

The Impact of the Misuse of AI on the Performance and Competence of English Language Learning at the University Level in Lahore

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Received: 09-12-2025

Revised: 04-01-2026

Accepted: 15-01-2026

Published: 02-02-2026

ABSTRACT

The quick adoption of AI tools in the academic world has altered the ways in which students of universities learn a language, but the over-use of the tools brings up the issue about the real skills development. The research question explored in this study is the impact of AI abuse on the performance and language proficiency of English language learners in the university level in Lahore. The research design applied was a qualitative research design which involved the interviewing of five English language learners and four teachers at a university in the Lahore city, which is in the public sector. Thematic analysis model by Braun and Clarke (2006) was used to analyze the interview data to understand the impact of AI misuse on the learner behavior, language development, and academic performance. The results show that though AI tools assist in grammar correctness, vocabulary development, and writing-organization, excessive use inhibits the creativity and critical thinking among students, as well as their memorization and problem solving skills. Teachers also noted changes in behavior, such as the drop of effort, unwillingness to think independently, and using AI to do even the simplest tasks. The researchers conclude that despite the potential usefulness of AI in terms of linguistic support, its use is counterproductive to the authenticity of language competence and student performance. The ethics of responsible use, instructing towards responsible use, and explicit AI ethics are crucial towards ensuring the self-reliance and language development of learners.

Keywords: AI misuse, language competence, student performance, thematic analysis

INTRODUCTION

The application of AI has grown tremendously in this modern-day period, particularly with university students. Artificial intelligence is currently being used by students to write, edit and even generate ideas with the increased accessibility of tools like ChatGPT, Jasper AI and Grammarly. The earliest concepts of AI were in the 1950s as the first computers were created and scientists began to work on the possibility of machine emulation of human thought. During the 2nd half of the 20th century, AI had evolved due to the emergence of new technologies, albeit in a limited scale and not accessible to general audiences. The emergence of virtual assistants such as Siri by Apple and Alexa by Amazon made AI more noticeable in the early 2010s and became more popular in the integration of artificial intelligence in everyday life. They

made AI more user-friendly because these assistants could process natural language to comprehend and respond to verbal instructions (Decker Library, 2025).

Artificial Intelligence (AI), a term coined by emeritus Stanford Professor John McCarthy in 1955, was defined by him as “the science and engineering of making intelligent machines” (McCarthy, 2007, p. 4). According to Stryker and Kavlakoglu, “Artificial intelligence (AI) is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy” (2024).

While these technologies provide quick solution and support in learning English they are also raising concerns about its misuses. As noted by Vieriu and Petrea (2025), “The integration of Artificial Intelligence (AI) in education has transformed academic learning, offering both opportunities and challenges for students’ development” (p. 343). This concern is further supported by Reiter et al. (2025) who observe that, “students may become less inclined to develop the skills required to excel in these tasks, choosing instead to focus on mastering the use of generative AI tools that can perform these tasks for them”. This raises question about understanding how performance and competence can be affected when students rely too heavily on artificial intelligence.

Chomsky defines competence as “the ability of the idealized speaker-hearer to associate sounds and meanings strictly following the rules of his language” and considers performance as “the ability to apply the competence into speaking-hearing procedures and show personal knowledge” (Chomsky, 2006, p. 103). This distinction highlights that having knowledge of a language is different from actually using it in real situations. As Kannan (n.d.) further explains, “While competence represents a speaker’s idealized knowledge of language, performance reflects the messy reality of language use. Performance may not always align with competence, as external factors can cause deviations from the speaker’s underlying linguistic knowledge” (p. 37).

When it comes to English language learning, it is defined as “the process by which individuals, particularly young children, acquire English as a second language, often after establishing their home language, leading to cognitive, cultural, and economic advantages” (Kim-Rich & Curwood, 2023). English first developed in the 5th century from Germanic roots but was later shaped by Norse invasions and the Norman Conquest, which added many French words. During the Middle English period from the 12th to the 15th century, writers such as Geoffrey Chaucer helped establish English as a literary language, while regional dialects began to join together around London. The Early Modern English period, which lasted from the 15th to the 17th century, brought big changes in vocabulary and grammar, supported by the printing press and enriched by the works of Shakespeare and the English Renaissance. Later, the spread of the British Empire and the Industrial Revolution carried English across the world, adding words from many other languages. (Oxford International English Schools, n.d.).

This study will explore the effects of artificial intelligence misuse on performance and competence of English language learning in the university level in Lahore. This paper will discuss the possibility of how the use of AI tools is a barrier to the acquisition of the key language skills in critical thinking, originality and communicative competence by learners. This study aims to establish how much AI is misused to the detriment of language acquisition by analyzing the academic practices and performance of students with and without AI assistance. To realize this purpose, the following objectives are targeted in the study:

- To determine how the misuse of AI tools affects the performance of English language learning students at the university level.
- To investigate the effects of the excessive use of AI on the language mastery of learners, such as writing, critical thinking, and solving of problems.
- To identify the problems and risks of being over reliant on AI in academic work.

The critical study illustrates the following research questions:

Q1. Which is the impact of artificial intelligence tools abuse on performance of university students in English language learning and other tasks that demand originality and critical thinking?

Q2. How can overuse of AI affect language proficiency of student's especially writing, critical thinking and problem solving capabilities?

Q3. What are the primary problems and threats of the overuse of AI in academic work?

LITERATURE REVIEW

The problem of the impact of artificial intelligence misuse on the performance of learners and the level of their linguistic competence has become a popular topic in the study of Applied Linguistic. Although the AI tools can be used to facilitate the learning of the English language by promoting writing, vocabulary, and understanding, their inappropriate application can restrain critical thinking of students and diminish their language abilities.

The systematic review conducted by Zhai et al (2024) on the impact of AI dialogue systems over the students revealed that over-dependence on these systems may impair the students critical thinking, decision-making and analytical reasoning. According to their results, although AI may help access the information faster, it can also decrease the interest of learners to more profound cognitive processes that are the key to the development of a well-developed language competence and ability to learn independently.

Another recent study that is already timely and was conducted by Ozer (2024) regarding the use of artificial intelligence in the online language learning process that was conducted on the students who pursue the courses in the English language, has shown that, despite the fact that the AI language models can simplify the process of learning, as well as increase the level of the language among the students who attend the courses, serious ethical and academic concerns can also be associated with the use of AI language models. It was concluded that, regardless of the intentions of students towards the use of AI in the development of writing and comprehension, the misuse of AI leads to numerous issues (plagiarism, cheating, overuse of automated assistance).

On the one hand, Rezaei et al. (2024) comment on the rising popularity of ChatGPT, which is an AI language model created by OpenAI, and its impact on the academic writing process of students. In their study they discuss the positive and the negative sides of the use of ChatGPT in schools. The article emphasizes that ChatGPT may assist students in the provision of ideas, grammar and sentence structure, research, and collaborative writing. Nevertheless, the authors were also concerned about the misuses, pointing out that overreliance on AI-generated content could result in plagiarism, incorrect details and deterioration of originality and critical thinking of students. Their conclusions point to the necessity of using AI tools in academic writing responsibly and ethically to make sure that the technologies do not kill human creativity and intellectual activity.

The same point of view is expressed by Silva and Alvarez (2023), who hinted that the actual situation is that AI tools remain at an early stage of development and are not flawless yet. In the darkness of disruption, maintaining a balance between the positive aspects that AI brings must be well-regulated and learners adequately trained in order to allow them to use it in a responsible manner. Thus, the human element that is vital in education should not be lost to critical thinking perspectives and audit AI tools. Based on the concept, Alharbi (2023) examined the application and misuse of machine translation (MT) tools equipped with artificial intelligence (AI) in English as Foreign Language (EFL) classrooms, specifically, in Google Translate. This paper has proven that AI-based translation devices can enhance

learning performance and generate more independent learners when utilized properly. Study however has also revealed that overreliance on such technologies can constrain the chances of students to gain their own linguistic competence and language criticality.

Mathew (2024) explored the opportunities and obstacles of implementing AI in English Language teaching (ELT) and the wider context of how new tools, like large language models (LLMs) and chatbots powered by generative AI, are changing the teaching and learning processes. His investigation found out that these AI applications can make lesson planning, assessment, feedback and student autonomy more effective, but they have grave concerns in relation to academic integrity, data privacy, and the changing role of teachers. Mathew (2024) then suggested that teachers could not ignore AI as a menace but could instead devise frameworks on how it could be responsibly and legitimately applied in language teaching. Relying on this premise, Woolf et al. (2013) proposed that among the most efficient strategies is to have schools to urge students to think critically about the way technology may benefit their learning and impair their learning and not only to teach them how to use it.

In response to the increasing role of artificial intelligence in the present day in the field of education, Kushmar et al. (2022) analyzed the role and efficiency of AI in English language learning in the Ukrainian universities. Their study concentrated on AI in changing the way education is delivered through personalized instructions, better assessment, and empowering both the teacher and the student. The results of this research indicate that there is a risk of data security, loss of emotional contact with human interlocutors, and lack of creativity when overusing AI tools. Equally, a study by Deshpande and Szefer (2023) investigating the performance of ChatGPT in an introductory course on computer engineering showed that the model can be significantly less accurate when it has to work on more challenging homework assignments, but can still provide correct answers to the inquiries on quizzes rather often.

Dakakni and Safa (2023) were another author on the use of AI in language education who examined the attitude of both students and teachers towards Artificial Intelligence (AI) tools in the L2 classroom. By adopting a mixed-methods case study design, based on online surveys and interviews with students and teachers, it was found that almost three-quarters of students admitted to using AI in an unethical manner in their academic work, creating ideas, preparing blueprints, and even writing entire assignments. Although they relied on AI, students were also distrustful of it, as they were concerned with privacy and fairness.

Even though there are studies which suggest the advantages and issues with artificial intelligence in language studies, the current research has been primarily devoted to the integration of AI-based tools and their possibilities, but not to the abuse and the effects of such technology on the outcomes of the learning process in students. Minor concerns have been paid on how the excessive use or abuse of AI influences actual performance, originality, and linguistic competence of students in learning English language. Furthermore, existing research has been conducted in broader international contexts, with limited focus on university-level learners in Pakistan, Lahore, where digital literacy and academic integrity concerns present unique challenges. Therefore, this study addresses this gap by investigating how the misuse of AI tools impacts the performance and competence of English language learners at the university level in Lahore, providing localized insights into the psycholinguistic and educational consequences of AI dependency.

RESEARCH METHODOLOGY

Research Design

In this research, a qualitative approach has been used, where a semi structured interview was used as the tool to measure the effects of AI on performance and competence of students. This study is conducted at a public sector university in Lahore, among the students and teachers. This research selects the qualitative method as it enables the researcher to gain an in-depth insight into students and teachers which helps uncover personal experiences, concerns, and opinions regarding overreliance on AI which are essential in formulating workable suggestions that can reduce its misuse.

Participants

The study chose nine participants, including five students and four teachers from the English department at the university level. The sample was selected using purposive sampling, which targeted those students who regularly use AI tools and teachers with at least four years of experience to be able to learn about the shifts in the performance and skills of the students since AI became common in education. Purposive sampling is “the better matching of the sample to the aims and objectives of the research, thus improving the rigour of the study and trustworthiness of the data and results” (Campbell et al., 2020).

Data Collection

Semi-structured interviews with the students and teachers were undertaken to answer the research questions. The interviews were to address the effects of AI tools on the English language learning of students, their writing, critical thinking and problem solving abilities, and the problems and issues surrounding the over relying on AI. Interviews were conducted until data saturation was reached that is, when no new information or themes emerged from additional participants (Saunders et al., 2017). Saturation was observed after conducting interviews with all five students and four teachers, no additional interviews were required.

The interview questions for students included:

1. Do you feel that AI tools have improved or hindered your language skills? Why?
2. Have you ever used AI tools to complete assignments or exams? If so, how did it affect your learning experience?
3. What are some potential benefits and drawbacks of using AI tools in language learning, in your opinion?

The interview questions for teachers included:

1. Do you believe that AI tools have affected student language skills positively or negatively, and why?
2. Have you noticed any change in students' behavior or performance since the increased use of AI tools?
3. What strategies do you use to ensure students are using AI tools responsibly and effectively in their language learning?

Data Analysis

The researcher discusses the impact of the abuse of AI tools on the English language learners performance and competency in Lahore by analyzing the interview data using thematic analysis method by Braun and Clarke (2006), which determines and interprets significant patterns in the qualitative data. The first step was to start with the initial coding where certain parts of the transcribed interview data were labeled. The codes were then grouped in accordance with their underlying meaning (latent content) in order to come up with the overall themes (Braun and Clarke, 2006).

Ethical Consideration

This study ensures that all ethical guidelines are followed. Before participating, students and teachers are fully informed about the purpose and procedures of the research. A total of twelve students and six teachers were contacted, of whom five students and three teachers agreed to take part after giving their consent. Participation is voluntary, and participants have the right to withdraw at any stage without any consequences. The data collected is used solely for research purposes, and the names of participants are replaced with fictional letters during analysis to maintain their anonymity.

FINDINGS AND DISCUSSIONS

This chapter provides the major findings which were revealed in the participants narrations, showing the common trends and mutual experiences which were observed in the interviews. The thematic analysis allowed grouping the data into significant clusters representing the perception of the students and teachers about the influence of the misuse of AI on language learning. The themes stated herein are the product of a critical interpretative procedure, where meaningful concepts, recurrent issues and shared observations user-examined and perfected in answering research questions of the study. According to Braun and Clarke (2006), themes are structured meanings in the data and they provide information of the problems behind the behaviour and language practice of the participants.

Table 1. Students' Themes, Codes, and Insights

Theme	Codes	Insights from Interviews
Impact of AI Tools on Language Skills	<ol style="list-style-type: none"> 1. Improved grammar and sentence structure 2. Vocabulary suggestions 3. Instant feedback 4. Reduced creativity 5. Overdependence / laziness 	Students claimed that AI solutions help to enhance grammar, sentence structure, and vocabulary by providing instant feedback. They acquired through AI corrections and learned their mistakes better. Nevertheless, a large portion of the users believed that overuse diminished creativity and independence in writing and turned them into too much reliant on AI
Use of AI in Assignments and Academic Work	<ol style="list-style-type: none"> 1. AI used for assignments and exams 2. Time-saving and quick notes 3. Idea generation and brainstorming 4. Easier learning but less personal effort 5. Negative impact on creativity 	One of the common uses that students made of AI was in assignment, study notes, exam preparation, and brainstorming. According to them, AI made the things simpler and quicker. Nevertheless, most of them confessed that they studied less actively and had less interest in the material with the help of AI, and their creativity was adversely impacted.
Perceived Benefits and Drawbacks of AI Tools	<ol style="list-style-type: none"> 1. Time management and efficiency 2. Detailed explanations and 	The greatest advantages mentioned by students were instant clarification, vocabulary enhancement, writing improvement and learning at a personal

	examples 3. Vocabulary and pronunciation support 4. Overreliance and loss of critical thinking 5. Contextual inaccuracies	level. They also pointed out negatives, however, such as overdependence and less critical and creative thinking as well as incorrect or insensitive AI responses that are sometimes inaccurate or context-dependent.
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It has been revealed in the interviews that there was a general inclination in the manner the students perceive the role of AI in language studies. The respondents noted that AI is of immediate assistance in correcting grammar, sentence structure, and vocabulary since it offers corrections and models of standardized language in real time. Student 3 said,

AI tools assist me in learning new vocabulary, improving my grammar, and providing immediate feedback on my writing. It happens when I run my sentences through AI I realize my errors and how to correct them.

Likewise, Student 2 outlined that AI offers some degree of standard form of language and making no errors, in which learners can have a better perception of grammar structure. Student 1 never told anything further, but he added that,

AI offers feedbacks to create grammatically correct sentences, and therefore, made mistakes are easier to see.

These remarks suggest that AI provides easy, fast linguistic support that can assist students in identifying and making corrections to their errors more efficiently than learning through conventional means. Nevertheless, another issue that was repeatedly mentioned by the students was a lack of creativity and increasing reliance. Student 1 said that despite the accuracy it helps with, “AI negatively affects the ability to write creatively” and Student 4 remarked that, “creative writing would have become robotic as a result of using AI too much”. Student 5 noticed that excessive dependence diminishes personal writing experience and remarked, stating, that,

I tend to over depend on them and as a result, my practice in writing becomes less

These issues imply that although the tool may be useful in terms of correctness, AI poses the risk of diminishing the skill of creating original ideas and creating an original style of writing, which is not an automated solution but cognitive in nature. The same was the case in instances where the students talked about how they used AI in assignments, notes, and preparing exams. There are a lot of respondents who admitted that AI is now becoming a part of every academic task, and it is usually able to assist them to complete assignments faster and spend their time more wisely. Student 1 explained that “I use AI to write short notes with headings because of lack of time” and Student 2 explained that,

AI offers solutions immediately that save my time and make me learn any phenomenon in a faster and more efficient way

Nevertheless, the students acknowledged that this convenience also contributed greatly to the lack of interest in the learning process. Student 1 made it clear that learning was also influenced as “I was not actively engaged in the learning process”. Similarly, Student 3 observed that excessive dependence on AI implied that they do not learn much when just repeating AI generated responses. These considerations indicate that despite the ease with which AI undertakes academic work, it promotes passive learning where students do not undertake various fundamental processes of learning the language, including the process of reading, analyzing, and practicing language. This tension was recapped by Student 4, who said that,

AI is a brainstormer, but it also influences creativity, albeit negatively, which can be seen as the influence AI may have on idea generation and inhibition of cognitive development

The combination of these experiences suggests that AI can be highly beneficial to efficiency, but it can also be abused by causing shallow learning, underdeveloped critical thinking, and less quality interaction with the very process of learning.

Table 2. Teachers' Themes, Codes, and Insights

Theme	Codes	Insights from Interviews
Teachers' Perceptions of AI's Impact on Student Language Skills	<ol style="list-style-type: none"> 1. Improved grammar and vocabulary 2. Better sentence structure and proofreading 3. Familiarity with new concepts 4. Mechanized expression 5. Overreliance reducing confidence 6. Weak memory retention 	According to teachers, AI applications enhanced vocabulary, grammar and sentence structure because they corrected the students instantly and exposed them to formal language. Nevertheless, they too noted adverse effects: mechanization of the expression of students, loss of confidence in their individual writing, excessive reliance on AI, and weak memorization of new words. Other students may present assignments that have vocabulary that they are not able to comprehend.
Changes in Student Behavior and Performance Due to AI Use	<ol style="list-style-type: none"> 1. Reduced critical thinking 2. Reliance on AI instead of brainstorming 3. Using AI even for classroom tasks 4. Grade discrepancy (good assignments but weak exams) 5. Reduced writing anxiety 6. Abundant ready-made ideas 	Teachers noted that learners tend to think less and less on their own and resort to AI even to answer straightforward assignments at school, usually by making snapshots of questions and asking AI to provide answers. A lot of students perform well in their assignments yet they perform poorly in tests. Other students are less anxious due to the fact that AI gives them easy ideas yet it is perceived by the teachers as less effort and learning.
Strategies to Ensure Responsible and Effective AI Use	<ol style="list-style-type: none"> 1. Allow AI for brainstorming and formatting only 2. No AI use for graded tasks 3. Read AI-generated text, then write independently 4. Confirm accuracy of AI information 5. Promote reading and listening as core input 6. Phone-free writing tasks 7. Teaching AI ethics 	According to teachers, some of the strategies included letting AI do the planning, idea generation, or formatting but not the actual writing of assignments. Other educators ask learners to read AI responses, turn AI off and write on their own. Others focus on checking the information provided by AI, enhancing reading and listening behaviors, removing phones during writing, and educating on the ethical utilization of AI in academic writing.

Educators always reported an ambivalent effect of AI on the language proficiency of students, noting improvements and decreases. They several times said that AI tools expose learners to grammatically correct language and richer vocabulary. One of the teachers said that,

AI offers standardized grammatical language, students learn new vocabulary, new phrases and grammar rules, and that the use of such tools as Grammarly and ChatGPT is highly beneficial at improving surface-level accuracy

One more teacher remarked that those tasks that,

Learners do now have perfect vocabulary, perfect sentence construction and logical presentation, which were impossible to some learners in the past

Nevertheless, these advances were perceived to be superficial since the students find it hard to replicate the same quality on their own. Students, as one teacher put it, tend to lose that sense of their ability to express themselves and end up with a submission that has words that they are not conversant with. According to teachers, this has resulted in a move towards mechanization in the expression, a form of writing that reflects the work of AI more than it reflects the talents of genuine students. They also indicated that in many cases, when exposed to new words often, via AI, individuals tend to remember none of them, which is an indication of weakened memory and not competence.

Even more critically described changes in student behavior were outlined. Educators noted on multiple occasions that learners have stopped thinking on their own and are overly dependent on AI even in the most basic assignments in classrooms. The striking example that one of the teachers provided is as follows:

When I ask them a question, they do not brainstorm; they just take a picture of the question even when it is on the board and ask ChatGPT

According to one of the other teachers, it is a form of cheating that renders one dull and stated that,

Learners are left to rely on the AI generated answers rather than build their own analytical capacity

There was also a notable gap between assignments and the exam performance due to this overreliance. According to one teacher, students who score maximum in assignments usually fail in exams showing a discrepancy between AI-generated work and the competency of the student. Some teachers admitted that AI can help them lessen writing anxiety and gives them plenty of readymade ideas but considered them benefits of the problem, students are now so comforted that they do not want to engage in their own cognitive effort.

In response to these issues, educators claimed to have employed various utilitarian techniques in keeping responsible AI use, as opposed to prohibiting it. Other educators interact with students to consider AI as a writing machine, instead of planning. Indicatively, one educator teaches by telling the learners to go through whatever ChatGPT says, read, and then turn it off and write independently. An additional teacher stressed the significance of natural input:

Nothing can substitute reading and listening, and thus does not allow the use of AI by confiscating phones during the writing process

The teachers also can verify the correctness of AI generated content and talk about AI ethics, which will enable students to differentiate between what is considered acceptable academic assistance and what is not. One of the teachers explained this strategy by stating that they can apply AI to brainstorm or organize, but their words and wording must be their own. These approaches echo the attempts of teachers to balance between the utility of AI and the necessity to maintain the independence, critical thinking, and development of the authentic language in students.

CONCLUSION

This research aimed to explore how the misuse of AI tools influences the performance and linguistic competence of English language learners at the university level in Lahore. Based on the interviews gathered from the participants, it can be concluded that while AI offers valuable support such as improved grammar, vocabulary, and instant feedback its excessive and uncontrolled use has significant negative

consequences. The results indicate that students become increasingly dependent on AI for generating ideas, completing assignments, and organizing their writing, which reduces their creativity, critical thinking, and independent problem solving abilities. Numerous interviewees mentioned that students tend not to do tasks independently, use AI even in simple tasks at the classroom, and perform worse in the tests, when they are not supported with AI.

This study was driven by the fact that the increased reliance on AI tools by students is undermining the same competencies that students are supposed to be acquiring at higher education. To a great extent, these expectations were confirmed in the findings that revealed that AI misuse leads to superficial learning, reduced memory retention, and lower confidence in one's own linguistic abilities. Teachers further emphasized that while AI can reduce anxiety and support language accuracy, it can also produce lead to the process of writing that is mechanical and a lack of authenticity concerning the learning process.

This research contributes to Applied Linguistics and Psycholinguistics by offering context specific insights into how AI misuse affects learners in a public-sector university in Lahore. The use of the thematic analysis suggested by Braun and Clarke (2006) enabled the research to find valuable themes in the perceptions of both students and teachers regarding the effects of AI on language development. Overall, the study suggests that AI should be viewed as a supportive tool rather than a replacement for genuine learning efforts. . It is necessary to ensure that real linguistic competence is preserved by encouraging students to use AI in a responsible manner i.e., to brainstorm, to verify grammar, or clarify concepts and, nevertheless, to form their own writing, reading and critical thinking skills. The findings highlight the need for AI ethics training, clear institutional guidelines, and teaching strategies that promote balanced and responsible AI use in academic settings.

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