for scholarly writing, where these individuals have no experience in any AI applications. Planned AI utilisation is the arranged application of AI in scholarly writing, where these individuals have used AI applications but lack experience in scholarly writing. Lastly, actual AI utilisation is the current usage of AI for scholarly writing, where these individuals have used AI in the writing of their research work.

Data Collection and Analysis

An online survey was distributed to the academic faculty and graduate students as part of the journal article writing workshops of the RDLead mentoring program for PhilSCA. For descriptive statistics, the percentage of the frequency of categories of demographic profiles and AI utilisation behaviour was computed. The frequency of the top-rank five tasks on academic writing and publishing was presented. Mean and standard deviation were also calculated for the perceptions of the level of capability of AI utilisation.

Ethical Considerations

The online survey was part of the baseline data collection on the research readiness assessment conducted by the RDLead program and the Research and Development Centre (RDC) of PhilSCA. A consent form was presented on the first page of the online survey. The personal identities of the respondents were maintained to be anonymous and secure. Ethical approval was granted by the PhilSCA-RDC (Ref. No. RDC-01-2024).

Results

Demographic Profile

The demographic profiles and research credentials of the sample population of graduate students and faculty from the teaching-focused HEI are presented in Table 1. For both cohorts, most respondents were males between the ages of 26 and 45 and had master units as the highest educational attainment. Several graduate students (82%) and faculty (54%) have no scholarly writing experience. On the other hand, around 30% of the graduate students and 40% of the faculty members have less than 5 years of experience in scholarly writing with mostly thesis advisers in higher education institutions. In addition, more than 80% of graduate students and faculty have no published journal articles. In this case, the majority of the respondents of the study can be considered early-stage researchers, who will either conduct a thesis or faculty research. Early-stage researchers are defined as faculty and students without and few scholarly publications. More than 80% of both cohorts have not published in any journal publications.

AI Utilisation Patterns

The AI applications and the utilisation frequency used by the respondents are shown in Figures 1 and 2, respectively.

Table 1. Demographic profile of the respondents of the study

Demographic Profile Category	Overall (n = 100)		Graduate Student (n = 50)		Faculty (n = 50)	
	Frequency (f)	Percentage (%)	f	%	f	%
Age (Years)						
18-25	18	18.0	10	20.0	8	16
26-45	64	64.0	36	72.0	28	56
46-60	17	17.0	4	8.0	13	26
Above 60	1	1.0	0	0	1	2
Sex						
Male	78	78.0	37	74	41	82
Female	18	18.0	13	26	9	18
Highest Educational Attainment						
Bachelor	5	5.0	0	0	5	10
With masters units	72	72.0	50	100.0	22	44
Masters	9	9.0	0	0	9	18
With doctoral units	7	7.0	0	0	7	14
Doctoral	7	7.0	0	0	7	14
Experience in Scholarly Writing (Years)						
None	68	68.0	41	82.0	27	54.0
Less than 5 years	29	29.0	9	18.0	20	40.0
6-10 years	2	2.0	0	0	2	4.0
Above 10 years	1	1.0	0	0	1	2.0
Journal Publications						
None	87	87.0%	46	92.0%	41	82.0%
1-5	11	11.0%	3	6.0%	8	16.0%
6-10	2	2.0%	1	2.0%	1	2%

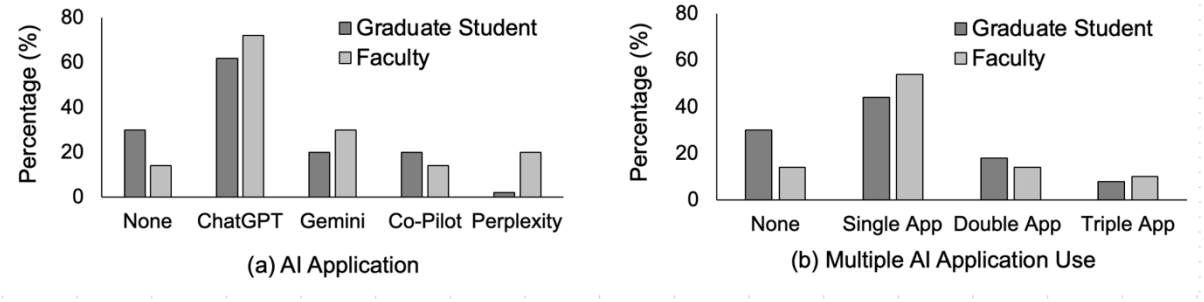

Fig. 1. (a) AI applications and (b) multiple AI utilization

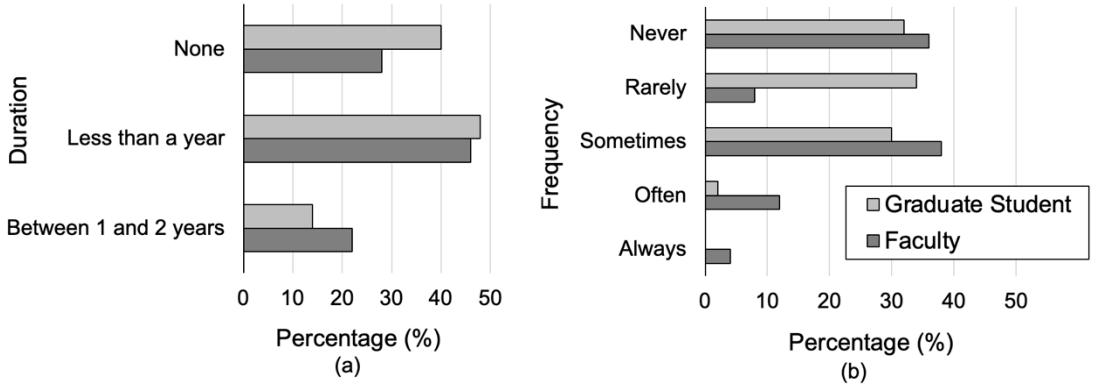

Fig. 2. (a) Duration and (b) frequency of AI utilisation

AI utilisation patterns provide a background on individual preferences and interaction with AI applications. Most graduate students (62%) and faculty (72%) use OpenAI's ChatGPT as the primary AI tool. ChatGPT has been observed to be the most popular tool for AI integration in various environments, with more than 100 million unique users (De Winter et al., 2025). Besides this, both cohorts only use a single AI application (see Fig. 1). Other AI applications used were Google's Gemini, Microsoft's Co-Pilot, and Perplexity. However, it should be noted that a minority do not utilise AI, with 30% for graduate students and 14% for faculty. For the duration of AI utilisation, around 50% of the cohorts have used AI for less than a year (see Fig. 2). Moreover, between 30% and 40% of the graduate students and faculty occasionally use AI. Around 50% of graduate students plan to use AI for scholarly writing of their thesis and future submissions in peer-reviewed journal publications. On the other hand, 23 (46%) and 21 (42%) faculty members have plans and actual utilisation of AI in their research work, respectively.

AI Utilisation Tasks for Scholarly Publishing

For research conceptualisation, more than half of respondents identified idea extraction for research conception (more than 20 responses) as a task where AI assistance is employed both for planned and actual utilisation (see Fig. 3). In terms of actual AI utilisation for the faculty, more than 20% have used AI for literature review and research design. Regardless of being AI application users and having scholarly writing experience, around half of the graduate students (56%) and faculty (48%) lack ideas on potential tasks for AI-assisted research conception.

For academic writing, paraphrasing has been identified as one of the highest-rated AI-assisted tasks for both graduate students and faculty (both close to 60% of the responses in Fig. 4). It has also been observed that the actual utilization of AI from the faculty is higher than graduate students for almost all tasks for both categories, which include title and keyword generation, English writing, and reference management.

For editing and proofreading, grammar checking has been seen as the most rated task by 66% of graduate students (33 responses) and 78% (36 responses) of faculty among the AI utilization behavior of the respondents (see Fig. 5). Less than 1% of the respondents are not aware of the AI utilization for editing and proofreading. It is also noteworthy that citation checking, spelling correction, and vocabulary enhancement are highly rated tasks with more than 20% and 40% responses from graduate students and faculty, respectively.

For academic publishing, it is shown that faculty have used AI for journal finding, review, and formatting (Fig. 6). However, a large population of graduate students (42%) and faculty (22%) are not aware of the capabilities of AI for academic publishing. Furthermore, around 20% of non-user and AI users from graduate students lack perceived and planned utilization of generative AI in academic publishing, respectively.

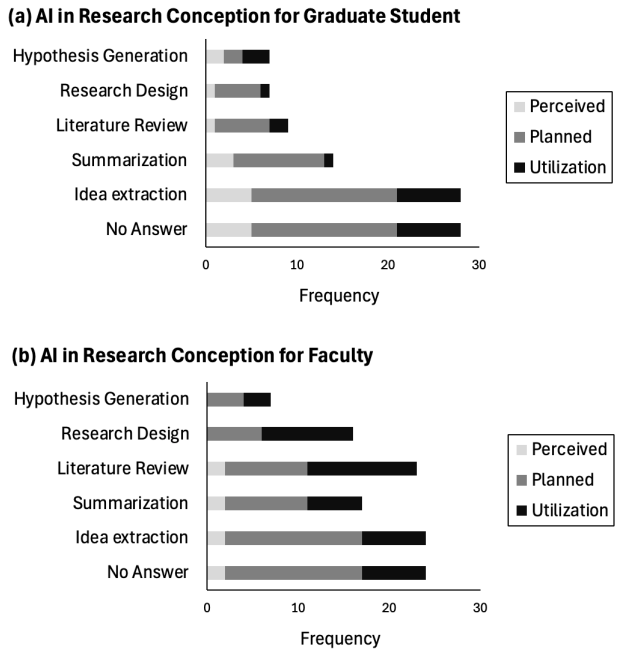

Fig. 3. AI Utilization in Research Conception

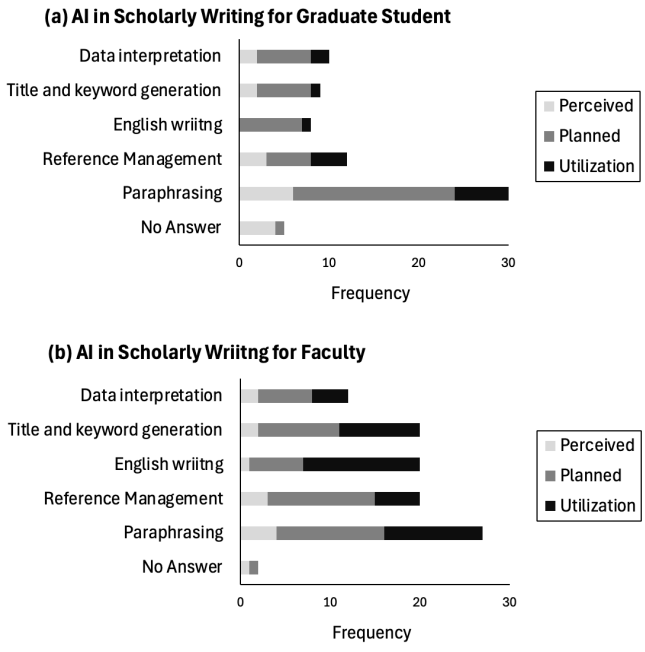

Fig. 4. AI Utilization in Academic Writing

Complementary to the AI utilization tasks of the respondents, the level of their ability for AI utilization was also investigated. Verbal interpretations used for this study are standard for a 5-point Likert scale, where mean values of 2.51-3.50 refer to satisfactory ability. Table 2 shows that half of the graduate students (50%) have satisfactory ability for planned AI utilization, except for scholarly writing and academic publishing. On the other hand, planned and actual AI utilizations have satisfactory abilities except for AI utilization in academic publishing for graduate students (m = 2.04) and faculty (m = 2.45).

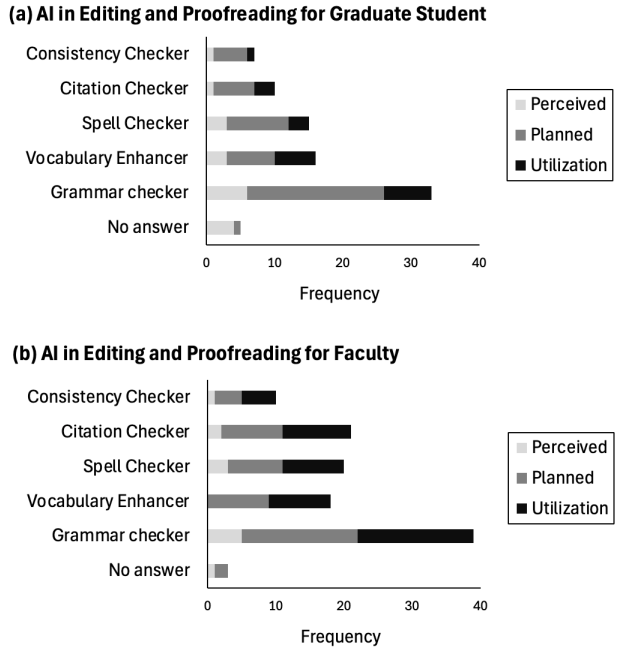

Fig. 5. AI Utilization in Editing and Proofreading

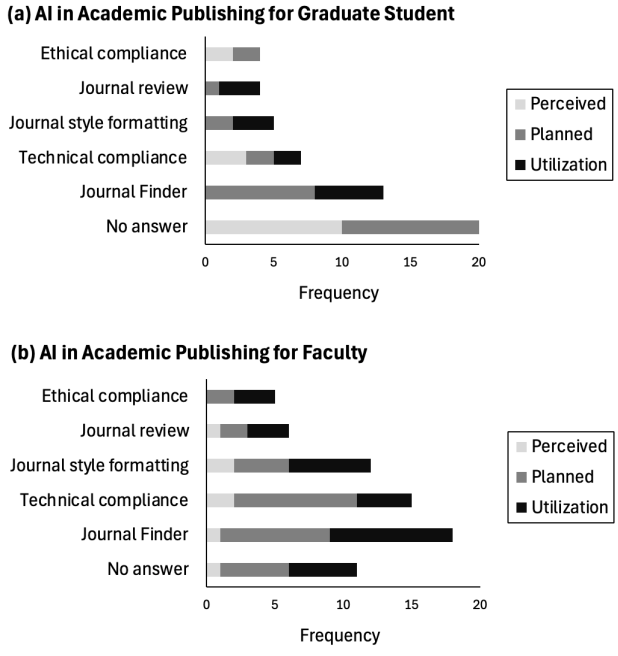

Fig. 6. AI Utilization in Academic Publishing

Discussion

AI utilisation patterns offer insights into individual preferences and interactions with AI applications. For AI users, more than two-thirds of graduate students and faculty use ChatGPT as the primary AI application. However, it should be noted that one-third of graduate students and less than a quarter do not utilise AI. Around half of the users have less than a year of experience with AI utilisation and only one-third with occasional use. On the other hand, almost half of the graduate students and academic faculty plan for AI-assisted scholarly publishing.

Table 2. Level of capability for AI utilisation

AI Utilisation Framework Components	Perceived		Planned		Utilisation	
	Mean (m)	SD	Mean (m)	SD	Mean (m)	SD
Graduate Student (n = 50)	n = 15		n = 25		n = 10	
Research Conception	2.29	1.27	2.60	0.76	3.00	1.05
Editing and Proofreading	2.07	1.07	2.64	0.81	3.10	0.88
Academic Writing	2.07	1.00	2.48	0.87	2.80	0.92
Academic Publishing	1.64	0.93	2.04	0.98	2.50	0.97
Faculty (n = 50)	n = 6		n = 23		n = 21	
Research Conception	2.50	0.84	2.91	1.08	2.80	1.06
Editing and Proofreading	2.83	0.98	3.00	1.09	2.85	1.04
Academic Writing	2.50	0.84	2.78	0.95	2.90	0.97
Academic Publishing	2.67	0.82	2.65	1.03	2.45	1.23

The Commission on Higher Education (CHED) released memorandum orders that focus on the generation of journal publications from HEIs. CHED issued 2019 guidelines for granting autonomous status to HEIs in terms of research involvement of 50 full-time faculty (or 30% of the full-time faculty members) and publications in refereed journals for at least 10% of the full-time faculty members. CHED also issued Memorandum Order No. 15, series of 2019, which requires all graduate students to publish an article in a refereed journal. Also in the same year, CHED issued a memorandum requiring all graduate students to publish an article in a refereed journal as a requirement for graduation. Despite the existing educational policies requiring graduate students and SUC faculty to publish in peer-reviewed journals for program completion and promotion, only nearly half of the respondents have utilised AI tools for scholarly publishing. A study reported a correlation between enhanced research productivity with AI usage (Tuppal et al., 2025). However, some academic researchers express concerns about ethics and academic integrity despite their AI-assisted research undertaking (Adewale, 2024).

AI utilisation patterns form a subset of individual behaviour in their interactions with AI applications for academic writing and publishing. In this study, the AI utilisation behaviour of graduate students and faculty was categorised into four major tasks of scholarly writing and academic publishing Zohery (2023): research conception, editing and proofreading, academic writing, and academic publishing. A similar study reported the collaborative writing components with generative AI: planning, translating, reviewing, and integrating (Lee, 2024). The perceived, planned, and actual utilisation tasks with AI applications were identified by the respondents. Perceived utilisation refers to the imagined usage of AI by non-users depending on their awareness and impression of existing applications. On the other hand, planned utilisation is an intended usage of AI based on the current experience of the users. Behavioural intention was found to act as a mediator variable to perceived use and use behaviour for AI tool adoption (Ma et al., 2024). Actual AI utilisation is based on the real-world applications and outcomes encountered by users in performing AI-assisted scholarly writing and publishing. The perceived usefulness of AI tools from experienced users promotes continuous usage intention (Kim et al., 2025). Understanding the context of AI utilisation for these three types of groups may provide a baseline of assumptions and gaps that may be used as a basis for teaching and training for AI-assisted scholarly writing and publishing.

This finding may be supported by Hodge et al. (2022), who stated that one of the central spheres of lifelong education research is adult learning. It is recognised that in adult learning, context is a key factor, changing life experience into knowledge and skills. In addition, according to Govindaraju (2021), the more adults are familiar with a knowledge base, the more effective their training can be. This gives an opportune space for graduate students and faculty members to learn more about AI, and eventually do more AI-assisted scholarly work in the future.

Another factor to be considered in adult learning is that it is fundamentally an independent process, where adult learners do self-directed learning and feel accountable for achieving their education goals. The good thing is, that adults can cope with a variety of learning opportunities for their professional and personal growth (Boeren, 2017, as cited in Govindaraju, 2021), and this includes the opportunity provided by digital technology, such as the use of AI.

These observations point to Knowles' (1968) assertion that adult learning (called andragogy) is different from childhood learning (called pedagogy), primarily due to these assumptions: adults need to know why they must learn a specific material or technology, they need to learn experientially as they focus more on the process and not on the assessment, and they approach learning with critical thinking (Knowles, 1984, as cited in El-Amin, 2020) where they take responsibility for their learning decisions throughout the undertaking. These learning inclinations of adults and the nature of AI that requires human intelligence, such as learning, reasoning, and problem-solving, give room for synergy. This synergy could offer a range of transformative opportunities.

AI may be used for idea generation and initial literature review, which are essential for the research conception process. Conducting these tasks is challenging for early-stage researchers due to their limited experience in surveying the relevant available literature and assessing the feasibility and novelty of a particular research topic. A considerable number of graduate students and faculty identified idea extraction for research conception as a task where AI assistance can be employed both for planned and actual utilisation. A similar study reported the use of generative AI in brainstorming and idea extraction for AI-assisted writing (Wang et al., 2024). Regardless of being AI application users and having scholarly writing experience, the majority of the respondents have no idea about AI assistance for research conception. Since research conception is usually assisted by an adviser or senior researcher, its actual AI application may be deemed lacking by the respondents. A study reported that AI tools assist in accelerating the initial phases of research (Remadevi & Arunkumar, 2023).

The use of AI for editing and proofreading started decades ago since the release of the grammar checking of Microsoft Word in 1992 and of the widely known application, namely, Grammarly, in 2009. AI-assisted editing and proofreading have been widely adopted in academic settings of both students and faculty. Among the AI utilisation behav-

iour of the respondents, grammar checking has been seen as the most rated task by the respondents. Editing and proofreading are widely recognised and utilised for AI assistance by the respondents of the study. Compared to a research-intensive institution in another study (Al-Bukhrani et al., 2025), 58% of 120 graduate students and junior faculty use generative AI for grammar checking. However, only 24% of 100 the combined graduate students and academic faculty utilise AI for grammar checking.

Academic writing has remained a major roadblock for academic writing both early-stage researchers of students and faculty. AI tools assist non-native English speakers in focusing on data analysis and experimentation instead of writing challenges (Osama et al., 2023). However, issues of plagiarism are still prevalent as intellectual dishonesty in the academe. This problem has been exacerbated by AI-generated content in academic writing (Alasadi & Baiz, 2023). Humanizing AI-generated content is performed by paraphrasing with also an AI application (Otterbacher, 2023). For scholarly writing, paraphrasing has been identified as the highest-rated AI-assisted task for both graduate students and faculty. Compared to a research-intensive institution in another study (Al- Bukhrani et al., 2025), 52% of 120 graduate students and junior faculty use generative AI for grammar checking against the 34% of 100 from the combined graduate student and academic faculty in the study.

When compared to a research-intensive institution (Al-Bukhrani et al., 2025), 56% utilise generative AI for scholarly publishing against 65% in the research-intensive institution. In addition, only a quarter and one-third of the teaching-focused institutions utilize AI-assisted grammar checking and paraphrasing, while more than 50% of the graduate students and junior faculty utilise AI for grammar corrections and writing suggestions, respectively. These results clearly show the stark difference in AI utilisation for scholarly publishing between a teaching-focused and research-intensive institution.

Traditionally, the burden of academic publishing lies with the academics of HEIs rather than students. Research productivity metrics include journal publications as one basis for tenure and academic progression. It is shown that faculty have used AI for journal finding, review, and formatting. However, a large population of graduate students are not aware of the capabilities of AI for academic publishing. Both the non-user and AI users from the graduate students lack perceived and planned utilisation of AI in academic publishing, respectively. It should be noted that graduate students are already required by the local regulatory body education with peer-reviewed publication as a requirement for graduation. On the other hand, only a considerable number of academic faculty have used AI for journal finding, review, and formatting.

Complementary to the numerous identified AI-assisted tasks in scholarly writing and academic publishing, the study shows generally satisfactory abilities for planning and utilisation of AI for a majority of the respondents both graduate students and faculty, except for academic publishing. Early-stage researchers have limited skills for publishing in peer-reviewed journals as evidenced also by the findings of the study, where AI utilisation is lacking as well.

Thus, higher education institutions' human resource (HR) departments must integrate learning AI into their capacity development programs. It is imperative that these programs are comprehensive and continuous, not one-off nor stand alone training sessions, as the more adult learners are familiar with a knowledge base, the more effective their training can be (Govindaraju, 2021). Also, these programs must do away with the pedagogical approach of lectures and memorisation; instead, they must employ andragogical methods that put emphasis on process rather than content, e.g., case studies, simulations, and self-evaluations. In doing so, HR brings adult learning a step closer to heutagogy, the study of self-determined learning-shifting the locus of control into the learners' grasp, and is very much aligned with the advancement of "digital and social media which encourages user-generated content, exploration, creativity, reflection, and networking" (Gerstein, 2013, as cited in Gillaspy and Vasilica, 2021).

Combining heutagogy with generative AI is especially powerful as it supports the learner's desire for autonomy and self-direction while leveraging AI's capability to deliver personalised, relevant, and even engaging content. In this new era, education is no longer just focused on the transmission of knowledge; it is about cultivating a lifelong path of discovery, independence, and self-reflection (Floridi & Chiriatti, 2020).

It cannot be negated that AI is very much a part of the fourth industrial world and that it has, in particular, a transformative potential for developing the metacognition, self-efficacy, and overall competence of adult learners–skills needed to thrive in today's work environment. For adults in academia, AI--with all that it can offer for making academic writing and publishing more efficient--becomes more necessary.

Conclusions

The study reports on the behavioural control of adult learners in integrating AI technology into scholarly publishing. It was reported that perceived behavioural control significantly influences students in adopting AI tools (Chang et al., 2024). In particular, this study investigated the AI adoption practices of early-stage academic researchers in a teaching-focused institution for scholarly publishing. The intention for AI adoption and behaviour for AI utilisation were compared for graduate students and academic faculty. ChatGPT emerged as the primary AI tool among graduate students and faculty. A notable portion has not experienced AI utilisation and many users have limited experience with AI for scholarly purposes and occasional use. There are positive indications that graduate students and academic faculty for the planned utilisation of AI for scholarly publishing. Behavioural intention was found to act as a mediator variable to perceived use and use behaviour for AI tool adoption (Ma et al., 2024). The perceived usefulness of AI tools from experienced users promotes continuous usage intention (Kim et al., 2025).

Findings also show that only half of the respondents used AI for idea extraction, grammar checking, and paraphrasing. Furthermore, there was a general perception of satisfactory ability for the planned and actual utilisation of AI for research conception, academic writing, editing, and proofreading. It has also been shown that early-stage researchers in

teaching-focused institutions have limited adoption of AI for academic publishing. Non-user and AI users from the graduate students lack perceived and planned utilisation of AI in academic publishing, respectively. On the other hand, only a considerable number of academic faculty have used AI for journal finding, review, and formatting.

In this study, only about half of the graduate students and faculty utilized generative AI for scholarly publishing, compared to nearly two-thirds of graduate students and junior faculty in a research-intensive institution Moreover, only a small percentage of graduate students and faculty in the teaching-focused institution makes use of AI-assisted tools for grammar checking and paraphrasing. More than half of graduate students and junior faculty in research-intensive institutions utilise AI for grammar corrections and writing suggestions. These findings highlight the pronounced disparity in the use of AI for scholarly publishing between teaching-focused and research-intensive institutions. Variations in AI technology adoption may be linked to institutional objectives, policies, inaccessible resources, limited training, and academic culture. In particular, a teaching-focused environment may place a low priority on adopting AI tools to advance research productivity.

The results of the study indicate that graduate students and faculty might be provided some assistance with using AI for academic publishing, which may also include ethical considerations of AI utilisation. Developing AI literacy programs or ethical guidelines for AI use in scholarly publishing is recommended, particularly for early-stage researchers who could benefit from structured guidance. Although the study has not sought to identify an enumeration of paraphrasing tasks, a comprehensive investigation on this focus may be conducted. Misconceptions about ethical paraphrasing can be elicited from a succeeding study. Other elements of the theory of planned behaviour for the adoption of generative AI for scholarly publishing may be studied.

The increasing use of AI tools in academic writing raises important ethical considerations that must be addressed. The findings indicate that many early-stage researchers use generative AI for paraphrasing and grammar checking, highlighting the potential for AI-generated content to be incorporated into scholarly work without proper attribution or disclosure. Higher education institutions need clear policies and support for adopting AI-assisted academic publishing that balances potential benefits and academic integrity concerns. The lower AI adoption rates in the teaching-focused institution studied here may reflect a need for more institutional guidance and support in ethical AI use, particularly for academic publishing tasks, where capability scores were lowest.

There is an overwhelming surge of recent studies that suggest the incorporation of generative AI in education to match the demands of evolving markets. As an implication of adult learning theory and methodology, the study provides valuable insights for integrating AI literacy into contemporary educational frameworks. The study highlighted the supporting roles of ethical guidelines on the responsible use of generative AI and support training programs for students and academic faculty for AI-based education. In addition, AI-driven educational frameworks may consider the contextual academic environment and student demographics to address the diverse needs of adult learners. For self-directed learning, the findings highlight the need for utilising strategies on the technology adoption of generative AI tools for adult learners.

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Conflict of Interest

The authors declare that there is no conflict of interest.

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Практика впровадження штучного інтелекту в наукових публікаціях молодих академічних дослідників

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Авторський вклад: A – дизайн дослідження; B – збір даних; C – статаналіз; D – підготовка рукопису; E – збір коштів

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Історія питання. Штучний інтелект кардинально змінив робоче середовище, що призвело до зміни навичок у робочій силі. Завдяки формальним інструкціям щодо використання штучного інтелекту дорослі учні покладаються на самостійне та емпіричне навчання для підвищення кваліфікації та перенавичок впровадження технологій у своїх робочих процесах. У вищій освіті студенти та викладачі використовують різні стратегії для впровадження технології штучного інтелекту в вимоги до навчальних курсів і дослідницькі заходи. Розробка теорії запланованої поведінки для впровадження генеративного ШІ в освітньому середовищі вимагає дослідження сприйнятого та фактичного контролю поведінки некористувачів і користувачів програм ШІ.

Цілі. У цьому дослідженні досліджувалися практики застосування штучного інтелекту академічними дослідниками на ранній стадії роботи в установі, орієнтованому на навчання, для наукових публікацій.

Матеріали та методи. Намір і поведінку впровадження та використання штучного інтелекту досліджували 50 аспірантів і 50 викладачів вищого навчального закладу, орієнтованого на викладання. Структуру використання штучного інтелекту було адаптовано для дослідження чотирьох компонентів наукової публікації: концепції дослідження, академічного написання, редагування та вичитки та академічної публікації. Описову статистику використовували для представлення та аналізу моделей впровадження та використання штучного інтелекту в наукових роботах і публікаціях.

Результати. Результати показують, що лише половина респондентів використовували ШІ для вилучення ідей, перевірки граматики та перефразування. Крім того, існувало загальне сприйняття задовільної спроможності щодо планового та фактичного використання ШІ для концепції дослідження, академічного написання, редагування та вичитки.

Висновки. Як приклад теорії та методології навчання дорослих, дослідження дає цінну інформацію для інтеграції грамотності ІІІІ в сучасні освітні рамки.

Ключові слова: стратегії впровадження штучного інтелекту, молоді академічні дослідники, наукові публікації.

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