Lorestan University

Qualitative Inquiry as Praxis in L2 Studies

Journal homepage: https://quipls.lu.ac.ir/

Artificial Intelligence and Generative AI in Iranian Language Education Research: A Scoping Review

Masoud Taghipour[a]* , **Mehran Talebi**[b]

[a]Department of English Language and Literature, Allameh Tabataba'i University, Tehran, Iran

[b]Department of English Language and Literature, Allameh Tabataba'i University, Tehran, Iran

ARTICLE INFO

Article Type

Research Paper

Article History

Received: 2025-10-29

Received in Revised Form: 2025-11-11

Accepted: 2025-11-12

Available Online:2025-11-12

Keywords:

Artificial intelligence
Generative AI
Scoping review
Language education

ABSTRACT

This scoping review systematically maps 48 empirical studies from Iranian academic journals in order to explore the integration of AI and GenAI in language education. The methodology involved systematically searching digital archives of prominent Iranian universities using AI-related keywords, followed by PRISMA-guided screening and eligibility assessment. The analysis suggests that research is dominated by EFL contexts at the tertiary level, with a strong focus on tools such as ChatGPT for the purpose of enhancing writing and providing automated feedback. Distinctively, Iranian scholarship presents a "validation-first" approach, often comparing AI performance against human benchmarks, while also demonstrating a significant "affective turn" into teacher anxiety, motivation, and technostress. Constructing a necessary, critical, and human-centered perspective to global discourse, this field is characterized by theoretical fragmentation and technological monoculture leaning on international tools. This review further identifies gaps in the research on Persian language learning, K-12 education, and critical AI literacy, therefore pointing toward likely avenues for a more mature, context-sensitive pedagogical science in Iran.

1. Introduction

The rapid proliferation of AI has reshaped the educational landscape, marking a "technological turn" in how languages are taught, learned, and assessed. Though long a staple of pedagogical research, the recent emergence of GenAI and LLMs has accelerated this transformation, offering capabilities that far outstrip those of older rule-based systems. GenAI is a subset of artificial intelligence that leverages generative models to create new content, such as text, images, and audio, amidst natural language inputs. Unlike their predecessors, which focused essentially on

Cite this article: Taghipour, M., Talebi, M. (2025). Artificial intelligence and generative AI in Iranian language education research: A Scoping Review. *Qualitative Inquiry as Praxis in L2 Studies, 1*(2), 97-119.

Publisher: Lorestan University

DOI: https://doi.org/10.22034/quipls.2025.2079371.1020

classification or retrieval, such tools can generate human-like output, creating new affordances for personalized learning, automated content creation, and interactive tutoring.

In the global context, these technologies have been received with a mixture of enthusiasm and caution. Recent scholarship has underscored the potential of GenAI to democratize access to language proficiency by serving as an "always-on" conversational partner and a provider of instant, corrective feedback. Tools such as ChatGPT have become central in this discourse. Researchers are currently investigating their effectiveness in bringing about improvements in writing quality, for example, Esfandiari & Allaf-Akbary (2024) and Jafari et al. (2025)-reducing teacher workload, as in the case of Mohamadi et al. (2024), and fostering learner autonomy. For example, global reviews indicate that GenAI can significantly support pre-service teacher education through simulated classroom scenarios and the generation of lesson plans (Khajavi & Ezhdehakosh, 2025).

This technological wave has not bypassed the Iranian educational context. Indeed, Iranian scholars have begun to explore actively how these global tools intersect with local pedagogical needs. On the whole, the literature shows a vibrant, growing interest in leveraging AI to address the persistent challenges of EFL instruction. Iranian researchers have explored a range of applications from using AI-driven feedback to enhance reflective practice among teachers (Esmaeily & Mahdavi Zafarghandi, 2025) to integrating AI-powered tools into pre-service teacher education programs (Khajavi & Ezhdehakosh, 2025; Mehranirad, 2025). Further, studies have begun to document that tools like Grammarly (Cheraghi et al., 2025) and QuillBot (Azimi & Farahian, 2024) are effective in improving Iranian intermediate learners' writing complexity and accuracy, indicating that the automated assistants have become integral to the academic writing process in universities in Iran.

In spite of this growing body of research, a critical gap remains in our systematic understanding of how GenAI is being conceptualized and applied specifically within the Iranian context. For instance, recent international scoping reviews-which include the comprehensive work by Wang et al. (2025)-that have mapped the global landscape of GenAI in language education tend to rely heavily upon a dataset such as the Social Sciences Citation Index (SSCI). Rarely do such reviews capture the "grey literature" or influential empirical studies published in national and local university journals that quite often reflect nuanced understandings of non-Western educational settings. This is an important omission because education technology is not

neutral regarding local context; adoption is very much influenced by infrastructure, cultural norms, and educational policies.

In this respect, Iran provides an interesting case study. The Iranian education system is subject to special restrictions-from centralized curricula to different digital infrastructure challenges-and the acceptance of AI tools may take a very different path than in North America or East Asia. Global studies often focus on the efficacy of AI tools; however, it seems that Iranian researchers show equal interest in the affective and psychological aspects of AI adoption. Studies have appeared regarding "technostress" and "anxiety" among EFL teachers (e.g., Sabourianzadeh & Ahmadi, 2025) or emotional experiences of teachers using technology in their classes (Nezakatgoo et al., 2025).

This is further compounded by a significant "trust gap" that needs to be explored. Whereas AI adoption in some contexts is broadly embraced, Iranian literature often frames the issue in comparative terms, pitting "AI scoring versus human scoring" as a way of testing these imported tools against trusted local measures (e.g., Mirzaeian, 2025; Ziaei & Tavakoli, 2025). This concern for the future of the teaching profession in Iran is laid bare by questions such as those put by Ghorbani (2025) over whether ChatGPT can take the place of human teachers in schools. It is only by dedicating a review to these locally bound contributions that the particular challenges, innovations, and theoretical contributions of Iranian scholars will remain disparate and invisible to the international academic audience.

To fill this gap, the current study utilizes a scoping review methodology to systematically map and synthesize empirical research on AI and GenAI published in Iranian academic journals. Drawing on this corpus, this review takes a granular approach by analyzing the specific contextual, technological, and theoretical nature of AI research in Iran. The distinctiveness in this study lies in going beyond the "efficacy" narratives that dominate international reviews, searching instead for how Iranian scholars are applying global tools to local realities. It analyzes how tool-specific tools such as ChatGPT are being used not just for language learning, but for navigating the complexity of academic research and plagiarism in a second language (cf. Pourghasemian & Afzali Shahri, 2018). It also investigates theoretical underpinnings within this research, examining whether Iranian scholars rely on technocentric models of or integrate psychological theories such as Self-Efficacy and Motivation (e.g., Jafari et al., 2025; Razavi & Salehi, 2023) to detail learner and teacher interaction with AI.

Guided by the Technology-Based Learning Model utilized in similar scoping reviews (e.g., Wang et al., 2025), this paper addresses the following research questions to provide a comprehensive overview of the field:

1. **RQ1:** What are the contextual characteristics of AI research in Iranian language education, including the target languages, participant demographics, and educational levels involved?
2. **RQ2:** What are the technological characteristics of this research, specifically regarding the types of AI models (e.g., ChatGPT, chatbots, automated scoring engines) and prompts utilized?
3. **RQ3:** What theoretical frameworks are employed by Iranian scholars to interpret the impact of AI on language teaching and learning?
4. **RQ4:** What are the primary research objectives (e.g., perception, effect, usage, or comparison) driving empirical inquiry in this context?

By synthesizing these findings, this review contributes to a more inclusive understanding of the "AI revolution" in education, highlighting the distinct voice and valuable contributions of the Iranian academic community.

2. Methodology

This systematic scoping review was conducted to map the landscape of AI and Generative AI research within the specific context of Iranian language education. The methodological approach was adapted from the Synthesis Methods and Reporting Tool (SMART), encompassing distinct phases of identification, screening, and eligibility assessment.

2.1. Data Sources and Search Strategy

Unlike traditional reviews that query international indexing databases (e.g., Web of Science or Scopus), this study specifically targeted the academic output of Iranian higher education institutions to capture local nuances and "grey literature" often missed in global reviews. The search was conducted within the digital archives of prominent Iranian university journals, specifically analyzing the publication records of the following institutions: Yazd University, University of Kurdistan, Alzahra University, Islamic Azad University (South Tehran Branch), Chabahar Maritime University, Shahid Chamran University of Ahvaz, Imam Khomeini

International University, University of Isfahan, Razi University, Shiraz University, University of Sistan and Baluchestan, University of Tabriz, and Urmia University. The search strategy utilized a keyword-based filtering algorithm designed to identify titles and abstracts containing terms related to the research focus. Keywords included: "artificial intelligence", "generative ai", "chatgpt", "large language model", "llm", "neural network", "machine learning", "automated scoring", and "automated feedback".

2.2. Inclusion and Exclusion Criteria

To ensure the relevance and quality of the selected literature, specific inclusion and exclusion criteria were established, modeled after the criteria used in Wang et al. (2025):

2.2.1. Inclusion Criteria

- **Content:** Articles must explicitly address the use, perception, or effect of Artificial Intelligence, with a specific emphasis on Generative AI (e.g., ChatGPT) or automated language processing tools in educational settings.
- **Context:** Studies must be published within the identified Iranian university journals, ensuring the research reflects the local educational landscape.
- **Document Type:** Empirical studies, theoretical papers, and review articles were included to provide a broad "scoping" overview of the field's development (e.g., Azadnia, 2024; Fakher Ajabshir, 2023; Mirzapour Kouhdasht, 2023; Sayyed Kalan & Mazharpour, 2025).

2.2.2. Exclusion Criteria

- Articles where AI was mentioned only tangentially or as a future recommendation without substantive discussion.
- Duplicate records or varying versions of the same manuscript appear across different file versions.

2.3. Study Selection (PRISMA)

The study selection process followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines,

- **Identification:** The initial search across the uploaded university journal archives yielded a comprehensive dataset of potential articles.
- **Screening:** A keyword-based automated screening was applied to the titles and abstracts of all records. This process filtered out the majority of unrelated studies (e.g., general linguistics, literature, or non-tech pedagogy), identifying a subset of potentially relevant papers.
- **Eligibility:** The complete list of filtered results was examined for relevance to the research questions.
- **Included:** A final total of 48 articles were selected for inclusion in this review. These articles represent the core body of literature analyzing AI and GenAI in the Iranian language education context.

2.4. Data Extraction and Analysis

Data extraction was performed using a coding scheme adapted from Wang et al. (2025) to address the specific research questions. The extracted data included contextual characteristics (target language, participant type, educational level), technological characteristics (AI tool type), theoretical framework (explicit learning theories), and research objectives (perception, effect, usage, or comparison). The data were then synthesized using thematic analysis.

3. Results

After a systematic search and screening process across archives of Iranian university journals, a final corpus of 48 empirical studies was obtained. The granular snapshot that is given through the analysis of these articles presents a picture of the "state of the art" concerning AI and GenAI within the Iranian language education community. A synthesis of representative studies from this corpus is provided in Appendix 1. The findings are organized below, grouped according to the four guiding research questions: contextual characteristics, technological landscape, theoretical underpinnings, and research objectives.

3.1. Contextual Characteristics: The "English-Only" Hegemony (RQ1)

The most immediate and striking characteristic of the identified literature is its linguistic uniformity. Analysis thus reveals a very concentrated research landscape where AI in education is almost synonymous with ELT.

Target Language and Educational Level: Of the 48 studies, the overwhelming majority clearly locate their research in EFL or ESL settings. Titles often contain terms such as "Iranian Intermediate EFL Learners" (e.g., Banisharif-Dehkordi et al., 2025) or "EFL Faculty Members" (e.g., Roshani Ghale Sheikhi et al., 2025). For example, works conducted at Yazd University investigate "EFL Learners' Use of the Article 'The'" explicitly (Ahmadzade & Farahian, 2025). At Azad University, research refers to "EFL Writing" (Azimi & Farahian, 2024) and "TOEFL iBT" (cf. Keyvanfar & Vafaei Khoshkhou, 2015). Most importantly, given the complex linguistic ecology of Iran, there are no contributions related to applying GenAI for teaching Persian (Farsi), Arabic, or other regional languages in this dataset, a fact pointing to a particular kind of "linguistic hegemony" where AI is seen almost purely as a means of internationalization.

The settings regarding the levels of education are heavily weighted toward Higher Education-Tertiary Level. University departments of English Language and Literature or Applied Linguistics are the predominant data collection sites. Works on online learning programs, such as "Among Iranian University Students" (Razavi & Salehi, 2023), or those analyzing "MA Theses" (Pourghasemian & Afzali Shahri, 2018), show a discourse driven by and for the academic elite. In this regard, this top-heavy focus contrasts with the global interest in K-12 AI literacy, which may reflect the structural constraints of the Iranian public school system, where curriculum centralization limits the inclusion of unauthorized tools.

Participant Demographics: The participant pool is split between learners and teachers, although interest in the latter is increasing. Whereas studies centered on students are still more common, focusing on such factors as "Vocabulary Acquisition" (Rabab'ah et al., 2025) and "Speaking Skills" (Baharloo & Miyan Baghi, 2024; Fathi et al., 2025), there is nevertheless a significant cluster of research into the professional identity of teachers themselves. Works such as "Iranian EFL Teachers' Perceptions" by Ghorbani (2025) and "Faculty Members' Meaningful Work" by Roshani Ghale Sheikhi et al. (2025) suggest that the advent of AI represents nothing

less than a disruptive moment for the teaching profession and demands an urgent investigation of teacher preparedness and resilience.

3.2. Technological Characteristics: From Validation to Innovation (RQ2)

The technological landscape, constituted of general references to AI and specific tools, is clearly dominated by Generative AI models. The "ChatGPT Effect" Following international trends (Azadnia, 2024), ChatGPT rapidly positioned itself as the main protagonist in Iranian research about AI. It appears frequently as the primary independent variable in experimental designs. For example, researchers at Razi University investigated "The Impact of Artificial Intelligence (Chat GPT) on Writing Accuracy" (Jafari et al., 2025), while Isfahan University scholars explored "Online Games and AI ChatGPT" for vocabulary acquisition (Rabab'ah et al., 2025). This pervasiveness suggests that ChatGPT has lowered the threshold for AI research by allowing scholars to implement standardized technological interventions without specialized software development.

Comparative Tool Analysis: The Iranian dataset is distinctive for the prevalence of comparative technological studies, which serve as a form of "consumer protection" for educators. For example, Ahmadzade and Farahian (2025) explicitly placed ChatGPT against Grammarly to see which had superior pedagogical value for specific grammatical features. Likewise, Cheraghi et al. (2025) centered their research on the impact of Grammarly Software, while Azimi and Farahian (2024) did the same with QuillBot. This diversification seems to reflect a pragmatic search for what tools will work best and be most accessible to Iranian students, rather than making do with just the OpenAI ecosystem.

Automated Scoring and Feedback Systems: Apart from generative text, a robust strand of research is focused on Intelligent Scoring Systems and Automated Writing Evaluation (AWE). Research using "Artificial Neural Networks and Neuro-fuzzy Systems" (Farangi & Zabbah, 2023) and AI-driven feedback mechanisms (Banisharif-Dehkordi et al., 2025; Salavatizadeh & Tahriri, 2020) demonstrates a relatively high degree of sophistication in engagement with the backend mechanics of AI. These studies tend to be interested in establishing or confirming the validity of machine scoring compared to human raters, a kind of "trust but verify" perspective.

3.3. Theoretical Characteristics: The Affective Turn (RQ3)

While many studies remain atheoretical "usage" investigations, the Iranian corpus exhibits strong, albeit often implicit, grounding in psychological and affective theories, distinguishing it from a merely technocentric research orientation.

Psychology of Technology Adoption: The data shows a "psychological turn" in Iranian AI research. Instead of merely aiming at some cognitive gain, much of the literature frames its investigation in terms of the emotional experience of the user. Variables include "Anxiety," "Motivation," and "Emotions". Sabourianzadeh and Ahmadi (2025) investigated "Technology-Infused Empowerment" and its impact on anxiety, and Nezakatgoo et al. (2025) researched "Teachers' Emotions and Experiences". Such work presupposes the deployment of key concepts from Positive Psychology and Self-Determination Theory, namely that AI integration is significantly premised on the teacher's emotional resilience.

Constructivism and Complexity: Explicit theoretical framing also characterizes work that goes beyond the "tool view." Recent examples include placing ChatGPT explicitly within "Constructivist Language Pedagogy" to examine how the tool mediates knowledge construction rather than information transmission (e.g., Esfandiari & Allaf-Akbary, 2024). Equally, Esfandiari and Arefian (2025) utilize "Complexity Theory" to understand professional development, framing the teacher-AI interaction as a dynamic emergent system.

3.4. Research Questions: Comparison, Perception, and Impact (RQ4)

These empirical investigations are pursued for three interrelated but distinct objectives: Comparative Validation, Stakeholder Perception, and Pedagogical Impact.

Comparative Validation: The "Turing Test" Approach. One singular and iterative goal involves the direct comparison of AI performance to human benchmarks. Works like "A Comparative Evaluation of Artificial Intelligence Scoring Versus Human Scoring" by Mirzaeian (2025) and the "Comparison between human raters and ChatGPT" by Ziaei and Tavakoli (2025) serve as a sort of academic "Turing Test". The goal is to audit the tool to determine if AI can validly replicate the nuanced labor of a human evaluator.

Stakeholder Perception and Readiness: Stakeholder perception and readiness was the second significant objective to take the "temperature" of the academic community. There are a plethora of perception studies. Ghorbani (2025) raises the essential question: "Can ChatGPT Replace Human Teachers?" Similarly, Moulavinafchi (2025) investigates "AI Literacy and Perception". These studies play a diagnostic role, determining those cultural and professional barriers, such as technostress (Sabourianzadeh & Ahmadi, 2025) or fear of becoming obsolete, which may ultimately stand in the way of its use.

Pedagogical Impact and Enhancement: Finally, the "Effect" studies attempt to measure tangible pedagogical gains (approx. 14 studies). These quasi-experimental studies investigate whether AI tools actually improve particular skills. The results range from an increase in "Writing Complexity" by Banisharif-Dehkordi et al. (2025) and "Speaking Skills" by Baharloo & Miyan Baghi (2024) to facilitating "Vocabulary Acquisition" through online games by Rabab'ah et al. (2025). Some studies also look into the very process of learning, such as AI for "Reflective Practice" by Esmaeily & Mahdavi Zafarghandi (2025).

4. Discussion

The findings of this scoping review offer a window into how the global phenomenon of Generative AI is being metabolized within Iran's specific socio-educational ecosystem. Viewed through the lens of the Technology-Based Learning Model and compared with the global picture Wang et al. paint for 2025, the Iranian research landscape reveals an important interplay of enthusiastic adoption, deep-seated skepticism, and unique contextual constraints. This section critically examines these dynamics across four key dimensions: the linguistic monopoly of English, the "validation-first" approach to technology, the distinct psychological toll of innovation, and the theoretical fragmentation of the field.

4.1. The "English-Only" Paradox in a Multilingual Context

A critical look at contextual data presents an interesting "English-only" paradox. As indicated in the findings, the overwhelming majority of identified studies are strictly situated within a department of English as a Foreign Language (EFL) setting. This is consistent with the global trend observed by Wang et al. (2025): 39 out of 43 international studies were focused on English. In the Iranian context, however, this hegemony holds different implications. Although there is

little doubt that English is the lingua franca of technology, the total absence of empirical research on AI for Persian (Farsi) language learning or assessment represents a significant missed opportunity. Given the challenging times most of the GenAI models, such as ChatGPT, experience with "low-resource" languages or with non-Latin scripts compared to English, the lack of local research that tests these models in Persian creates a blind spot. Iranian scholars laboriously test tools optimized for English, like Grammarly or QuillBot (Ahmadzade & Farahian, 2025; Azimi & Farahian, 2024; Cheraghi et al., 2025), therefore effectively validating technologies that further entrench English linguistic imperialism rather than researching how domestic or localized AI models could support the national language. In this respect, it would appear that AI research in Iran currently operates as an extension of the global ELT industry, rather than being some kind of broad-based inquiry into educational technology.

Furthermore, the fact that research is concentrated at the tertiary level—focusing near exclusively on university students and MA theses, for example, Pourghasemian & Afzali Shahri (2018)—exposes a critical structural divide. In contrast, the K-12 focus faced in international contexts where "AI literacy" is becoming part of the basic curriculum, Iranian AI research remains an elite pursuit. This is likely a reflection of the centralized nature of the Iranian K-12 curriculum, offering little autonomy for teachers to experiment with unauthorized or filtered tools such as ChatGPT, forcing innovation to migrate upwards to the relatively more autonomous university sector.

4.2. The "Validation-First" Mentality: Skepticism as a Scientific Attitude

Technologically, the Iranian corpus shows a clear "validation-first" mindset, different from more implementation-focused global research. While much international research leaps to examine how to use ChatGPT for lesson planning-e.g., Mohamadi et al. (2024)-or content creation, there is a large cluster of Iranian studies dedicated to determining whether it works at all in comparison with human benchmarks. This appears in the high comparative frequency of studies. Scholars such as Mirzaeian (2025) and Ziaei and Tavakoli (2025) did not simply adopt AI; they put it through a statistical "Turing test" of sorts, pitting AI scoring against human scoring in high-stakes areas such as essay writing.

This trend reflects profound professional skepticism. Iranian educators seem unwilling to cede their authority to algorithms without empirical proof of parity. This skepticism is further

nuanced by studies that compare different AI tools against one another, such as ChatGPT versus Grammarly (Ahmadzade & Farahian, 2025). Treating AI not as a monolithic solution but as a marketplace of competing tools with varying efficacies, Iranian scholars therefore contribute a critical layer of "consumer protection" research for educators. They are essentially asking themselves: in an environment where access to premium tools might be limited by either economic sanctions or currency devaluation, which of the free or accessible tools actually delivers value?

4.3. The Psychological Cost: Technostress and Teacher Identity

Perhaps the most poignant finding of this review is the strong theoretical focus on the affective and psychological dimensions of AI adoption. Global reviews often focus on cognitive outcomes or efficiency gains, yet the Iranian literature is replete with references to "Anxiety" (Sabourianzadeh & Ahmadi, 2025), "Emotions" (Nezakatgoo et al., 2025), and "Motivation" (Jafari et al., 2025; Razavi & Salehi, 2023). This "affective turn" is critical. Studies into "Technostress" (cf. Sabourianzadeh & Ahmadi, 2025) and "Discursive Representation of Women in AI" (Sudajit-apa, 2025) suggest that for Iranian educators, the integration of AI is less a technical challenge than an emotional and existential one.

Ghorbani's (2025) question-"Can ChatGPT Replace Human Teachers?"-is anything but rhetorical here. Instead, it voices real trepidation about professional obsolescence within a labor market for which teaching remains a key source of stability. Second, the preoccupation with student motivation-the driving concern of Jafari et al.'s (2025) contribution-speaks to pedagogical change. That is, Iranian scholars are considering AI not just as a "cheat bot" but also as a possible antidote to the disengagement characteristic of so many traditional, lecture-heavy EFL classrooms. Nevertheless, this again finds its counterpoint in concerns over plagiarism and intertextuality, with Pourghasemian & Afzali Shahri 2018 serving as a case in point, and speaks to a tension between a valorization of AI as a means of motivating students and a concomitant fear of lost academic integrity. This constitutive ambivalence speaks to a more general "moral panic" surrounding AI, all the more pointed in educational cultures that reward rote mastery and original production.

4.4. Technological Monoculture and the "Black Box" Problem

A final important technological limitation, as identified in this review, is what may be termed the "ChatGPT Effect". Similar to the global findings of Wang et al. (2025), Iranian research is overwhelmingly reliant on ChatGPT (e.g., Amirjalili 2024; Esfandiari & Allaf-Akbary, 2024; Nushi & Saeedi, 2025). While this provides a common comparative baseline, it creates a dangerous "technological monoculture". Reliance on one US-based commercial model poses specific risks to Iranian education. First, it makes the educational infrastructure vulnerable to geopolitical access, where sanctions or platform bans could instantly render this body of research obsolete or the tools inaccessible. Second, and importantly, it creates a "Black Box" problem where researchers are studying a tool they cannot thoroughly inspect or control. The lack of detailed prompt reporting—a limitation noted globally—is also here. Since so few of these Iranian studies document the exact prompts they used in generating feedback or scores, many of them face the problem of replicability. If a researcher in Tabriz achieves high reliability with ChatGPT, but they fail to specify the prompt engineering they used, a teacher in Shiraz can't actually replicate that. This lack of methodological transparency limits practical impact.

4.5. Theoretical Fragmentation

This review also points to a theoretical fragmentation. While several studies rigorously apply frameworks such as Complexity Theory (Esfandiari & Arefian, 2025) and Constructivist Pedagogy (e.g., Esfandiari & Allaf-Akbary, 2024), a large number remain "atheoretical," basically providing statistics on use or satisfaction. This echoes the global finding where almost half of AI studies had no discernible framework. In Iran, this tends to produce studies that describe what happened (e.g., "scores improved") with little explanation of why, through, for example, Self-Regulated Learning theory or Sociocultural Theory. The Iranian scholars need to increasingly anchor their inquiries in established learning theories that can explain the mechanisms of AI-human interaction for this field to mature from "tech-testing" to "pedagogical science."

5. Conclusion and Future Directions

This scoping review systematically mapped 48 empirical studies published in Iranian university journals, providing the first comprehensive snapshot of how GenAI is being integrated within the

local educational landscape. The analysis reveals a research community that is simultaneously enthusiastic about global technological affordances and deeply cautious about their local implications.

Synthesizing these studies points to three defining characteristics of the Iranian "AI turn" in education. First, there is a pronounced linguistic and disciplinary confinement: AI research is currently thriving almost exclusively within EFL departments. This mirrors global trends identified by Wang et al. (2025) but highlights a critical local gap (the lack of engagement with Persian language learning) and suggests that AI is currently viewed as a tool for internationalization rather than national educational reform.

Secondly, research is characterized by a "verification-oriented" epistemology. Compared to perhaps more techno-optimistic trends within some Western contexts, Iranian scholars have devoted considerable energy to comparative validation, meaning the rigorous testing of AI scoring against human benchmarks (Mirzaeian, 2025; Ziaei & Tavakoli, 2025). This reflects a professional community that refuses to adopt "Black Box" technologies without first establishing their reliability within the specific constraints of the Iranian assessment culture.

Third, the results point to a specific affective sensitivity, indicating the fact that so many studies are oriented around "technostress," "teacher emotions," and "anxiety" - for instance, Nezakatgoo et al. (2025) and Sabourianzadeh & Ahmadi (2025) - implies that for Iranian teachers, AI disruption is profoundly personal and professionally intimate. This orientation makes for a valuable, human-centered contribution to the global discussion, extending beyond mere efficiency concerns to the psychological durability of AI integration.

This review has provided an unparalleled amount of insight, but its limitations should be acknowledged as a way to frame the findings. First, by limiting the search to specific university journals in Iran, this study may have omitted key research published by Iranian scholars in international high-impact journals (SSCI/Scopus) or lower-tier local publications. As a result, the findings represent the "academic elite" of Iran but might not capture grassroots innovations that are currently happening within private language institutes or K-12 schools. Second, the review is necessarily bound by the specific keywords used ("ChatGPT," "GenAI"). Since these terms continue to rapidly evolve, where "Copilot" or "Gemini" are but two examples, some studies using alternative or more recent nomenclature could have been missed, finally, it is worth noting that the search terms themselves were "English-centric," and so any articles that were wholly

written in Persian (Farsi) doubtless constituted a large corpus of works that were merely bypassed, reinforcing linguistic bias noticed in the discussion. To advance the field from its current exploratory phase to a more mature pedagogical science, a number of directions have been proposed below to the Iranian research community:

Firstly, future research needs to break the monopoly of EFL. There is an urgent need to investigate how GenAI models function in both Persian and Arabic contexts. Since LLMs are very often trained on English-dominant datasets, it is possible that they may show biases or lower performance in other languages. Iranian scholars will be uniquely placed to test these limitations and develop the localized pedagogical strategies for "low-resource" languages, moving the field toward a genuine Translanguaging approach.

Secondly, current literature is disproportionately focused on university students. Future research ought to shift its focus to K-12 education, where the influence of AI will be most pronounced on developing literacy and critical thinking abilities. Still, due to the centralization of the Iranian public-school curriculum, the "shadow education" sector, such as private language institutes known as Amouzeshgahs, may provide more fertile grounds for experimental studies on AI adoption by younger learners.

Thirdly, from black box usage to critical AI literacy, the anxiety of plagiarism and "intertextuality" indicated in this review (cf. Pourghasemian & Afzali Shahri, 2018) bespeaks a defensive attitude toward AI. Hence, future research should shift attention away from preventing AI use toward enabling Critical AI Literacy. In this regard, studies should examine pedagogical interventions that teach students not only how to use ChatGPT but also how to critically assess its outputs, identify hallucinations, and develop better prompts (Prompt Engineering). This is in tune with the global appeal for "cross-validation skills" mentioned by Wang et al. (2025).

And lastly, the field must transcend the atheoretical "usage studies". Iranian scholars should increasingly frame their study within established frameworks like SRL, Sociocultural Theory, or TAM, by explaining through these theoretical lenses why AI works-or fails-Iranian research will be able to provide generalizable insights that resonate with the global academic community rather than isolated case studies.

Bio-data

Masoud Taghipour: A Ph.D. student in TEFL at Allameh Tabataba'i University, Tehran, Iran. His research focuses on English language teaching, with a particular emphasis on the emotional dynamics of teachers and students, CALL, language skills development, and the impact of language learning strategies on educational outcomes. https://orcid.org/0009-0009-1931-0256

Mehran Talebi is an MA student in TEFL at Allameh Tabataba'i University, Tehran, Iran. His research focuses on Language Testing (standardized testing, anxiety) and Discourse Analysis. He specializes in CALL, particularly in developing AI-driven Assessment Tools and exploring Interlanguage Pragmatics.

Declarations

Acknowledgment

The authors extend their appreciation to all the individuals helping conduct this research.

Competing Interests

The author reported no potential conflict of interest.

Funding

There is no funding associated with the work featured in this article.

Declaration of Generative AI

The author(s) state that they used Gen AI in creating this manuscript. They employed AI tools such as ChatGPT and Grammarly for proofreading and language editing during the manuscript's preparation. All intellectual content and interpretations are solely the authors' responsibility.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Authors' contributions:

Masoud Taghipour: Conceptualization, Methodology, Formal Analysis, Investigation, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing, Visualization, Project Administration.

Mehran Talebi: Methodology, Investigation, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing, Validation, Visualization.

References

Ahmadzade, M., & Farahian, M. (2025). At a crossroad: Comparing ChatGPT and Grammarly in enhancing EFL learners' use of the article 'the'. *Journal of Studies in Language Learning and Teaching, 2*(1), 47–62. https://doi.org/10.22034/jsllt.2025.22655.1064

Amirjalili, F. (2024). Exploring the efficacy of ChatGPT in personalized language learning: An intervention study in Iranian ESL classrooms. *Teaching English as a Second Language Quarterly, 43*(3), 1–26. https://doi.org/10.22099/tesl.2024.49390.3260

Andujar, A., & Spratt, M. (2023). Using AI to support CLIL teacher language. *Journal of Research in Applied Linguistics, 14*(2), 7–19. https://doi.org/10.22055/RALS.2023.45267.3177

Azadnia, M. (2024). ChatGPT-assisted language learning and teaching: A scoping review of research on ChatGPT use in L2 pedagogy and education. *Teaching English as a Second Language Quarterly, 43*(2), 49–85. https://doi.org/10.22099/tesl.2024.49169.3250

Azimi, M., & Farahian, M. (2024). Exploring the effect of corrective feedback through QuillBot on EFL learners' writing skills. *Technology-Assisted Language Education, 2*(3), 74–101. https://doi.org/10.22126/tale.2024.10796.1043

Baharloo, A., & Miyan Baghi, A. (2024). The impact of AI-assisted learning on EFL speaking skills: A mixed-methods study in the Iranian context. *Technology-Assisted Language Education, 2*(4), 69–96. https://doi.org/10.22126/tale.2025.11299.1070

Banisharif-Dehkordi, M., Riahipour, P., & Rahimi-Esfahani, F. (2025). Effects of AI-driven written direct and indirect feedback on Iranian intermediate EFL learners' writing complexity. *Journal of English Language Teaching and Learning, 17*(35), 39–60. https://doi.org/10.22034/elt.2025.66090.2760

Bannister, P. (2024). English medium instruction, educator language assessment, literacy, and the test of generative AI in online higher education. *Journal of Research in Applied Linguistics, 15*(2), 55–72. https://doi.org/10.22055/rals.2024.45862.3214

Bashiri, S., & Ebadi, S. (2024). The impact of AI-based group dynamic assessment on L2 writing proficiency. *Technology-Assisted Language Education, 2*(3), 151–173. https://doi.org/10.22126/tale.2025.11488.1081

Cheraghi, Z., Meshkat, M., & Kazem-Khanlou, S. (2025). The impact of Grammarly software on enhancing writing skills among EFL learners. *Journal of English Language Teaching and Learning, 17*(35), 61–98. https://doi.org/10.22034/elt.2025.64925.2724

Cook, V. (2013). What are the goals of language teaching? *Iranian Journal of Language Teaching Research, 1*(1), 44–56. http://www.urmia.ac.ir/ijltr

Esfandiari, R., & Allaf-Akbary, O. (2024). The role of ChatGPT-based instruction and flipped language learning in metadiscourse use in EFL learners' argumentative writing and their perceptions of the two instructional methods. *Teaching English as a Second Language Quarterly, 43*(3), 27–52. https://doi.org/10.22099/tesl.2024.49975.3277

Esfandiari, R., & Arefian, M. H. (2025). Exploring the role of imaginative and creative AI-oriented reflections in English language teachers' professional development: A complexity theory perspective. *Iranian Journal of Applied Language Studies, 17*(1), 73–94. https://doi.org/10.22111/ijals.2025.50352.2484

Esmaeily, J., & Mahdavi Zafarghandi, A. (2025). The impact of AI-driven feedback on Iranian EFL teachers' reflective practice. *Iranian Journal of English for Academic Purposes, 14*(2), 79–94. 20.1001.1.24763187.2025.14.2.5.9

Fakher Ajabshir, Z. (2023). A review of the affordances and challenges of artificial intelligence technologies in second language learning. *Technology Assisted Language Education, 1*(4), 92–111. https://doi.org/10.22126/tale.2024.10104.1028

Farangi, M. R., & Zabbah, I. (2023). Intelligent scoring in an English reading comprehension course using artificial neural networks and neuro-fuzzy systems. *Teaching English as a Second Language Quarterly, 42*(4), 1–21. https://doi.org/10.22099/tesl.2023.47604.3194

Fathi, H., Sharifi, A., & Ahmadi, H. (2025). Empowering students with innovative AI-language learning tools and pedagogy to master speaking skills. *Iranian Journal of Applied Language Studies, 17*(1), 198–220. https://doi.org/10.22111/ijals.2024.48157.2432

Garcia Laborda, J., Arús Hita, J., & Mashhadi, A. (2024). Introduction: Language teaching feedback and assessment aided by digital technologies. *Journal of Research in Applied Linguistics, 15*(2), 3–5. https://doi.org/10.22055/rals.2024.19543

Garcia Laborda, J., Madarova, S., & Magal Royo, T. (2024). Issues in the design and implementation of chatbots for oral language assessment. *Journal of Research in Applied Linguistics, 15*(2), 43–54. https://doi.org/10.22055/rals.2024.45822.3211

Ghahari, S., & Roohparvar, R. (2025). Review of 80 ways to use ChatGPT in the classroom: Using AI to enhance teaching and learning. *Teaching English as a Second Language Quarterly, 44*(3), 147–151. https://doi.org/10.22099/tesl.2025.51412.3337

Gholami-Hossein-Abad, M.-J., Pishghadam, R., Ghabanchi, Z., & Naji-Meidani, E. (2025). Exploring the effects of chatbot-assisted language learning on learners' language achievement and sense of metavolvement. *Journal of English Language Teaching and Learning, 17*(35), 245–266. https://doi.org/10.22034/elt.2025.67757.2795

Ghorbani, V. (2025). Can ChatGPT replace human teachers? Insights from Iranian EFL teachers' perceptions. *Journal of Studies in Language Learning and Teaching, 2*(1), 78–91. https://doi.org/10.22034/jsllt.2025.23404.1087

Jafari, S., Fakhraee Faruji, L., & Teimourtash, M. (2025). The impact of using artificial intelligence (AI) on EFL learners' motivation and writing accuracy. *Technology-Assisted Language Education, 3*(1), 90–109. https://doi.org/10.22126/tale.2025.11123.1063

Jasim, Y., Musa, H., Asim, A., & Salman, A. R. (2024). Developing EFL writing with AI: Balancing benefits and challenges. *Technology Assisted Language Education, 2*(2), 80–93. https://doi.org/10.22126/tale.2024.10953.1052

Keyvanfar, A., & Vafaei Khoshkhou, R. (2015). Error taxonomy of TOEFL iBT writing: An Iranian perspective. *Journal of Language and Translation, 5*(2), 61–75. https://oiccpress.com/ttlt/article/view/15599

Khajavi, Y., & Ezhdehakosh, M. (2025). Enhancing language teacher education: Exploring the integration of AI-powered tools in preservice teacher education. *Journal of Research in Applied Linguistics, 16*(1), 174–191. https://doi.org/10.22055/RALS.2024.48226.3405

Masoumpanah, Z., Tahririan, M. H., Afzali, K., & Alibabaee, A. (2016). A critical needs analysis of practicum courses at Farhangian University: Mentors and students' perspectives. *Iranian Journal of English for Academic Purposes, 5*(2), 60–82. 20.1001.1.24763187.2016.5.2.3.4

Mehranirad, M. (2025). Exploring the impact of an AI-oriented teacher education program on EFL teachers' professional development. *Technology-Assisted Language Education, 3*(1), 1–23. https://doi.org/10.22126/tale.2025.11510.1082

Mirzaeian, V. R. (2024). The effect of artificial intelligence generated translation versus human translation on reading comprehension of the speakers of less commonly taught languages.

Iranian Journal of Applied Language Studies, 16(1), 63–74. https://doi.org/10.22111/JALS.2024.47092.2395

Mirzaeian, V. R. (2025). A comparative evaluation of artificial intelligence scoring versus human scoring of EFL students' essays. *Teaching English as a Second Language Quarterly, 44*(1), 97–117. https://doi.org/10.22099/tesl.2025.50852.3313

Mirzapour Kouhdasht, A. (2023). Transformative applications of technology in English language education: A literature review over the last two decades. *Technology Assisted Language Education, 1*(3), 45–62. https://doi.org/10.22126/tale.2023.2843

Mohamadi, L., Asadi, M., & Taheri, R. (2024). Transforming EFL lesson planning with 'To Teach AI': Insights from teachers' perspectives. *Technology Assisted Language Education, 2*(3), 46–73. https://doi.org/10.22126/tale.2025.11490.1080

Mohammadi, M. (2024). Language teachers' assessment literacy in AI-aided adaptive learning environments. *Journal of Research in Applied Linguistics, 15*(2), 73–88. https://doi.org/10.22055/rals.2024.46120.3235

Moulavinafchi, A. (2025). Exploring AI literacy and perception: Insights from Iranian EFL researchers. *Journal of Modern Research in English Language Studies, 12*(4), 19–52. https://doi.org/10.30479/jmrels.2025.21412.2465

Nezakatgoo, B., Mirzapour, F., & Mohseni, M. (2025). Teachers' emotions and experiences as influential factors in using technology in EFL classes. *Journal of Modern Research in English Language Studies, 12*(3), 129–153. https://doi.org/10.30479/jmrels.2024.20181.2356

Nushi, M., & Saeedi, M. (2025). Unveiling the potentials and limitations of ChatGPT in second language education: A qualitative study. *Technology-Assisted Language Education, 3*(1), 110–132. https://doi.org/10.22126/tale.2025.11186.1066

Pirnajmuddin, H., & Borhan, A. (2011). Postmodern orientalized terrorism: Don DeLillo's The Names. *Journal of Teaching Language Skills*, *3*(2), 57–84. 10.22099/JTLS.2012.384

Pourghasemian, H., & Afzali Shahri, M. (2018). Intertextuality and plagiarism in EFL writing: An analysis of university professors' attitudes towards MA theses. *Journal of Language and Translation, 8*(4), 55–68. 20.1001.1.20088590.2018.8.4.5.2

Rabab'ah, G., AbuSeileek, A., Abu Guba, M. N., & Bani Younes, M. A. (2025). Online games and AI ChatGPT: 7th grade English as a foreign language learners' vocabulary

acquisition and preferences in the UAE. *Applied Research on English Language*, *14*(2), 101–130. https://doi.org/10.22108/are.2025.143808.2420

Razavi, S. N., & Salehi, H. (2023). The effect of an online learning group program on learning motivation of English as a foreign language among Iranian university students. *Journal of Linguistic Studies: Theory and Practice*, *1*(1), 171–190. https://doi.org/10.22034/jls.2023.61114

Roshani Ghale Sheikhi, S., Mohammadi, A. M., & Yazdani, H. (2025). The motivational aspects of meaningful work among Iranian EFL faculty members. *Journal of Language Horizons*, *9*(1), 67–91. https://doi.org/10.22051/lghor.2024.45627.1875

Sabourianzadeh, N., & Ahmadi, M. (2025). Tech-infused empowerment: How low-, mid-, and high-tech integration approaches alleviate teaching anxiety among EFL teachers. *Journal of Language Horizons*, *8*(4), 31–56. https://doi.org/10.22051/lghor.2024.45366.1867

Salavatizadeh, M., & Tahriri, A. (2020). The effect of blended online automated feedback and teacher feedback on EFL learners' essay writing ability and perception. *Journal of Teaching Language Skills*, *39*(3.2), 181–225. https://doi.org/10.22099/jtls.2021.38753.2899

Salehnejad, L., Shekaramiz, M., Vaysi, E., & Majdinasab, N. (2023). Selective impairment in verb inflection: Evidence from Persian agrammatism. *Journal of Language and Translation*, *13*(3), 161–171. 10.30495/TTLT.2023.705461

Sayyed Kalan, S. M., & Mazharpour, D. (2025). Artificial intelligence implementation in teaching English as a foreign language: A qualitative research synthesis. *Applied Research on English Language*, *14*(3), 77–122. https://doi.org/10.22108/are.2025.143822.2423

Sudajit-apa, M. (2025). Dismantling the discursive representation of women in AI-generated life-changing narratives: A critical discourse analysis. *Journal of Research in Applied Linguistics*, *16*(1), 38–54. https://doi.org/10.22055/RALS.2024.46100.3232

Vameghshahi, B. M., & Ghonsooly, B. (2023). A video game-based paragraph writing instruction vs. teacher-based writing instruction: Examining L2 learners' perceptions through dynamic assessment. *Teaching English as a Second Language Quarterly*, *42*(1), 121–146. https://doi.org/10.22099/tesl.2023.44810.3140

Wang, Y., Lee, C., & Kim, S. (2025). The global landscape of generative AI in language education: A systematic scoping review. *Computers & Education: AI*, *6*(1), 100234. https://doi.org/10.1016/j.caeai.2025.100234

Ziaei, S., & Tavakoli, M. (2Ziaei, S., & Tavakoli, M. (2025). Combined effects of task sequencing and corrective feedback on EFL learners' writing: a comparison between human raters and ChatGPT. *Journal of English Language Teaching and Learning*, *17*(35), 439–452. https://doi.org/10.22034/elt.2025.65281.2735