EFL Teachers' Use of AI Tools in Academic Research: Practices, Purposes, and Adoption Factors

Malika Nouri*

University of Jijel (Algeria), malika.nouri@univ-jijel.dz

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Abstract:

Artificial intelligence (AI) tools are increasingly reshaping academic research practices, particularly in higher education contexts. This descriptive quantitative survey examined how EFL university teachers use AI in academic research, focusing on the extent and frequency of AI use, preferred tools, research tasks, and the factors that encourage or discourage its adoption. Data were collected from 27 of the 72 EFL university teachers in the Department of English at the University of Jijel using a structured questionnaire consisting of closed-ended items. Although all 27 teachers completed the questionnaire, only the 24 respondents who had previously used AI were included in the analysis of AI usage practices. The data were analysed using descriptive statistics in Microsoft Excel. The findings revealed a high AI adoption rate (88.9%), with most teachers using AI tools regularly. ChatGPT, Grammarly, and QuillBot were the most commonly used tools, mainly for proofreading and editing, brainstorming, summarising literature, and organising manuscripts. Saving time and supporting research activities were the main reasons for using AI, whereas concerns about accuracy, ethical issues, and overreliance were the main barriers. The findings also showed that most teachers had not received formal institutional training and instead relied on self-study and online learning. Overall, the study suggests that AI has become an important part of academic research for many EFL teachers and highlights the need for institutional guidance and professional development to promote its responsible and effective use in academic research.

Keywords: Academic Research, AI Adoption, AI Tools, EFLTeachers, Higher Education.

1. Introduction:

Artificial intelligence (AI), particularly generative AI, is increasingly becoming part of academic research across a wide range of disciplines.Tools such as ChatGPT, Grammarly, and automated summarization and paraphrasing systems are increasingly used to support literature review, academic writing, data analysis, and research organization (Khalifa & Albadawy, 2024; Pigola et al., 2023). Their growing use reflects the practical benefits they offer, particularly by improving efficiency and helping researchers meet the increasing demands associated with research and publication (Cheng et al., 2025; Khalifa & Albadawy, 2024).

* The sender author.

AI has become particularly valuable in EFL academic contexts, where researchers often encounter additional linguistic and writing challenges when producing academic texts in English. These challenges, which can affect both publication opportunities and the visibility of their research, have prompted many researchers to use AI tools. AI language and writing support tools assist researchers with tasks such as proofreading, editing, paraphrasing, and organising academic manuscripts, thereby helping them overcome linguistic challenges and improve the clarity and quality of academic writing (Cheng et al., 2025; Flowerdew, 2019). The increasing use of AI among EFL researchers, therefore, is not only driven by the availability of these innovative technologies but also by the specific demands of conducting research in a second or foreign language.

Although AI has attracted growing attention in higher education, most studies have focused on its use in teaching and learning. Comparatively fewer studies have examined how university teachers use AI to support their own research activities. Those that have explored AI adoption have generally considered researchers or university faculty as broad populations, with limited attention to the experiences of EFL teachers and the particular challenges of conducting research in a second or foreign language (Thomas et al., 2023; Pigola et al., 2023; Khalifa & Albadawy, 2024). As a result, there is still limited empirical evidence on how EFL university teachers use AI for academic research, including the extent of its adoption, the tools they prefer, the research tasks it supports, and the factors that encourage or discourage its use.

Against this background, the present study investigates how EFL university teachers in the Department of English at the University of Jijel integrate AI tools into their research activities by examining AI adoption patterns, frequency of use, the types of tools employed, research tasks supported by AI, and the factors encouraging or discouraging its use. By providing evidence from the Algerian EFL context, where research on AI use in academic research remains limited, the study adds to the growing literature on AI in higher education and contributes to a better understanding of how EFL university teachers use AI in their research.

Accordingly, the study is guided by the following research questions:

1. To what extent do EFL university teachers use AI for academic research ?
2. Which AI tools do EFL university teachers use for academic research, and for which research tasks are these tools mainly used?
3. What factors encourage or discourage EFL university teachers from using AI tools in academic research?

2. Literature review

2.1. Artificial Intelligence in Academic Research

Academic research is a systematic process through which knowledge is generated by collecting, analysing, and interpreting evidence. Creswell (2012, p. 3) describes research as *"a process of steps used to collect and analyze information to increase our understanding of a topic or issue."* Although these steps are guided by established methodological principles, conducting research remains a demanding process that requires researchers to make informed decisions from identifying a research problem to communicating the findings. As research increasingly relies on digital technologies, researchers are also expected to develop the technological skills needed to make effective use of these tools in their research.

Among recent technological developments, AI has attracted considerable attention because of its ability to support a wide range of research activities. Advances in generative AI, machine learning, and natural language processing have expanded the range of tools available to researchers, enabling them to to process information more efficiently, automate repetitive tasks, and support decision making throughout the research process (Pigola et al., 2023; Khalifa & Albadawy, 2024).

Previous studies (Khalifa & Albadawy, 2024; Pigola et al., 2023; Resnik & Hosseini, 2025; Uno et al., 2024) indicate that AI contributes to several interconnected stages of the research process. Although these studies differ in their focus, they consistently show that AI supports researchers throughout the research cycle, from the early stages of developing research ideas to the dissemination of research findings. Four broad areas of application emerge consistently across the literature: research planning and literature review, academic writing, data management and analysis, and research integrity and communication.

During the early stages of the research process, AI facilitates research planning and literature exploration. AI tools assist researchers in brainstorming research ideas, identifying gaps in existing knowledge, formulating research questions, and developing theoretical and conceptual frameworks. They also support literature discovery by locating relevant studies, summarizing research findings, comparing findings across studies, and organizing information into meaningful themes (Khalifa & Albadawy, 2024; Pigola et al., 2023; Uno et al., 2024). These capabilities reduce the time required to review large volumes of literature and help researchers gain a broader understanding of their research topic.

AI has also become an increasingly valuable resource for academic writing. AI writing assistants help researchers improve grammatical accuracy, lexical choice, coherence, and overall readability while supporting drafting, paraphrasing, editing, formatting, and abstract writing. Such tools can be particularly valuable for researchers who write in English as a second or foreign language, helping them communicate their ideas more clearly and reducing some of the linguistic challenges associated with scholarly publishing (Cheng et al., 2025; Khalifa & Albadawy, 2024).

Beyond writing, AI offers important support for managing and analysing research data. Through machine learning and advanced analytical techniques, AI can assist with coding qualitative data, recognising patterns in large datasets, producing visualisations, and supporting both quantitative and qualitative analyses. This enables researchers to process complex information with ‘‘utmost accuracy and efficiency within an infinitesimal period of time’’(Uno et al., 2024), allowing researchers to focus more attention on interpreting findings and making informed research decisions.

In addition to supporting research production, AI contributes to research integrity and the publication of research findings. AI tools assist researchers in plagiarism detection, reference management, language translation, and adapting research outputs for different audiences. At the same time, these developments have raised important ethical questions concerning the accuracy of AI-generated content, transparency, authorship, and researcher accountability (Resnik & Hosseini, 2025; Cheng et al., 2025). Most scholars therefore agree that AI should support, rather than replace, human judgement throughout the research process.

Overall, the literature suggests that AI has become a valuable resource that supports multiple stages of academic research, from developing research ideas and reviewing the

literature to analysing data and writing manuscripts. While these technologies offer clear opportunities to improve research efficiency, their effective use depends on researchers' ability to evaluate AI-generated outputs critically and apply them responsibly within established academic and ethical standards.

2.2. AI Use in EFL Academic Contexts

Research conducted in EFL academic contexts consistently highlights the linguistic and writing challenges faced by non-native English-speaking scholars and students. These challenges include limited vocabulary, grammatical inaccuracies, difficulties with academic style and genre conventions, and constraints in expressing complex disciplinary knowledge in English (Hyland, 2016; Flowerdew, 2019). Such difficulties often hinder effective participation in academic discourse and may negatively affect research productivity and reduce opportunities for successful publication.

In response to these challenges, AI has emerged as a valuable resource for supporting academic writing and research in EFL settings. Writing assistants - including automated grammar checkers, paraphrasing tools, and large language models - have demonstrated potential in enhancing linguistic accuracy, coherence, and clarity in academic writing through immediate, individualized feedback and learner engagement improvements (Lee, Davis & Lee, 2024; Zhai & Ma, 2022). These tools offer immediate and accessible feedback, which can be particularly beneficial for EFL researchers who do not have access to institutional writing support. Such feedback, typically targeting lower-level linguistic features such as grammar and mechanics (Mekheimer, 2025), helps reduce the effort required to correct linguistic errors and revise texts, allowing EFL writers to focus more on developing ideas, constructing arguments, and organising their work.

Beyond language support, AI tools have also been shown to facilitate several research-related activities. AI tools assist with locating and summarising relevant literature, synthesising information from multiple sources, and organising research manuscripts. These capabilities are particularly valuable for EFL researchers, who often need additional time to read, interpret, and synthesise English-language publications (Zohery, 2023). At the same time, scholars note that excessive reliance on AI-generated summaries may limit opportunities to develop critical reading and analytical skills, highlighting the importance of maintaining active engagement with the research literature.

The increasing use of AI in EFL research must also be understood within the broader context of increasing publication pressure. Researchers are frequently expected to publish in English-language journals despite differences in language proficiency and unequal access to professional editing or writing support (Flowerdew, 2015; Lillis & Curry, 2010). Within this context, AI is increasingly viewed as a practical resource that helps reduce linguistic barriers, improve manuscript quality, and support the revision process. Its growing use therefore reflects not only technological innovation but also researchers' efforts to meet the linguistic and publication demands of the international academic community.

Despite these advantages, the use of AI in EFL academic contexts raises important ethical and pedagogical concerns. Issues related to authorship, originality, transparency, and academic integrity have become central in discussions of AI-assisted research and writing (Resnik & Hosseini, 2025). Scholars have also drawn attention to differences in AI literacy and access, which may create new inequalities among researchers. These concerns have reinforced calls for

clearer institutional guidance and educational initiatives that promote the responsible and ethical use of AI.

Overall, the literature indicates that AI offers valuable support for EFL researchers by addressing linguistic challenges, facilitating academic writing, and assisting with a range of research activities. However, its effective integration depends not only on technological capability but also on researchers' ability to use these tools critically, ethically, and in ways that complement their own expertise and scholarly judgement (Resnik & Hosseini, 2025; Cheng et al., 2025; Lee et al., 2024).

2.3. Factors Influencing AI Adoption

The adoption of AI in EFL academic research is influenced by a combination of technological, individual, institutional, and ethical factors. Recent literature (Cheng et al., 2025; Khoza & Van der Walt, 2025; Thomas et al., 2023) identifies several factors that encourage AI adoption while also highlighting barriers that may limit its effective integration into academic research.

2.3.1. Encouraging Factors

A major factor encouraging AI adoption is its perceived usefulness in addressing the linguistic challenges of academic research. Studies indicate that AI-powered writing assistants can help improve grammatical accuracy, vocabulary choice, fluency, and overall text quality, making manuscript preparation less challenging and increasing researchers' confidence in their writing (Lee et al., 2024; Mekheimer, 2025). This perceived linguistic support is particularly valuable in EFL contexts, where researchers often face the additional challenge of writing academic texts in a non-native language (Flowerdew, 2019; Hyland, 2016).

Time efficiency and productivity gains also emerge as significant motivators for AI adoption (Thomas et al., 2023). AI tools that support literature search, summarization, citation management, and manuscript editing enable EFL researchers to complete time-consuming tasks more efficiently and manage demanding research and teaching responsibilities. These tools, Khalifa and Albadawy (2024, p.02) argue, "are not just helpful but central to improving the efficiency and quality of academic writing". In an increasingly competitive academic environment characterized by "publish or perish" pressures, AI tools are viewed not only as writing assistants but also as practical resources that help researchers manage growing publication demands.

Ease of use further contributes to the growing acceptance of AI in academic research. Most writing assistants and large language models require little technical expertise while providing immediate support for writing, editing, and information retrieval. This is consistent with the Technology Acceptance Model, which identifies perceived ease of use as an important factor influencing the adoption of new technologies (Davis, 1989; Liang et al., 2026; Ayyoub et al., 2025). Additionally, recent studies indicate that researchers recognize the potential of AI to improve research efficiency and support academic writing, which may encourage them to experiment with AI-assisted research practices (Nikolic et al., 2024).

2.3.2. Barriers and Challenges

Although several factors encourage AI adoption among EFL researchers, important barriers continue to limit its effective integration into academic research. A frequently cited concern relates to ethical and academic integrity issues. Questions surrounding authorship, plagiarism, transparency, and the acceptable extent of AI assistance in scholarly writing have created uncertainty among researchers, particularly in the absence of clear institutional or journal guidelines. As a result, some researchers remain hesitant to use AI in their research.

Limited AI literacy represents another significant challenge (Thomas et al., 2023). While many EFL researchers recognize the potential benefits of AI, they may lack the knowledge and training needed to evaluate AI-generated content critically or to use these tools effectively. This skills gap may result in the superficial or inappropriate use of AI, such as overreliance on automated text generation, which may limit researchers' ability to develop their own academic voice and critical thinking skills.

Concerns about the reliability of AI-generated outputs also influence researchers' willingness to adopt these technologies. Previous studies have reported reservations about inaccurate or fabricated information, biased responses, and the tendency of AI to produce generic or formulaic academic writing (Cheng et al., 2025). These concerns may make EFL researchers more reluctant to use AI, despite its potential to support academic writing and research.

Institutional and contextual constraints also play an important role in shaping AI adoption among EFL researchers. In some academic settings, limited access to advanced AI tools, inadequate technological infrastructure, or unsupportive institutional environments may discourage researchers from experimenting with AI or integrating it into their research practices (Khoza & Van Der Walt, 2025). These contextual limitations may reduce researchers' confidence in using AI and limit their opportunities to gain practical experience, making it more difficult to integrate these technologies into everyday research activities.

Overall, the literature indicates that, despite the growing potential of AI to support academic research, its adoption among EFL researchers remains influenced by several interrelated challenges. Ethical and academic integrity concerns, limited AI literacy, doubts about the reliability of AI-generated outputs, and institutional and contextual constraints continue to affect researchers' decisions about whether and how to use AI in academic research.

3. Method

3.1. Research Design

This study employed a descriptive quantitative research design to investigate how EFL university teachers in the Department of English at the University of Jijel use AI tools in academic research. This design was appropriate because the study aimed to describe existing patterns of AI use without manipulating any variables (Creswell & Creswell, 2018). Data were collected using a structured questionnaire, which was appropriate for collecting standardized quantitative data that could be analysed statistically (Cohen et al., 2018). The questionnaire was developed to address the study objectives by covering teachers' AI use, frequency of use, preferred AI tools, research-related applications, and the factors that encourage or discourage AI use.

3.2. Population, Sample, and Participants

The target population comprised all 72 EFL university teachers employed in the Department of English at Mohamed Seddik Ben Yahia University of Jijel. The department was selected because its academic staff routinely engage in both English language teaching and academic research, making them an appropriate population for investigating AI use in EFL research practices. Given the growing use of AI tools to support academic writing, literature review, editing, and other research-related activities in higher education (Khalifa & Albadawy, 2024; Pigola et al., 2023), this setting provided an appropriate context for achieving the objectives of the study.

A convenience sampling technique was adopted, and all teachers were invited to participate in the study. A total of 27 teachers completed the questionnaire, representing a response rate of 37.5%, and these respondents constituted the final study sample. Participation was voluntary and anonymous, and no personally identifiable information was collected.

Participants' teaching experience ranged from 1 to 20 years, with the majority reporting between 7 and 16 years of teaching experience. This distribution ensured the inclusion of teachers with varying levels of professional experience. Participants also differed in their level of research experience, as reflected in the number of publications and conference papers they had produced. Five participants reported one or two research outputs, whereas five others reported more than 15. More than half of the participants (n = 14, 58.3%) indicated having produced between three and five research outputs, indicating a moderate level of research activity among the participants.

3.3. Data Collection Tool

Data were collected using a researcher-developed structured questionnaire designed to examine how EFL university teachers use AI tools in academic research. The questionnaire was developed in line with the study objectives and informed by the literature on AI use in academic research and higher education (Khalifa & Albadawy, 2024; Resnik & Hosseini, 2025; Thomas et al., 2023).

The questionnaire comprised eight items divided into three sections. The first section gathered background information about participants, including their teaching and research experience. The second section focused on AI use and adoption, covering whether participants used AI tools and how frequently they did so, whether they had received training or guidance, the tools they used, and the research tasks for which they used them. The third section examined the factors that encourage or discourage the use of AI tools in academic research. The questionnaire consisted mainly of closed-ended items, including yes/no and multiple-response questions, allowing for the collection of standardized quantitative data.

To establish content validity, the questionnaire was reviewed by one expert in research methodology, who evaluated the relevance, clarity, and organization of the items in relation to the study objectives. Based on the expert's recommendations, minor revisions were made to improve the wording and presentation of several items. The revised questionnaire was then piloted with two EFL university teachers to assess its clarity and comprehensibility. Their feedback resulted in minor modifications before the questionnaire was administered to the study participants.

3.4. Data Collection Procedure

The questionnaire was administered electronically using Google Forms. An invitation containing the survey link was distributed via institutional email addresses to all teachers in the department. Before accessing the questionnaire, participants were provided with an introductory statement explaining the purpose of the study, assuring them of the confidentiality and anonymity of their responses, and informing them that participation was entirely voluntary. Data were collected between 7 July and 21 July 2025. At the end of the data collection period, the responses were exported from Google Forms and prepared for analysis.

3.5. Data Analysis

The quantitative data were analysed using Microsoft Excel. Descriptive statistics, including frequencies and percentages, were used to summarize participants' responses regarding AI use, frequency of use, AI tools employed, research-related applications, and the factors encouraging or discouraging AI use. The results are presented in figures to facilitate interpretation.

4. Results

4.1. AI Adoption and Use

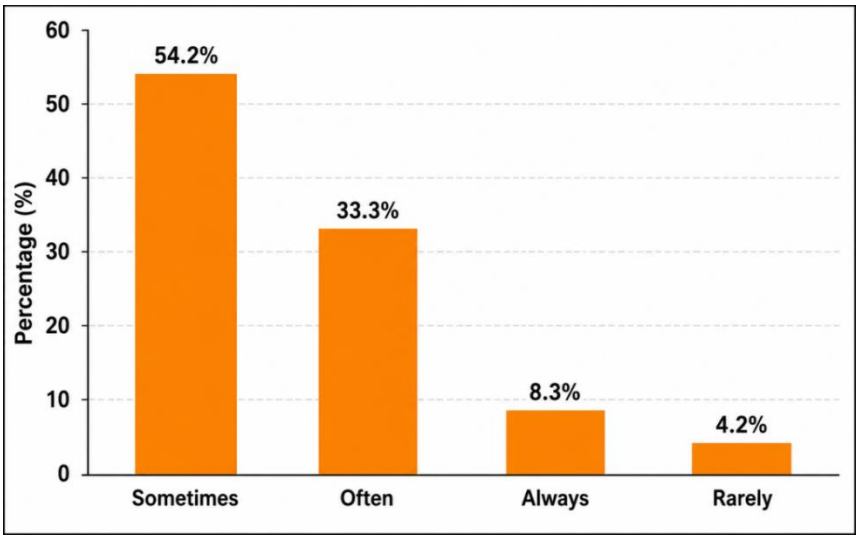
The first part of the questionnaire focused on teachers' use of AI tools in academic research, including whether they used AI, how frequently they used it, whether they had received any training or guidance, and which AI tools they used.

4.1.1. AI adoption and frequency of use

Q1. Have you ever used any AI tools (e.g., ChatGPT, Gemini, QuillBot) for academic research?If yes, how often ?

Of the 27 respondents, 24 (88.9%) reported having used AI tools for academic research, whereas 3 (11.1%) indicated that they had never used them. Since the purpose of this study was to examine AI usage practices, only teachers with prior experience using AI tools (n = 24) were included in the analysis of AI usage practices.

Figure 1. Frequency of AI tool use

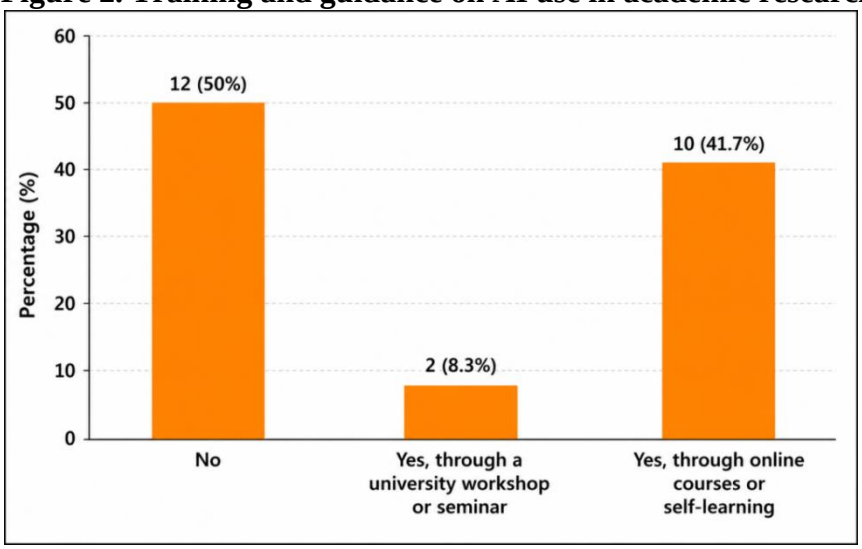


Among the 24 AI users, 13 respondents (54.2%) reported using AI tools sometimes, 8 (33.3%) indicated that they used them often, and 2 (8.3%) reported always using them. Only 1 respondent (4.2%) reported using AI tools rarely. These findings indicate that AI has become a regularly used resource among most participating teachers.

4.1.2. Training and guidance

Q2. Have you received any training or guidance on the use of AI in academic research?

Figure 2. Training and guidance on AI use in academic research

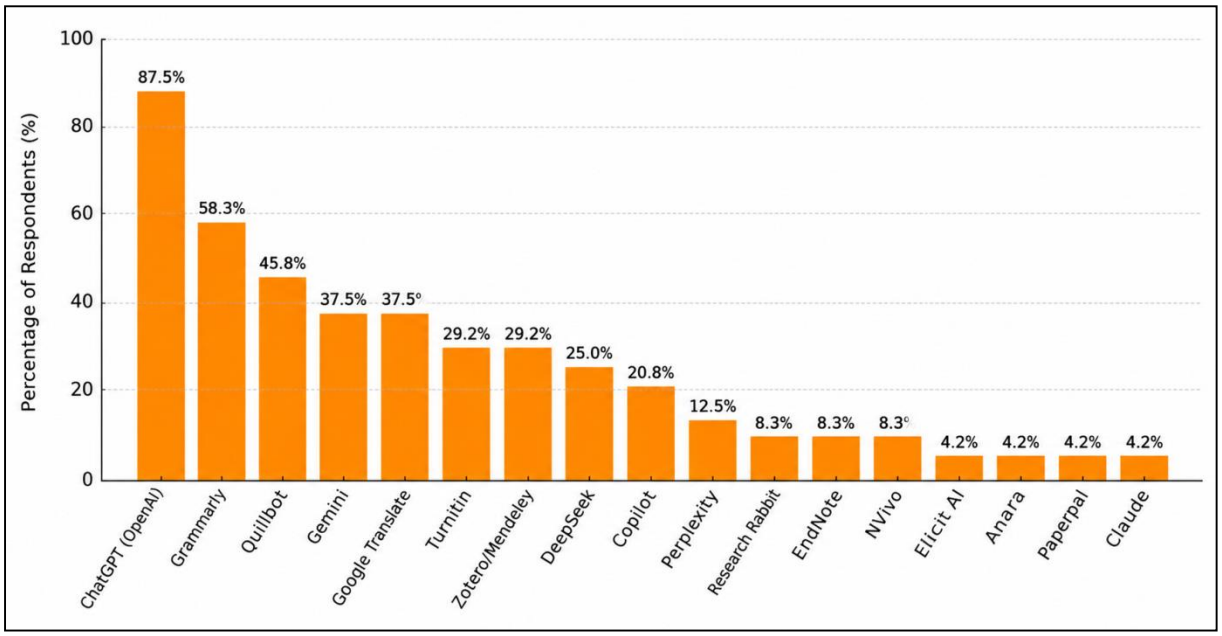


Regarding training, 12 respondents (50%) indicated that they had not received any formal training on the use of AI in academic research. Only two respondents (8.3%) reported participating in institutional training provided by their university, whereas 10 respondents (41.7%) stated that they had developed their AI skills through online tutorials, webinars, or self-directed learning. These findings show that teachers primarily acquire AI knowledge independently rather than through structured institutional support.

4.1.3. AI tools used

Q3. Which of the following AI tools have you ever used?

Figure 3. AI tools used by EFL teachers in academic research



The results reveal that participants employ a wide range of AI tools to support their research activities. ChatGPT was by far the most commonly used tool, reported by 21 respondents (87.5%), followed by Grammarly (14 respondents, 58.3%) and QuillBot (11 respondents, 45.8%). Gemini and Google Translate were each used by 9 respondents (37.5%). Turnitin and Zotero/Mendeley were each reported by 7 respondents (29.2%), followed by DeepSeek (6 respondents, 25%) and Copilot (5 respondents, 20.8%). Less frequently used tools included Perplexity (3 respondents, 12.5%), while Research Rabbit, EndNote, and NVivo were each reported by 2 respondents (8.3%). The least commonly used tools, including Fireflies, Elicit AI, Anara, Paperpal, and Claude, were each reported by only 1 respondent (4.2%). The findings further indicate that respondents often used more than one AI tool, indicating that teachers combined different tools for different research-related tasks.

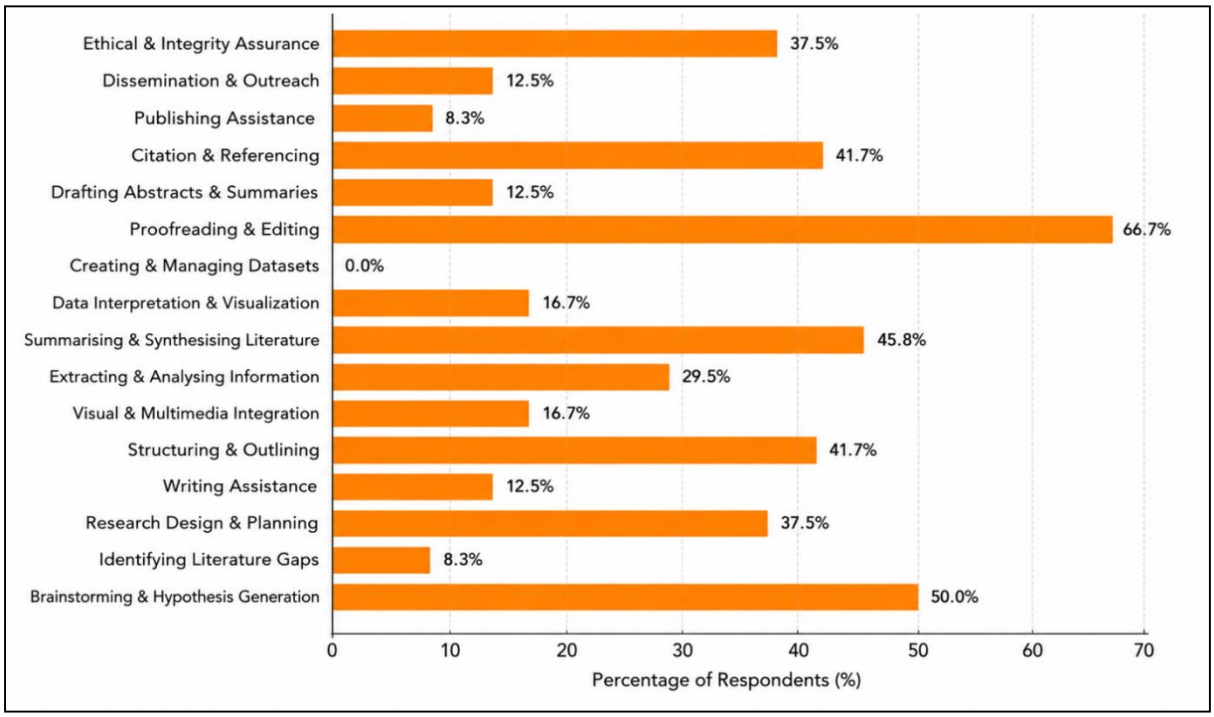
4.2. Purposes of AI Use in Academic Research

The second part of the questionnaire investigated the research tasks for which participants use AI tools.

4.2.1. Research tasks supported by AI

Q4. What tasks do you mainly use AI tools for?

Figure 4. Research tasks supported by AI tools



The findings show that teachers mainly use AI to support the language and writing aspects of academic research. Proofreading and editing emerged as the most common uses, selected by 16 respondents (66.7%). This was followed by brainstorming and idea generation (12 respondents, 50%) and summarising and synthesising literature (11 respondents, 45.8%). Similarly, structuring and outlining manuscripts and citation and referencing were each reported by 10 respondents (41.7%), showing that AI plays an important role throughout the academic writing process. Moderate levels of use were reported for research design and planning and ethical and integrity assurance, each selected by 9 respondents (37.5%), while extracting and analysing information was reported by 7 respondents (29.2%). Less common uses included visual and multimedia integration and data interpretation and visualisation (4 respondents each, 16.7%), as well as drafting abstracts and summaries and research dissemination (3 respondents each, 12.5%). Only 2 respondents (8.3%) reported using AI for identifying literature gaps and publishing assistance. Notably, none of the participants reported using AI for creating or managing research datasets.

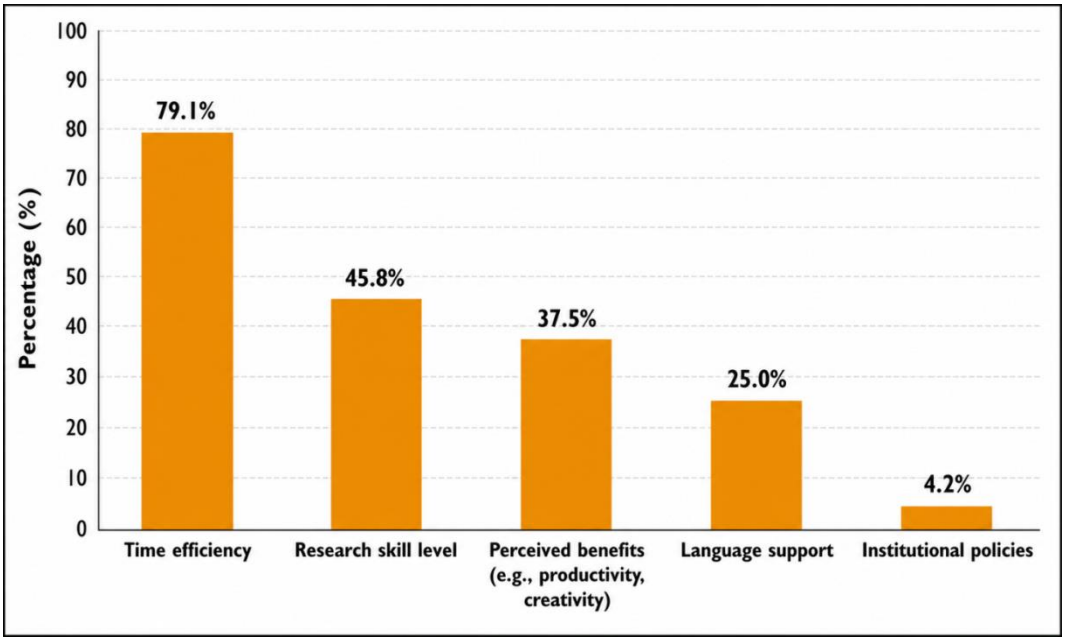
4.3. Factors Influencing AI Adoption

The third section of the questionnaire explored the factors that encourage and discourage teachers' use of AI tools in academic research.

4.3.1. Encouraging factors

Q5 .What factors encourage you to use AI in academic research?

Figure 5. Factors encouraging AI adoption

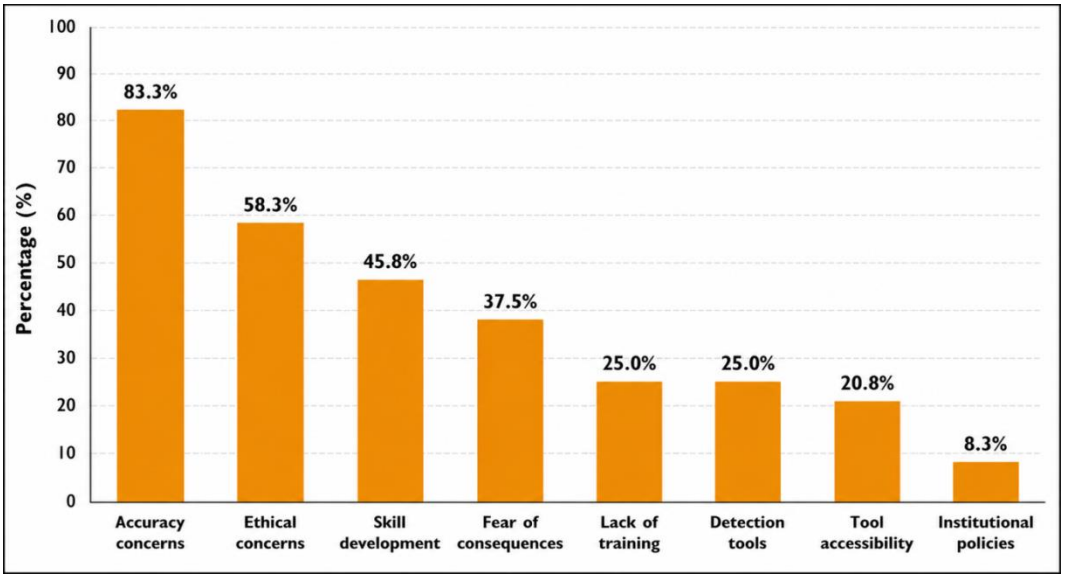


The findings show that time efficiency was the strongest factor encouraging AI adoption, reported by 19 respondents (79.1%). Nearly half of the participants (11 respondents, 45.8%) also identified research skill level as an important reason for using AI, indicating that many teachers rely on AI to support them with more demanding research tasks. Furthermore, 9 respondents (37.5%) perceived AI as beneficial for improving research productivity and creativity, while 6 respondents (25%) valued it mainly for language support. In contrast, institutional policies had little influence on AI use, with only 1 respondent (4.2%) identifying them as a reason for adopting AI.

4.3.2. Discouraging factors

Q6. What factors discourage you from using AI in academic research?

Figure 7. Factors discouraging AI adoption



The most frequently reported barrier to AI use was concerns about the accuracy of AI-generated outputs, identified by 20 respondents (83.3%). Ethical concerns, including issues related to plagiarism, transparency, and responsible AI use, were also common, with 14 respondents (58.3%) reporting them as a factor discouraging them from using AI. Other important barriers included concerns about skill development (11 respondents, 45.8%) and fear of possible consequences of using AI (9 respondents, 37.5%). In addition, lack of training and AI detection tools were each identified by 6 respondents (25%), while limited accessibility of AI tools was reported by 5 respondents (20.8%). Institutional policies were the least frequently reported barrier, mentioned by only 2 respondents (8.3%).

5. Discussion

The findings point to a high level of AI use among the EFL teachers surveyed, with 88.9% reporting that they had used AI tools for academic research. This indicates that AI has already become part of research practices for many teachers, particularly in areas related to academic writing and language support. Similar findings have been reported in recent studies, which show that generative AI is being increasingly adopted by researchers for activities such as idea generation, literature review, writing support, language editing, and data analysis (Andersen et al., 2025; Khalifa & Albadawy, 2024). However, the presence of a few non-users shows that concerns about ethics, limited guidance, or personal preferences may still discourage some teachers from using these tools.

The frequency of AI use further suggests that these tools are becoming a regular part of the research process rather than being used only occasionally. Most respondents reported using AI sometimes or often, indicating that it has become integrated into their everyday research activities. Rather than being simply an optional resource, AI appears to have taken on a more established role in the research process. While these findings demonstrate widespread AI adoption, they also raise concerns about whether teachers receive sufficient training and institutional support to use these technologies effectively and ethically.

The findings show that access to formal training on AI use in academic research was limited among the participants, highlighting a gap in institutional support. Most participants relied on self-learning rather than university training, indicating that many are developing AI skills without structured guidance. While self-learning gives researchers the flexibility to explore AI tools and develop new skills at their own pace, it may also result in differences in how these tools are used and understood, particularly when it comes to responsible and ethical use. The importance of formal training is supported by Dorta-González et al. (2024), who found that researchers lacking access to training resources were less likely to use AI tools frequently, emphasizing the role of institutional support in promoting AI adoption. Taken together, these findings suggest that professional development may not yet have kept pace with the growing use of AI in academic research.

The range of AI tools reported by the participants shows that teachers are using different technologies to support their research. ChatGPT, Grammarly, and QuillBot were the most commonly used, which may reflect the importance of writing and language support in EFL academic research. These tools can help with tasks such as improving language, generating text, and paraphrasing, which is consistent with previous research highlighting the growing use of AI to support academic writing (Khalifa & Albadawy, 2024). The use of Gemini and Google Translate by a considerable number of participants further points to the importance of language support in teachers' choice of AI tools. A smaller number of teachers also reported using more

specialised tools, indicating some use of AI beyond writing and language-related tasks. These findings show that teachers do not rely on a single AI tool but use different tools for different research needs.

The findings also show that teachers use AI across different stages of the research process, although language and writing support remain the main areas of use. Proofreading and editing were the most common uses, showing that AI is primarily seen as a tool for enhancing clarity and language accuracy. Many participants also used AI for brainstorming, idea generation, and literaure summarisation, which may help them save time during the earlier stages of their research. AI was also widely used to structure manuscripts and manage citations, indicating that its role extends beyond language correction to other parts of the writing process. Fewer participants, however, reported using AI for information extraction and analysis, which may reflect concerns about the accuracy and reliability of AI-generated outputs. Meanwhile, the fact that some respondents use AI for research design and checking ethical issues suggests that they are beginning to see it as a useful tool for supporting methodological decisions and ensuring that their work meets academic standards.

AI was used less often for tasks such as creating visuals, preparing abstracts, identifying research gaps, and supporting publication. None of the participants reported using AI to create or manage research datasets. These lower levels of use may reflect the fact that teachers are less likely to rely on AI for tasks that involve greater judgment or more specialised research decisions. Overall, these patterns indicate that EFL teachers use AI selectively, mainly for writing, language support, and other tasks where it can provide practical assistance, while using it less often for some of the more specialised aspects of academic research.

Beyond the ways in which AI is used, the findings also provide insight into the factors that motivate EFL teachers to use these tools in their academic research. Time saving emerged as the most motivating factor, suggesting that teachers value these tools for improving the efficiency of research activities, particularly drafting, summarising, and revising academic texts. This is consistent with previous research showing that researchers increasingly use AI to improve efficiency, reduce the time required for academic tasks, and support activities such as drafting, summarising, editing, and synthesising the literature (Andersen et al., 2025; Khalifa & Albadawy, 2024). Research skill level was another important factor, indicating that some teachers turn to AI when they need additional support with more demanding aspects of the research process. Perceived benefits, including improved creativity and productivity, were also reported by a considerable number of participants, showing that teachers recognise some broader advantages of using AI in research. By comparison, language support was a less common motivation, possibly because many teachers already have a good command of English or rely on other language-support tools. The limited influence of institutional policies suggests that formal guidance has not yet become a major factor shaping teachers' use of AI in academic research. Instead, the findings show that teachers' use of AI is guided primarily by the practical needs of their research activities, particularly saving time and obtaining support with research-related tasks.

Despite these perceived benefits, the findings show that several factors discourage teachers from using AI in academic research. Concerns about accuracy emerged as the main factor, showing that many teachers remain uncertain about the reliability of AI-generated content. These findings mirror a growing body of literature warning about hallucinated information, fabricated references, plagiarism, and the lack of transparency in AI-generated content (Mohammadi et al., 2026, Walters &Wilder, 2023, Dwivedi et al.,2023). Ethical issues,

including plagiarism, transparency, and proper attribution, were also major concerns, reflecting the growing debate about the responsible use of AI in higher education. Some teachers were also reluctant to rely heavily on AI because they wanted to maintain their research skills and avoid becoming overly dependent on these tools. Others expressed concerns about the possible consequences of using AI, which may reflect uncertainty about acceptable and responsible uses of these tools in academic research. Lack of training further contributed to teachers' hesitation, suggesting that they still need more guidance on how to use AI effectively and responsibly. In contrast, institutional policies and access to AI tools were less frequently identified as barriers. Overall, the findings show that teachers' reluctance to use AI is driven mainly by concerns about accuracy, ethics, and maintaining academic integrity rather than by access or institutional barriers.

6. Implications

The findings on AI adoption, patterns of use, and the factors influencing AI use have several implications for academic practice, institutional policy, and professional development.

1. The widespread adoption and frequent use of AI tools indicate that AI is becoming an increasingly common part of academic research among EFL teachers. This highlights the need for universities to establish clear institutional guidelines that define appropriate uses of AI in research. Such guidance can reduce uncertainty, encourage responsible use, and help maintain academic integrity.
2. The limited access to formal training suggests that universities should offer structured AI training for researchers. Such training can improve AI literacy, strengthen ethical awareness, and help researchers evaluate AI-generated content more effectively.
3. Concerns about accuracy, plagiarism, and overreliance indicate that AI should be used as a support tool rather than a substitute for critical thinking and scholarly judgment. Training and institutional guidance should encourage researchers to verify AI-generated content and use AI responsibly.
4. The variety of AI tools used by participants highlights the need for guidance on selecting appropriate AI tools and evaluating the reliability of their outputs. This can help researchers make informed decisions while maintaining research quality and ethical standards.

7. Limitations of the Study

This study has several limitations that should be acknowledged. First, the findings are based solely on questionnaire data, which may not fully capture the complexity of teachers' actual AI practices in academic research. Second, although the questionnaire focused on the main aspects of AI use, its limited number of items may not have covered all dimensions of teachers' experiences and practices. Third, the study relied on a convenience sample of 27 EFL teachers from a single Algerian university. As a result, the findings may not be generalizable to teachers in other institutions, disciplines, or educational contexts. These limitations should be considered when interpreting the findings and addressed in future research through larger and more diverse samples and multiple data collection methods.

8. Conclusion

This study explored the use of AI tools in academic research among EFL university teachers by examining their level of adoption, patterns of use, preferred tools, research applications, and the factors that encourage or discourage AI use. The findings show that AI

has become a common resource for many teachers, particularly for academic writing, idea generation, literature review, and other tasks that improve the efficiency of the research process. At the same time, participants demonstrated a thoughtful approach to AI use, recognizing its benefits while remaining aware of issues related to accuracy, ethics, and excessive reliance on AI-generated content. The study also found that AI use among EFL university teachers is shaped mainly by individual research needs rather than institutional support. Most participants reported learning to use AI independently, highlighting the limited availability of formal training and institutional guidance. These findings point to the need for universities to develop clear policies, provide appropriate training opportunities, and promote the responsible use of AI in academic research. Although AI can make many research tasks more efficient, it should complement rather than replace researchers' critical thinking, academic judgment, and responsibility. Future research could include larger and more diverse samples, compare different academic disciplines, and examine how AI use evolves over time and influences research practices.

Disclosure of AI Use

The author discloses that ChatGPT was used in a limited and supportive manner during the research process, primarily to assist with language refinement and improve the clarity of the manuscript.

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