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Research Article

Investigating ChatGPT Integration into Iranian EFL Classrooms: A Mixed Methods Study of Personalized Language Learning

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Abstract

Artificial intelligence (AI) is rapidly transforming educational landscapes, particularly in language learning, where personalized and real-time support is critical for learner success. This mixed methods study investigates how ChatGPT, as an AI-driven tool, is transforming English as a Foreign Language (EFL) classrooms in Iran, particularly in the areas of learner engagement, individualized feedback, and adaptive instruction. The study involved both learners and teachers, using a combination of interviews, classroom observations, and a Technology Acceptance Model (TAM)-based questionnaire. Interview findings indicated that both teachers and learners viewed ChatGPT as an engaging, motivating, and accessible learning assistant that enhanced autonomy and interest. Observations confirmed increased student participation during AI-integrated sessions. They highlighted the practical benefits of real-time support while revealing common implementation challenges such as unstable internet access and lack of teacher training. Survey results showed general acceptance of ChatGPT among both teachers and students, with learners showing more enthusiasm regarding its usefulness. Both groups appreciated its intuitive interface and potential to enhance learning experiences. Although the integration of AI holds great promise for Iranian EFL classrooms, the study identified critical barriers, including insufficient infrastructure, limited teacher preparedness, and institutional resistance. These findings call for targeted professional development, stronger digital infrastructure, and culturally responsive strategies to leverage AI technologies in EFL education fully.

Keywords: Artificial Intelligence, educational technology, personalized learning, technology acceptance model, self-regulated learning

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1. Introduction

The integration of Artificial Intelligence (AI) technologies (e.g., ChatGPT) has transformed teaching and learning processes worldwide. These technologies enable highly personalized instruction tailored to individual students' needs (Akgun & Greenhow, 2022; Alotaibi et al., 2025; Atchley et al., 2024; Jiang, 2022; Nwoko et al., 2023; Wei, 2023). In English as a Foreign Language (EFL) learning, where learners face challenges like limited exposure to naturalistic use, varied levels of proficiency, and the lack of immediate feedback, AI technologies can provide adaptive learning pathways, interactive language practice, and immediate feedback (AlTwijri & Alghizzi, 2024; Fan & Zhang, 2024; Fereidouni & Farahian, 2024; Shaikh et al., 2023; Song & Song, 2023; Wei et al., 2023). However, without proper planning, these tools may exacerbate existing educational inequalities instead of addressing them.

Although the application of AI in EFL education has been extensively studied in technologically advanced regions such as China, the United States, and Europe (Jamshed et al., 2024; Yu, 2024; Zhai et al., 2024; Zawacki-Richter et al., 2022), its implementation in Iranian EFL classrooms has not been explored as well. The Iranian education system is largely founded on the traditional, teacher-centered approaches characterized by rote memorization, grammatical learning, and minimal communication between teachers and students (Sadeghi et al., 2022; Shamshiri et al., 2023). Traditional approaches typically fail to support learner autonomy, adaptive instruction, and personalized feedback. Personalized EFL learning involves the variation of instruction content and activities to suit the unique needs, levels of proficiency, and learning styles of learners, which fosters greater engagement and improved outcomes in language learning (Derakhshan et al., 2021; Hemmati & Aziz Malayeri, 2022; Namaziandost & Rezai, 2024).

This study addresses this gap by exploring the potential of AI tools, specifically ChatGPT, to enhance personalized learning in Iranian EFL classrooms. ChatGPT was chosen for its accessibility, cost-effectiveness, and capacity to generate real-time, contextually relevant language interactions, making it an appropriate AI tool in resource-scarce learning environments (Arantes, 2023; Jafari et al., 2025; Slamet, 2024).

This paper has three main contributions to the literature: (a) methodological contribution by employing a mixed methods approach, combining semi-structured interviews, classroom observations, and a large-scale TAM-based survey; (b) theoretical contribution by expanding the TAM model by extending it to AI integration in EFL learning, namely in a non-

Western, resource-scarce environment; (c) publication contribution by providing policy suggestions to Iranian policy-makers and educationists on the best ways of applying AI-based tools in instruction for EFL, addressing technology, cultural, and institutional complexities.

Despite the promise of AI-driven personalized learning, numerous challenges face its implementation in Iranian EFL education. Research identifies barriers such as inadequate technological infrastructure, untrained instructors, and institutional resistance to pedagogical innovation (Kamali et al., 2024; Kusuma, 2023; Naderi, 2010). In addition, AI uptake might be culturally resisted, considering that traditional education systems tend to prioritize teacher dominance and standardized curricula at the expense of technology-facilitated, student-centered pedagogies. The use of AI tools for educational purposes, especially in learning English as a Foreign Language (EFL), has gained more and more scholarly attention. AI technologies such as ChatGPT provide personalized interactive experiences in learning that have much potential to revolutionize traditional EFL teaching (Shaikh et al., 2023). Nevertheless, integration within Iranian classrooms has thus far been scant due to technical, pedagogical, and cultural constraints. Overall, these studies underscore the significant potential of ChatGPT in EFL instruction.

While AI-based EFL learning software has been widely studied in technologically developed countries, research into its use in Iran is a critical gap. Most of the studies focus on the pedagogical potential of AI but seldom investigate practical concerns, such as infrastructural limitations, teacher readiness, and socio-cultural challenges in the Iranian educational context (e.g., Shahsavar et al., 2024). This study tries to bridge this gap by applying the TAM model to Iranian EFL classrooms to quantify the attitude of teachers and students towards AI adoption, investigating the potential of AI in enhancing self-regulation among Iranian learners. Hence, this research aimed to evaluate the impact of AI-driven personalized learning in Iranian EFL classrooms through the following questions:

> **RQ1**: How do Iranian EFL teachers and learners perceive the role of ChatGPT in enhancing personalized learning, motivation, and real-time feedback?
>
> **RQ2**: To what extent do classroom observations reflect the practical benefits and challenges of integrating ChatGPT in Iranian EFL classrooms?

RQ3: Is there a statistically significant difference between teachers' and students' perceptions of ChatGPT in terms of perceived usefulness and ease of use?

2. Literature Review

One of the key theoretical frameworks guiding this study is the Technology Acceptance Model (TAM) (Davis, 1989), which has been widely used to examine how users evaluate and adopt educational technologies. TAM focuses on users' perceptions of a tool's usefulness and ease of use, both of which have been central to prior research on AI in education (Holmes et al., 2022). Davis' (1989) TAM clarifies technology adoption via two main ideas: Perceived Usefulness (PU), the extent to which users feel a technology improves their performance, and Perceived Ease of Use (PEOU), how simple the technology is to use.

The self-regulated learning (SRL) theory presumes that students regulate their learning process by means of goal-setting, self-monitoring, and self-reflection (Zimmerman, 2002). The SRL theory reinforces the emphasis on personalized learning in the investigation. It stresses students' capacity to regulate their learning using goal setting, strategy use, and self-monitoring—activities that fit well with the interactive, on-demand feedback capabilities of ChatGPT. Using SRL concepts—particularly learner autonomy and involvement—the qualitative results (from interviews and observations) were analyzed.

The two complementary theories offer a thorough perspective for grasping both the use and educational value of AI applications in EFL classrooms. Together, TAM and SRL let this research investigate not only the acceptance of AI technologies (i.e., ChatGPT) but also their impact on learning behaviors. TAM guided the quantitative component, while SRL helped to inform the qualitative interpretation.

AI-based tools like ChatGPT follow the principles of SRL since they enable students to receive instant feedback and adjust their learning strategy as such, facilitate independent learning through the exercise of language skills at their own pace, and enjoy access to personalized learning routes, developing motivation and autonomy (Qiao & Zhao, 2023).

Experiments in China and South Korea, where AI-flexible learning contexts are widely adopted, show that students who implement AI-assisted EFL applications are more independent and possess stronger language retention than students in conventional classrooms (Ng et al., 2023; Ateş & Gündüzalp, 2025). These implementations require comprehensive teacher

training and institutional support, which remain limited in Iran. AI models such as ChatGPT have been found to enhance language learning in the following manner:

(a) Individualized Feedback: AI-powered tools provide instant corrections, grammar suggestions, and pronunciation feedback, allowing students to refine their skills without waiting for instructor feedback (Holmes & Tuomi, 2022).
(b) Adaptive Learning Paths: AI also individualizes exercises based on personal proficiency levels, ensuring students engage with materials that suit them (Mohamed, 2024).
(c) Immersive Language Practice: AI chatbots simulate real-life interactions, providing contextual learning experiences that are not feasible in traditional EFL classrooms (Li et al., 2024; Tajik, 2025).

Past studies highlight that AI-driven language learning systems increase student engagement and retention rates (Lo et al., 2024; Ng et al., 2023; Shaikh et al., 2023). AI-driven adaptive tutoring systems such as Squirrel AI have been integrated into China's public school system, which has led to measurable progress in reading comprehension and writing skills (Naderi, 2010). Artificial Intelligence-based language learning software like ChatGPT can potentially transform personalized learning in EFL teaching. Whether they will do so will be a function of whether the completion is technologically ready, the amount of training that teachers receive, and cultural acceptability (Tajik, 2024).

Recent empirical research has explored the multifaceted application of Artificial Intelligence (AI), particularly ChatGPT, in language instruction, extending beyond pedagogical outcomes to address motivational, ethical, and institutional concerns. Alotaibi et al. (2025), through a mixed methods study in Saudi Arabia, found that learners' acceptance of ChatGPT was highly influenced by its perceived usefulness and enjoyment, aligning with the TAM. Similarly, a systematic review by AlTwijri and Alghizzi (2024) affirmed the positive impact of AI tools on emotional engagement in EFL contexts.

In the Iranian context, Baharloo and Miyan Baghi (2024) reported that ChatGPT improved learners' speaking fluency and confidence, while Jafari et al. (2025) found enhancements in writing accuracy and motivation among intermediate EFL learners. These results are corroborated by broader international studies such as those by Fan and Zhang (2024) and Wei (2023), which confirm gains in language proficiency and learner autonomy in AI-supported environments.

Alongside pedagogical benefits, ethical and professional issues have emerged. Akgun and Greenhow (2022) highlighted concerns regarding data

privacy, teacher deskilling, and overdependence on automation. Arantes (2023) emphasized that while AI personalization fosters learning, it may undermine teacher authority and increase workload. Institutionally, Atchley et al. (2024) pointed to the dual role of AI-human collaboration in higher education as both innovative and challenging due to insufficient teacher preparation. Kamali et al. (2024) identified major barriers to AI adoption in Iran, including rigid curricula, lack of supportive policies, and poor digital infrastructure—concerns echoed in Zawacki-Richter et al.'s (2022) global review. International comparative research further highlights the necessity of institutional readiness, noting that successful AI implementation hinges not only on user acceptance but also on teacher digital literacy and robust infrastructure (Lo et al., 2024; Ng et al., 2023), which are the critical shortcomings in the Iranian educational system (Naderi, 2010; Namaziandost & Rezai, 2024).

3. Method

3.1. Design

Using an exploratory sequential mixed methods approach, the investigation first gathered qualitative data through interviews and classroom observations to probe teachers' and students' experience with AI. In the second phase, a questionnaire was used to quantitatively assess perceptions of using ChatGPT to enhance personalized learning. This two-step method allowed the study to capture nuanced individual perceptions and general tendencies in a larger sample with an emphasis on the local context of Iranian EFL classrooms.

3.2. Participants

This study had two primary participant groups: EFL teachers and students in Bandar Abbas city, Hormozgan, Iran. Due to the requirements of the mixed methods approach, purposive sampling was utilized for qualitative data collection and simple random sampling for the quantitative phase. For the qualitative component, five EFL teachers and five students were selected using purposive sampling. The inclusion criteria required participants to have: (a) prior experience with AI tools in educational settings, and (b) a strong willingness to integrate AI (e.g., ChatGPT) into their teaching/learning. This was because they were knowledgeable about AI-assisted language learning to provide deep insight into the challenges and benefits it posed. The sample size was determined by data saturation—the point at which no new themes emerged during data collection during interviews and observations (Creswell & Creswell, 2023; Xu et al., 2024). The overriding importance of this method was to improve the trustworthiness of qualitative findings by ensuring thematic

completeness without repetition. Additionally, the participants were selected from various schools across the city of Bandar Abbas to ensure diverse institutional perspectives, accounting for variations in AI access, school policies, and teaching styles.

For the quantitative phase, 100 Iranian EFL teachers and 100 EFL students were recruited using simple random sampling from a sample pool to enhance generalizability across Iran. The participating teachers had a mean age of 33 years, while students averaged 16 years old, aligning with the typical demographic profile of Iranian secondary and post-secondary EFL learners. A call for participants was issued via LinkedIn, where volunteers were asked to contact the research assistant. From this pool, random selection was performed to ensure an unbiased sample representation. To validate the sample size, Cochran's formula (Cochran, 1977) was applied, ensuring that the selected 200 participants provided sufficient statistical power to detect meaningful differences in AI adoption between teachers and students. While random selection was employed to minimize bias, the use of LinkedIn as a recruitment platform may introduce sampling bias. LinkedIn users typically have higher digital literacy and technology exposure than the broader Iranian EFL teaching population. By employing a dual-phase sampling strategy, this study tried to balance specific contextual insights (i.e., Bandar Abbas) with broader statistical generalizability (i.e., nationwide questionnaire data).

3.3. Instruments

Three main research instruments were employed to collect data in this mixed methods study: (1) a semi-structured interview protocol, (2) a classroom observation checklist, and (3) a structured questionnaire based on TAM.

3.3.1. Semi-Structured Interview Protocol

The interview protocol was designed to elicit in-depth qualitative responses from the students and EFL educators regarding their experience of using ChatGPT as an AI-supported learning tool. The interviews were designed to talk about perceived benefits, pedagogical issues, institutional barriers, and suggestions for improving AI adoption in the classroom. The protocol included a set of open-ended questions under three thematic domains: a) engagement and motivation (e.g., "How has ChatGPT influenced your interest in learning or teaching English?"), b) pedagogical use and feedback (e.g., "How has ChatGPT affected the process of feedback in your classroom?"), and challenges and recommendations (e.g., "What are some issues you have encountered using ChatGPT in your classroom?").

Interviews were conducted in person or via video conferencing

software (e.g., Skype, Zoom) based on participant availability. Interviews lasted approximately 30–45 minutes each and were tape-recorded with full consent of the interviewees. Transcripts were analyzed thematically with the assistance of MAXQDA software, following open, axial, and selective coding procedures (Creswell & Creswell, 2023).

3.3.2. Classroom Observation Checklist

To complement interview data with observations of real-time behavior, a classroom observation checklist was developed. The instrument was intended to note how ChatGPT was integrated into lesson delivery and its impact on classroom dynamics, student engagement, and pedagogical practices. The observation checklist included rating-scale items and open observation fields and was focused on the following dimensions: a) student engagement: level of participation, voluntary use of ChatGPT, frequency of questioning, b) teacher facilitation: extent of instructional scaffolding, teacher support for AI-based activities, c) technical functionality: type and frequency of technical issues (e.g., internet disruptions), and d) alignment with objectives: degree of alignment between ChatGPT-based activities and curricular goals.

The duration of each observation session was approximately 45 minutes. Observers used a 3-point rating scale (1 = *Not Observed*, 2 = *Occasionally Observed*, 3 = *Frequently Observed*), supported by qualitative field notes. There were five classrooms in which observations were conducted in three independent sessions for each class in Bandar Abbas, Iran.

3.3.3. TAM-Based Questionnaire

The Technology Acceptance Model (TAM), as originally developed by Davis (1989), informed the quantitative component of the research. The questionnaire sought to capture respondents' attitudes towards ChatGPT on two underlying constructs: a) Perceived Usefulness (PU) – the extent to which ChatGPT is seen as enhancing learning/teaching outcomes; and b) Perceived Ease of Use (PEOU) – the extent to which ChatGPT is perceived as being easy to use and convenient. The scale consisted of 14 Likert-scale items (ranging from 1 = S*trongly Disagree* to 5 = *Strongly Agree*), divided equally between PU and PEOU dimensions. The following are the sample items:

a. PU: "Using ChatGPT improves my English language task performance."
b. PEOU: "ChatGPT is easy to use when performing language learning tasks."

The content validity of the questionnaire was established through expert review by three applied linguistics specialists. Internal consistency was verified by Cronbach's alpha, which yielded coefficients of 0.85 for PU and 0.82 for PEOU, indicating high reliability. The questionnaire was administered to 200 participants (100 teachers, 100 students) via online Google Forms and paper versions where necessary.

3.3.4. Field Notes

Field notes were one of the primary qualitative tools employed during classroom observation. They were utilized to capture spontaneous classroom interactions, students' behaviors, and environmental details not addressed in the formal observation checklist. The observer maintained a running commentary during the observation session, noting real-time impressions, verbal and non-verbal responses, and classroom climate. The notes were noted descriptively and included: a) points of unplanned student participation or disengagement, b) teacher accommodations and strategies for coping with AI tools, and c) external variables affecting ChatGPT use (e.g., classroom layout, student cohort size, or school timing). These qualitative accounts were then coded thematically and cross-checked against interview and checklist data to add depth and credibility to qualitative results. Field notes were particularly effective at identifying the nuances of pedagogical interactions and validating the veracity of structured observation results.

3.3.5. Research Logs

The study employed research logs for tracking systematically technical and procedural issues that were encountered during the period of classroom observations. These logs acted as a systematic record-keeping tool that documented technical glitches and issues with the operation and coordination of ChatGPT in real-classroom contexts. The logs tracked the following: a) internet breakdown or latency events; b) malfunctions with software, delays in the AI response, or denial of access; c) teachers' and students' reactions to technological breaks; and d) duration of disruption and action taken to correct it.

Each record in the research log contained a date, location, class type, and brief descriptive summary of the disruption. The research logs provided rich information about the infrastructural and logistical issues that make the integration of AI in Iranian EFL classrooms practically viable or not. The data collected with research logs was explained and included under the thematic coding of technical challenges.

3.4. Procedure

The procedures were executed sequentially in two phases: qualitative and quantitative. Data were first gathered through semi-structured interviews with five EFL instructors and five students in Bandar Abbas. The participants were recruited using purposive sampling based on prior experience in the use of AI learning tools or stated willingness to use such tools in learning or teaching. The interviews were conducted separately and either face-to-face or online, depending on participant convenience. Each session lasted between 30 and 45 minutes. The interviews were audio-recorded after informed consent and subsequently transcribed for documentation.

The second qualitative method was direct observation in classrooms. Five classes that were continuously using ChatGPT were observed three times over one month, amounting to 15 observation sessions. The researcher adopted the role of a non-disruptive observer to not interfere with classroom dynamics. Observation data were captured in a systematic checklist focusing on student engagement, utilization of AI tools, and teacher facilitation. Field notes were also taken to capture contextual nuances. Throughout all qualitative sessions, further field notes were maintained by the researcher. The notes included in situ remarks, observation of behavior, and random insight, which could not necessarily be captured by audio or documented on checklists.

Research logs were used to systematically record any technical or procedural issues encountered when applying AI tools within the classroom. The logs provided a good and detailed description of interruptions (e.g., device failure or network malfunction), scheduling changes, and climactic conditions affecting data. After the qualitative phase, a TAM-based questionnaire was administered to 100 Iranian EFL teachers and 100 students from various parts of Iran. The survey was conducted via Google Forms and consisted of Likert-scale and open-ended questions about two core constructs: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of ChatGPT. Participants filled out the form anonymously, and data were preserved securely to be analyzed later.

The ethical issues were taken into consideration rigorously. All participants were fully briefed on the study's aims and provided with signed informed consent. They also had the option to withdraw without incurring any penalty. Through questionnaires, anonymity was guaranteed using Google Forms with no personal and identifiable data being collected. The extremely sensitive nature of AI adoption in Iran thus called for extra layers of confidentiality measures to protect participants. The study had institutional

approval by an ethics board that guaranteed adherence to international standards for research integrity.

3.5. Data Analysis

Thematic analysis with MAXQDA software was conducted for the qualitative data analysis. After transcription, interview and observation data were coded openly to identify initial codes. The codes were then sorted using axial coding to allow the researcher to identify recurrent patterns and themes. Thematic maps were generated to show the interconnections between the themes, such as engagement and motivation, personalized feedback, and issues of implementation. To determine reliability, coding was tested and refined in a cycle of iterative steps, and the themes were cross-checked with constant comparison across participants and sources of data. For the quantitative phase, SPSS software was utilized. Descriptive statistics (i.e., mean and standard deviation) were calculated to depict the responses of the participants. An independent-sample t-test was run to compare teachers' and students' perceptions of the usefulness and ease of use of ChatGPT. All statistical assumptions were checked prior to the application of the test.

4. Results

4.1. Results for the First Research Question

To address the first research question (i.e., How do Iranian EFL teachers and learners perceive the role of ChatGPT in enhancing personalized learning, motivation, and real-time feedback?), MAXQDA was used to conduct the thematic analysis, which identified three basic themes: engagement and motivation, personalized feedback, and challenges in implementation. These themes were identified through structured coding, and their characteristics are summarized in Figure 1, which presents a thematic map of qualitative findings.

4.1.1. Interview Question 1

In response to the first interview question (i.e., How has the use of ChatGPT influenced student engagement and motivation in your EFL classroom experience?), the cases indicated that ChatGPT significantly increased student engagement and participation in EFL classrooms. Many students found the tool to be dynamic, interactive, and stimulating**,** describing it as **"**like having a personal tutor available at all times." In classrooms where traditional instructional methods prevail, ChatGPT introduced a sense of novelty that helped break monotony and increase student enthusiasm.

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personal tutor available at all times." In classrooms where traditional instructional methods prevail, ChatGPT introduced a sense of novelty that helped break monotony and increase student enthusiasm.

One student noted, "I feel more motivated to do writing tasks when ChatGPT is part of the lesson. It gives me ideas and corrects my grammar right away" (Teacher 3). Another explained, "It feels like I can talk to someone without being judged. That makes me want to try more" (Teacher 1).

Teachers also observed positive changes in student behavior. One teacher commented, "Students who were usually silent are now asking questions and interacting with ChatGPT. It's like they found their voice" (Teacher 2). Another added, "It has boosted classroom energy—learners are more curious and proactive, even during grammar practice" (Teacher 5).

4.1.2. Interview Question 2

In reply to the second interview question (i.e., In what ways does ChatGPT provide personalized feedback, and how do you think this affects the teaching and learning process?), it was found that by giving instant, personalized feedback, ChatGPT became one of the most valued tools, as it enabled students to correct their errors immediately without waiting for teacher evaluation. Teachers also benefited from the use of the tool, which reduced their grading burden, freeing their time to concentrate on interactive teaching strategies. A student noted, "ChatGPT corrects my grammar instantly and suggests improvements, saving me much time."

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One student noted, "ChatGPT corrects my grammar instantly and suggests improvements, saving me much time" (Student 2). Another shared, "When I see where I made a mistake right away, I remember it better and try not to repeat it" (Student 4). From the teachers' perspective, one participant commented, "It helps me focus more on communicative activities because students get quick grammar feedback from ChatGPT" (Teacher 1). Another added, "Instead of spending hours correcting repetitive writing errors, I now guide students in refining their drafts using the tool" (Teacher 4).

4.1.3. Interview Question 3

Despite its advantages, several obstacles to AI adoption were identified when the third interview question was asked (i.e., What challenges have you experienced or observed in implementing ChatGPT or similar AI tools in EFL classrooms?). Despite its advantages, several obstacles to AI adoption were identified. The most frequently mentioned challenges included: a) limited internet access disrupts classroom activities; b) insufficient teacher training leads to the underutilization of the ChatGPT features, and c) institutional resistance to AI adoption due to concerns about curriculum alignment and overreliance on technology.

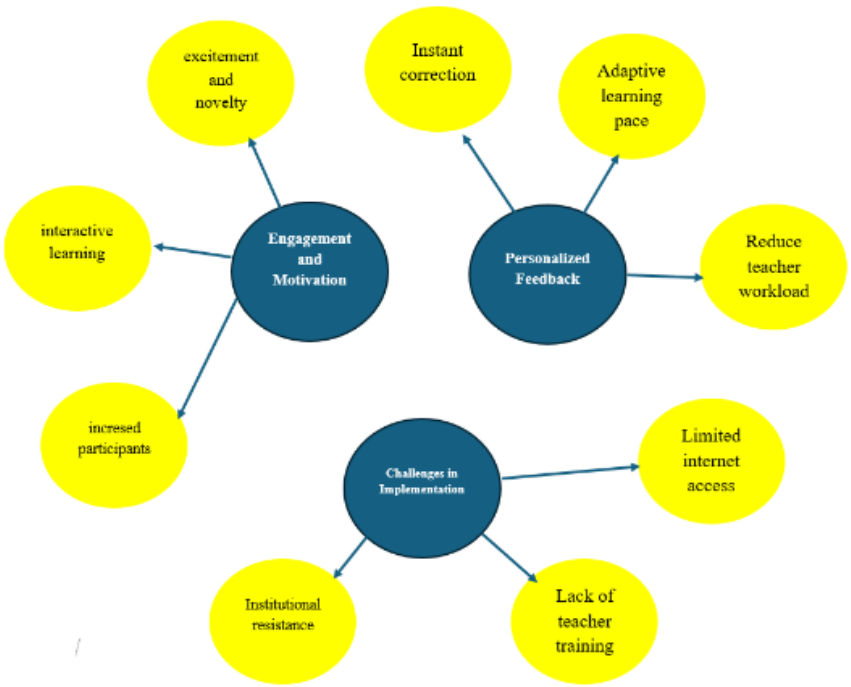
One teacher commented, “While ChatGPT appears promising, most schools lack the technical support necessary for its proper integration” (Teacher 2). Another explained, “We were never trained to use tools like this, so I just tell my students to experiment with it, but I’m not confident about guiding them properly” (Teacher 5).

Students also reported practical limitations. One noted, “Sometimes the internet goes off in the middle of an activity, and we can’t continue the task” (Student 1). Another shared, “My teacher is not sure how to use it, so we only try ChatGPT when we finish other tasks” (Student 4). These barriers must be addressed for AI to realize education’s full potential.

4.2. Results for the Second Research Question

To address the second research question (i.e., To what extent do classroom observations reflect the practical benefits and challenges of integrating ChatGPT in Iranian EFL classrooms?), classroom observations offered direct insight into how ChatGPT was implemented in practice. The findings are summarized below: There observed benefits were: a) Increased student interaction: students actively engaged with ChatGPT-based exercises; b) Enhanced lesson planning: teachers incorporated AI into more diverse and interactive lesson structures; and c) Improved adaptability: AI enabled personalized learning for students of varying proficiency levels. However, the observed challenges were: a) frequent technical disruptions due to intermittent internet access, b) misalignment with curriculum objectives makes it difficult for teachers to integrate AI effectively, and c) teachers' limited familiarity with AI tools highlights the need for specialized training programs. A thematic map visualizing key qualitative insights is provided below, categorizing responses into engagement, feedback, and obstacles (Figure 1).

Figure 1
Thematic Map of Qualitative Findings



4.3. Results for the Third Research Question

To address the third research question (i.e., Is there a statistically significant difference between teachers' and students' perceptions of ChatGPT in terms of perceived usefulness and ease of use?), the quantitative questionnaire examined the participating both teachers' and students' perceptions of ChatGPT using two primary constructs: PU and PEOU.

Table 1
The Skewness and Kurtosis Values for Teachers' and Students' PU and PEOU

Group	Construct	Skewness	Kurtosis
Teachers	PU	-0.42	-0.21
	PEOU	-0.35	-0.19
Students	PU	-0.61	0.23
	PEOU	-0.48	0.15

Prior to running inferential statistics, preliminary presuppositions were checked to confirm the validity of the t-tests. The skewness and kurtosis values for all constructs fell within the acceptable range of -1 to +1, indicating that the data were approximately normally distributed. The Levene's test was used

to assess the similarity in variances between teacher and student groups, resulting in non-significant results ($p > 0.05$) that validated the equality of variance needed for independent-sample t-tests. Samples were collected both individually and anonymously from different participants across multiple institutions, allowing for an assumption of independence during the sampling process. To assess the difference between students and teachers, an independent samples t-test was conducted (Table 2).

Table 2
T-Test Results for PU and PEOU

Construct	Group	Mean	t-value	p-value
PU	Students	4.30	2.47	0.01
	Teachers	4.12		
PEOU	Students	4.10	1.38	0.17
	Teachers	3.99		

The results in Table 2 show that students (M=4.30) perceived ChatGPT as significantly more useful than teachers (M=4.12), $t(2,198)=2.47$, $p = 0.015$). However, both groups found the tool equally easy to use ($M_{students}$=4.10, $M_{teachers}$ =3.99), $t(2,198)=1.38$, $p = 0.170$), suggesting familiarity with AI technology was not a major barrier.

Different expectations and teaching responsibilities could help to explain the greater use rating students give than instructors. Students may view ChatGPT as a fresh and interesting tool directly fulfilling their language learning demands—instant grammar correction and vocabulary assistance—functions normally needing teacher input. By contrast, instructors—particularly those used to conventional approaches—might be more concerned about ChatGPT's shortcomings, such as occasional inaccuracy, misalignment with curriculum, or incapacity to run classroom dynamics.

Another way to interpret this is that since teachers could view it as additive rather than revolutionary, students—being digital natives—may adjust more readily to AI interfaces and prioritize real-time connection more than instructors do. Students may see technological novelty as effective, whereas instructors might see use through the prism of pedagogical control, assessment severity, or institutional limitations.

Table 3
Summary of Key Findings

Aspect	Key Findings
Engagement & Motivation	ChatGPT increased student participation and enthusiasm, creating a more interactive learning environment.
Personalized Feedback	The tool provided instant, tailored feedback, reducing teachers' grading workload.
Technical Challenges	Limited internet access and lack of teacher training emerged as major barriers.
Resistance to Change	Cultural and institutional resistance hindered AI adoption.

The findings of this research indicate that although ChatGPT has the potential to change Iranian EFL students' personalized learning in the classroom, technical constraints, a lack of teacher training, and institutional opposition are serious barriers. Future initiatives should focus on improving infrastructure, providing targeted professional development for teachers, and fostering a transparent culture around AI-based pedagogical innovation.

5. Discussion

In this study, the researcher focused on three dimensions. First, the research examined EFL teachers' and students' beliefs about the role of ChatGPT in provoking individualized learning, motivating students, and providing immediate feedback. Second, it inspected whether classroom observations underpin the envisioned pedagogical advantages and whether they reveal any implementation-related shortcomings of the tool. Third, the study quantitatively compared EFL teachers' and students' attitudes towards the PU and PEOU of ChatGPT in order to establish whether there were statistically significant differences between the two groups. The synthesis of these aims presents an interdisciplinary profile of how ChatGPT is accepted and utilized in the Iranian EFL context and how it can support more learner-centered, adaptive, and technology-enhanced language instruction.

The findings related to the first research question show that ChatGPT was instrumental in enhancing student engagement, fostering learner autonomy, and offering immediate, personalized feedback, particularly in learning contexts still dominated by traditional EFL teaching methods. This was evident in the way the students depicted ChatGPT as an interactive and friendly learning partner. This notion of increased agency and reduced need

for teachers for basic language corrections supports the concept of AI facilitating SRL as supported by Shaikh et al. (2023) and Baharloo and Miyan Baghi (2024) and Yu (2024). This finding is consistent with the principles of SRL (Zimmerman, 2002), where students actively manage their learning through goal-setting, monitoring progress, and adjusting strategies. By using ChatGPT for grammar correction, vocabulary development, and idea generation, students engaged in autonomous learning at their pace. Several students' reflections, such as feeling more confident to "practice on their own" or "not waiting for feedback next week," illustrate the activation of SRL processes. The tool's instant feedback loop allowed learners to correct themselves and reflect on errors immediately, which enhances metacognitive awareness. Therefore, ChatGPT appears to function as both a linguistic support tool and a scaffolding mechanism for promoting SRL behaviors, a finding also supported by Qiao & Zhao (2023). The difference between students' and teachers' perceptions indicates a digital divide and differences in the level of AI adoption in pedagogical practice. Although students showed great enthusiasm, some teachers were still reluctant. This gap is consistent with findings by Namaziandost and Rezai (2024), who similarly observed teachers' cautious optimism and students' proactive use of AI tools.

Despite all its benefits, ChatGPT uptake was plagued by serious challenges. Lack of internet connectivity, inadequate teacher training, and institutional conservatism were the issues that participants frequently reported. These structural limitations align with the argument that technology alone cannot transform education without support at the system level, echoing the concerns expressed by Zhai et al. (2024) and Zheng et al. (2023) in East Asian settings.

Relative to AI-saturated classrooms in more technologically advanced settings such as South Korea and China, where studies (Ng et al., 2023; Zare et al., 2024) reference seamless integration of AI, this study presents a context-conditioned reality for Iranian classrooms, especially in poorly equipped provinces. As great as the pedagogical potential of ChatGPT is apparent, its successful implementation is still heavily reliant on localized infrastructure, teacher training opportunities, and cultural openness to AI-enhanced learning. Overall, the Iranian EFL context reflects both promise and constraint: a growing recognition of the promise of AI to provide individualized learning, combined with systemic and institutional barriers to its widespread adoption.

To respond to the second research question, a sequence of direct classroom observations was conducted. The analysis of observation reflected repeated patterns with qualitative interview data, highlighting pedagogical affordances and implementation constraints of AI integration.

Classroom observations indicated that ChatGPT facilitated increased student engagement, particularly in the form of instant interaction and new learning. The students were significantly more engaged when AI tools were utilized in speaking and writing tasks. This was also reflected in observable actions such as increased rates of student-generated input, spontaneous interaction with the tool, and higher questioning. As noted by Shaikh et al. (2023), interactional novelty and immediacy of feedback are the key drivers of the learner, the findings shared in this research.

Instructors were also observed developing more interactive and adaptive lesson structuring with the incorporation of ChatGPT activities into class routines. For instance, students with different language skills would be able to learn at their own pace with the help of AI, supporting arguments by Namaziandost and Rezai (2024) and Baharloo and Miyan Baghi (2024) regarding the scaffolding potential of AI in differentiated instruction. This adaptability allowed more equitable participation across proficiency levels. It eased the workload of teachers in error correction, as feedback and error identification were being distributed to some degree with the system—aligned with those of Yu (2024).

Despite the pedagogical benefits observed, several systemic barriers limited the ability to utilize ChatGPT in the Iranian EFL context fully. First among these was technical interference that was recurrent, especially due to inconsistent internet connectivity. In several sessions, connectivity disruptions abruptly halted activity on ChatGPT, which left students disillusioned. These findings support the findings by Zhai et al. (2024) and Zare et al. (2024), which pointed out infrastructural anomalies in non-centralized learning environments. In addition, teachers' limited working expertise with AI tools was evidenced in the extent to which the tool was used narrowly or unevenly. Teachers used the tool narrowly or unevenly in most instances (e.g., telling students to "try it") rather than using it deliberately as part of scaffolded learning tasks. This result supports positions made by Namaziandost and Rezai (2024) and Zheng et al. (2023) in terms of the need for professional development to support effective AI adoption. Finally, perceived misalignment between curriculum objectives and ChatGPT strengths held back the strategic use of the tool. The teachers tended to shy away from using AI due to attributed contradictions with modular lesson planning or test-prep teaching—a dynamic also discussed in Ng et al. (2023).

The emerging themes were translated into three predominant categories: engagement and motivation, personalized feedback, and implementation challenges, as schematized in Figure 1. These thematic

clusters report the two-faceted character of AI adoption in Iranian EFL classrooms. Although promising in terms of its pedagogical potential, it remains limited by infrastructural and institutional issues. These findings accentuate the imperatives of context-dependent training, curriculum redefining, and infrastructure deployment to facilitate effective AI integration into language teaching.

The findings for the third research question reveal that students perceived ChatGPT as significantly more useful than teachers, while there was no statistically significant difference in their PEOU. These results suggest a divergence in how different stakeholders evaluate the functional value of AI tools in EFL education, despite a shared sense of technological accessibility. The significant difference between students' and teachers' perceptions of PU reflects the central TAM concept that user experience influences technology acceptance (Davis, 1989). Students rated ChatGPT more useful because it directly assisted with real-time correction and vocabulary development, suggesting that their behavioral intention to use the tool is strong. In contrast, teachers' lower PU ratings may stem from concerns about curriculum alignment and classroom control, consistent with TAM's emphasis on contextual barriers (Venkatesh & Bala, 2008). Notably, both groups reported similarly high scores for PEOU, indicating that technical complexity is not a major obstacle—again reinforcing TAM's predictive power in this context.

This outcome aligns with prior studies that emphasized students' enthusiasm for AI-based learning. For instance, Namaziandost and Rezai (2024) found that Iranian EFL students showed high levels of autonomy and motivation when engaging with intelligent language learning platforms. Similarly, Baharloo and Miyan Baghi (2024) reported that students perceived ChatGPT as a powerful learning assistant, especially in tasks requiring self-correction and independent output generation. The current study supports these claims by showing that students find ChatGPT highly useful in addressing their immediate learning needs (i.e., grammar support, vocabulary development, and writing enhancement) without waiting for teacher intervention.

The convergence in teachers' and students' ratings on PEOU reflects what Yu (2024) described as the growing digital comfort among both groups, even in resource-constrained contexts. The teachers in the present study did not struggle with the basic operation of ChatGPT, which supports the notion that technical barriers are diminishing. However, the lower usefulness rating given by teachers resonates with the challenges identified in Kamali et al. (2024) and Ng et al. (2023), which highlight pedagogical uncertainty, lack of training, and curricular misalignment as primary obstacles to teacher engagement with AI tools.

Interestingly, the current results show a clear divergence between learners' and instructors' pedagogical expectations. While learners view ChatGPT as a dynamic complement to their language learning, instructors are more cautious—concerned about its instructional fit and the possibility of undermining their classroom authority. This hesitancy mirrors the findings of Zheng et al. (2023) and Zhai et al. (2024), which noted that without proper institutional support and teacher professional development, AI integration may remain superficial or underutilized.

In comparison to studies from technologically advanced educational systems (e.g., China and South Korea), where both learners and instructors demonstrate high acceptance of AI (Ng et al., 2023; Zare et al., 2024), the present study reveals that Iranian educators require more pedagogical scaffolding to reach comparable levels of confidence and perceived usefulness. This disparity underscores the importance of localized training programs, AI-aligned curricula, and clearer instructional models to help teachers move beyond viewing ChatGPT as a novelty and toward adopting it as a sustainable pedagogical tool.

The findings of this study identify a broad perception divide between Iranian EFL students and teachers regarding the implementation of AI tools like ChatGPT, with the students eager to incorporate AI in their independent study practices and the teachers requiring focused intervention to reconsider AI as a teaching aid and not a rival to their professional persona. The gap reflects a need for extensive reform in policy, curriculum, and infrastructure. Current pedagogic frameworks do not cater to AI-powered tools, and this hinders teachers' ability to align such technology with teaching targets and assessment standards. Most teachers also lack the AI literacy and pedagogy competencies to deploy such tools effectively, which calls for empowering institutions via in-service training courses, digital pedagogy modules, and AI certification.

This study also identifies an unparalleled digital divide, as infrequent or slow internet connectivity in underdeveloped areas frequently disrupts the use of ChatGPT, increasing learning disparities. For AI technologies to be realized and implemented efficiently and equitably within Iranian EFL classrooms, there is a need for an effectively coordinated national plan that includes the integration of AI literacy into teacher training, the integration of AI utilization into curriculum and policy documents, and the augmentation of digital infrastructure in all regions of the country. It is only through such systemic and broad reforms that the potential for change offered by AI-enabled technologies like ChatGPT can be harnessed in Iran's educational scene.

6. Conclusions and Implications

The findings highlight the importance of the TAM theory since user attitudes were predicted by PU and PEOU. However, the disparity between teacher and student answers emphasizes the necessity of adding external elements, such as generational variations, digital literacy, and institutional support, into the TAM model in resource-limited environments. Given enough scaffolding, the research also backs the SRL theory, stressing the function of AI in advancing autonomy and adaptive learning.

Effective use of AI tools in Iranian EFL classrooms calls for investments in infrastructure, bilingual and culturally adapted platforms, and focused teacher training. Long-term results, rural applications, and ethical issues, including data privacy and artificial intelligence prejudice, should all be investigated in future studies. Resolving these problems collectively among teachers, legislators, and developers will enable AI technologies like ChatGPT to be used to promote fair, high-quality language learning in various Iranian educational settings.

The findings have implications for the effective integration of AI technologies, such as ChatGPT into Iranian EFL classrooms. First and foremost, EFL teachers should be offered carefully designed professional development opportunities that not only introduce them to the technical aspects of AI tools but also guide them on how to use these tools in a way that adds value to language teaching. This kind of training needs to emphasize how AI can be used to enhance, rather than replace, the role of the teacher, developing confidence and competency in using it.

Next is infrastructure development. Universal and stable internet connectivity, particularly in underprivileged areas, is a prerequisite for utilizing AI tools in education with any consistency. Without stable connectivity, the advantages of AI platforms cannot be harvested, and the digital divide among students would further increase. Developers and ed-tech businesses ought to develop localized AI solutions and platforms that are aligned with the linguistic and cultural context of Iranian learners. This includes offering bilingual support and utilizing culturally relevant content that resonates with the experiences and learning necessities of the learners.

AI tools should be officially incorporated into the curriculum in a way that augments traditional teaching. Rather than viewing AI as a substitute for teachers, it has to be used to enhance pedagogical methodologies—enhancing learner engagement, facilitating differentiation, and developing independent learning. Finally, ethical guidelines must be established and enacted. There

should be clear-cut policies in institutions that address issues related to data privacy, algorithmic bias, and over-reliance on technology. Ethical use of AI must have some assurances that will protect the personal data of students and promote fairness, transparency, and trust in digital technology.

However, the study acknowledges a limitation related to sampling. Recruitment through LinkedIn likely introduced sampling bias, as participants drawn from this platform may be more digitally literate, urban-based, and professionally engaged with technology. Consequently, the findings may overestimate AI acceptance and readiness compared to the broader EFL teaching community in Iran, especially those in under-resourced contexts. To address this, future research should adopt diversified and stratified recruitment strategies, including in-person outreach through local schools, government networks, and offline educational channels to ensure balanced representation across geographic and socioeconomic lines.

Future studies should investigate multiple crucial fields to enhance knowledge of AI integration in language teaching. One important path is investigating AI tools like the long-term consequences of ChatGPT on students' academic performance, learner independence, and motivation. Although initial increases in engagement have been noted, long-term studies are required to evaluate long-term effects over time. The scalability of AI-based learning systems in rural and low-connectivity parts of Iran is yet another crucial field of interest. These environments usually have major infrastructure problems. Therefore, studies should look at how AI technologies might be modified or backed to guarantee fair access and influence over socioeconomic boundaries and geography.

Further investigation is needed to see how teacher attitudes and generational variances affect AI adoption. Knowing how various teacher groups view and apply AI technologies will help you create more focused professional development courses and support networks. Moreover, comparative studies are required to assess the efficacy of different AI systems beyond ChatGPT. This includes looking at voice-based assistants, multimodal learning platforms, and other developing technologies to see which ones aid language learning in various contexts. Finally, future research should concentrate on ethical issues, including data privacy, algorithmic bias, and digital equity. Studying how these issues are handled or disregarded inside educational environments will help guarantee that AI is applied sensibly and inclusively, therefore protecting the interests of teachers and students.

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