

Research Article

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Investigating EFL Students' ChatGPT Usage and Attitudes Through the Lens of the Technology Acceptance Model (TAM)

Maha Alghasab 

Abstract

Background/purpose. Due to its significant potential, ChatGPT has recently revolutionized global education, particularly in the field of language learning. Against this backdrop, this study examines the perceptions of English as a Foreign Language (EFL) students regarding the use of ChatGPT to enhance their English language skills. It examines whether gender and prior experience with technology influence EFL learners' perceptions of ChatGPT and their intentions to utilize it.

Materials/methods. Based on the Technology Acceptance Model (TAM), this study examines several key attributes: perceived ease of use, perceived usefulness, attitude, behavioral intention, actual use, perceived enjoyment, facilitating conditions, and technological complexity. Employing a sequential explanatory mixed methods design, the data were collected using an adapted TAM questionnaire (n=108), followed by semi-structured interviews with selected students who exhibited the highest and lowest positive responses (20 students). Descriptive and inferential statistics were employed to analyze the quantitative data, while a thematic analysis was utilized for qualitative data analysis.

Results. Findings revealed overall positive perceptions towards using ChatGPT. Statistical analysis indicated that gender did not significantly influence TAM attributes. However, prior experience with technology emerged as a statistically significant predictor, demonstrating a measurable impact on both intentions to use and the actual use of ChatGPT.

Conclusion. These findings suggest that one of the most effective ways to overcome resistance to adopting ChatGPT is to increase users' familiarity and confidence in the technology.

1. Introduction

The emergence of Generative Artificial Intelligence (GenAI) tools, particularly ChatGPT, has revolutionized the language learning field, sparking transformative debates about its pedagogical potential and challenges (Kostka & Toncelli, 2023; Warschauer & Xu, 2024). Since its launch in November 2022, ChatGPT has gained popularity as an effective tool for language learning, offering capabilities such as instant feedback, text generation, and personalized writing assistance (Barrot, 2023a; Xiao & Zhi, 2023; Zhai, 2022).

Previous research on ChatGPT in language learning contexts has concentrated on the potential benefits and challenges of integrating and using this AI-powered tool (Barrot, 2023b). In EFL contexts, where learners often face limited authentic language exposure, ChatGPT presents an AI partner (Godwin-Jones, 2022) that enhances grammar, vocabulary, and academic writing skills (Allen & Mizumoto, 2024; Song & Song, 2023; Yan, 2023). Although recent studies provide sufficient evidence of ChatGPT's potential advantages in language teaching and learning, its adoption remains contentious, with scholars divided over whether it serves as an innovative affordance or a disruptive challenge (Abdaljaleel et al., 2024; Barrot, 2023b; Kohnke et al., 2023). Proponents highlight its utility in fostering engagement and task completion (Liu & Ma, 2024) and enhancing writing skills (Boudouaia et al., 2024; Polakova & Ivenz, 2024; Song & Song, 2023), while critics caution against overreliance, ethical dilemmas, and risks to academic integrity (Abdi et al., 2024; Al-Khreshehm, 2024; Sallam et al., 2024; Yan, 2023).

In addition to the ongoing debate about the pedagogical values and limitations of ChatGPT, there is less consensus regarding the individual factors that shape learners' acceptance of this tool. Among these, gender and prior technological experience emerged as key variables in the adoption of ChatGPT (Abdaljaleel et al., 2024; Alotaibi et al., 2025; Hwang et al., 2025; Sallam et al., 2024); however, findings remain inconsistent and context-dependent. Some research findings suggest that gender significantly influences ChatGPT use, reporting that male learners have higher self-efficacy in using AI tools than female learners (Elshaer et al., 2024; Zou et al., 2024), while others have found no significant gender effects (Panagiotarou et al., 2020; Sallam et al., 2024). Prior technological experience has also been reported as a significant factor that may reduce adoption barriers, as digitally proficient learners often embrace new tools more readily (Yan et al., 2023).

These conflicting findings suggest that the influence of gender and prior technological experience on technology acceptance may be highly context-specific, warranting further exploration, particularly in under-researched populations such as Kuwaiti EFL learners. Preliminary research in neighbouring Gulf countries, such as Saudi Arabia and the United Arab Emirates (UAE), suggests that regional variations in digital literacy and cultural attitudes significantly influence technology acceptance, underscoring the need for localized studies (Alharathi, 2024; Ekundayo et al., 2024; Sallam et al., 2024).

Due to inconsistencies and discrepancies in previous research findings regarding the effects of gender and prior experience on ChatGPT use, coupled with a notable absence of significant studies specifically with Kuwaiti EFL learners, this study was conducted to address these literature gaps. More specifically, the current study addresses Kuwaiti EFL undergraduates' perceptions of ChatGPT through an extended Technology Acceptance Model (TAM). It examines the interplay of perceived ease of use, usefulness, attitudes, behavioral intention, actual use, enjoyment, facilitating conditions, and technological complexity, while exploring the effect of gender and prior technology experience on TAM constructs and ChatGPT usage. The study quantifies adoption patterns and contextualizes learners' experiences through qualitative insights. The following research questions guided the current study:

1. What are students' perceptions and experiences of ChatGPT across TAM constructs, including perceived ease of use, perceived usefulness, attitudes, behavioural intention, actual usage, perceived enjoyment, facilitating conditions, and technological complexity?
2. How do participants' perceptions of ChatGPT differ across gender groups?
3. How do users with and without prior experience with technology differ in their acceptance and perceptions of ChatGPT?
4. How do the core TAM constructs relate to each other in the context of Kuwaiti EFL students' use of ChatGPT?

2. Literature Review

2.1. Technology Acceptance Model (TAM) and Its Application to AI Tools

The Technology Acceptance Model (TAM), developed by Davis (1989), posits that perceived usefulness (PU) and perceived ease of use (PEU) shape users' attitudes, intentions, and actual technology adoption. Recent studies extend TAM to AI-driven tools, incorporating factors like perceived enjoyment (intrinsic motivation) and facilitating conditions (institutional support) to better predict adoption behaviors (Elshaer et al., 2024; Venkatesh et al., 2003). Research on e-learning platforms indicates that students' intention to use these technologies is significantly influenced by their perceptions of how easy and useful the platforms are (Granić & Marangunić, 2019). Extensions of the Technology Acceptance Model (TAM) incorporate factors such as social influence and facilitating conditions, with research indicating that these elements positively affect behavioral intentions (Khanchel, 2023). Perceived enjoyment significantly influences the adoption of ChatGPT among EFL learners, while technological complexity hinders its uptake (Liu & Ma, 2024). Hwang et al. (2025) further demonstrate that output quality and result demonstrability enhance perceived usefulness and ease of use in AI-driven learning environments. These extensions underscore the need to adapt traditional models to accommodate the multifaceted nature of AI tools.

Recent research has utilized the Technology Acceptance Model (TAM) to examine AI tools. Grassini et al. (2024) discovered that among Norwegian students, the intention to use ChatGPT was influenced by behavioral intention, with performance expectancy playing a key role. Nonetheless, the impact of cultural and geographic factors on technology adoption remains insufficiently studied. For instance, there is a lack of understanding regarding the acceptance of AI tools among Kuwaiti EFL learners, where cultural context, gender, and prior experience with AI may be significant factors (Ma et al., 2024). Earlier studies have shown that gender, context, and experience are key factors in AI adoption (Ameen et al., 2021; Bodani et al., 2023; Zhang et al., 2023), underscoring the need for further research in these areas.

2.2. ChatGPT and Language Learning

Generative Artificial Intelligence (GenAI) tools have recently received significant attention, particularly in language learning (Warschauer & Xu, 2024). According to Lim et al. (2023), GenAI refers to any "technology that leverages deep learning models to generate human-like content (e.g., images, words) in response to complex and varied prompts (e.g., language, instructions, and questions)" (p.2). In November 2022, GenAI gained popularity with the emergence of ChatGPT, which attracted numerous language learners and teachers (Zhu & Wang, 2025). GenAI tools, such as ChatGPT, have transformed EFL education by providing personalized writing assistants, instant feedback, and opportunities for autonomous practice (Kohnke et al., 2023; Xiao & Zhi, 2023). These tools address critical challenges in EFL contexts, such as limited authentic language exposure, by enhancing grammar, vocabulary, and academic writing skills (Song & Song, 2023).

Systematic reviews examining its application in language learning have revealed notable advancements in research trends related to its use (see Huang et al., 2022; Li et al., 2024). One major area of exploration examines the role of ChatGPT in developing writing skills (Abdi et al., 2024; Barrot, 2023a; Polakova & Ivenz, 2024; Yan, 2023). Findings revealed that ChatGPT has the potential to enhance writing skills by providing ongoing and immediate feedback on content and language accuracy, as well as assisting learners in generating ideas. Another strand focuses on teachers' and learners' attitudes, intentions, and perceptions towards using ChatGPT for language learning purposes (AbuSa'aleek & Alenizi, 2024; Alsalem, 2024; Allen & Mizumot, 2024; Bao & Li, 2023; Baek et al., 2024; Slamet, 2024; Teng, 2024; Xiao & Zhu, 2023). These studies emphasize two key points: first, individual differences such as gender, as well as the perceptions of both learners and teachers-including perceived usefulness and satisfaction- play a significant role in shaping their attitudes and intentions toward using ChatGPT; second despite the promising advantages ChatGPT offers for language learning, concerns remain about its reliability, the potential for learners to become dependent on it, and issues related to academic integrity.

2.2.1. Gender and Technology Background in ChatGPT Adoption

According to previous studies, gender differences in technology adoption yield mixed findings: male students exhibit higher self-efficacy with AI tools (Aksakalli & Daser, 2025; Elshaer et al., 2024), though disparities diminish with greater technology-related education (Draxler et al., 2023). For example, a study involving 874 Turkish EFL students found that perceived usefulness and satisfaction had a positive impact on their attitudes towards using ChatGPT (Aksakalli & Daser, 2025). The study also reported gender-based differences in usage frequency, but not in overall perceptions. Male respondents used ChatGPT more frequently than female respondents, and male participants perceived ChatGPT as easier to use compared to their female counterparts. Congruent with this, Yilmaz et al.'s (2023) study found a significant disparity in the perceived ease of use dimension between male and female participants. Specifically, male participants found using ChatGPT easier to use compared with their female counterparts. Although Aksakalli and Daser (2025) reported that gender variation did not impact the overall perceptions, Sindermann et al (2022) found that men typically exhibit more positive attitudes toward ChatGPT than women, which is attributed to varying levels of exposure. Other studies provided contradictory findings suggesting that women displayed greater engagement with ChatGPT than male users did (Alotaibi et al., 2025; Bodani et al., 2023), while others reported a moderate effect (Almansour, 2024) or no significant differences between genders (Islahi & Nasrin, 2019; Romero-Rodríguez et al., 2023; Vo & Nguyen, 2024).

Beyond gender variations, prior technology experience consistently predicts adoption, as digitally proficient learners perceive AI tools as more useful and easier to use (Panagiotarou et al., 2020; Liu & Ma, 2024). Empirical studies found that the experience of use significantly impacted the facilitating conditions of the tool (Romero- Rodríguez et al., 2023) and that users with more experience with AI have higher perceived usefulness and ease of use because they may have established a stronger degree of familiarity, comfort and confidence resulting in more favourable attitudes and behavioural intents to use (Yilmaz et al., 2023). The contradictions in research findings regarding the influence of gender on technology acceptance make exploring its effect even more indispensable.

Empirical research has consistently demonstrated that the acceptance of ChatGPT in language learning is primarily determined by perceived usefulness and perceived ease of use (Hwang et al., 2025). For example, Almansour's (2024) study with Saudi EFL learners and Zhou et al.'s study (2024) with Chinese learners both found that behavioural intentions to use ChatGPT for language learning were greatly impacted by their perceived usefulness and that computer self-efficacy was a significant determinant influencing perceived ease of use and perceived usefulness (Almansour, 2024). Other studies (e.g., Vo & Nguyen, 2024) found that although students found ChatGPT easy to use and

perceived it as a useful tool for their language learning, they held neutral opinions on its overall usefulness. Several perceived usefulness were reported for the use of ChatGPT including generating dialogue practice materials that could enhance speaking skills (Yildiz, 2024), assisting students with accomplishing writing tasks (Marzuki et al., 2023; Xiao & Zhi, 2023), improving writing skills (Song & Song, 2023; Yan, 2023), enriching vocabulary (Kohnke et al., 2023) and providing immediate feedback (Guo & Wang, 2023; Yan, 2023). Alotaibi et al. (2025) found that there was no significant relationship between perceived ease of use and attitudes; rather, Saudi EFL learners' attitudes were more influenced by the benefits and value of the tool for language learning.

2.2.2. Concerns About ChatGPT Use

While acknowledging the benefits of ChatGPT in optimizing the language learning process, some concerns were also raised regarding its effect on students' cognitive abilities and the risk of reducing critical thinking, the potential of learner overreliance, and academic integrity (Barrot, 2023a; Baek et al., 2024; Kostka & Toncelli, 2023). Empirical research has reported that educators and teachers harbor concerns about the potential overreliance on AI tools, which may lead to 'cognitive offloading' and the suppression of creativity (Chen et al., 2020; Darwin et al., 2024). In studies conducted by Yan (2023) and Baek et al. (2024), learners expressed concerns about the potential long-term detrimental consequences, the risk of accusations of plagiarism and academic policy violations, and emphasized the need for guidance on the proper use of this tool for their academic writing assignments. Likewise, Alsalam (2024) and Hu and Škultéty (2023) both reported that students experienced frustration due to ChatGPT's inability to provide rich and genuine interaction, as well as its limited pronunciation, resulting in comprehension challenges. Other ethical concerns include authentic authorship, academic integrity, and plagiarism (Creely, 2024; Yan, 2023). Thus, scholars remain divided: proponents emphasized ChatGPT's role in fostering engagement and task completion (Liu & Ma, 2024), while critics warn of overreliance, ethical dilemmas, and risks to academic integrity (Alotaibi et al., 2025; Gligorea et al., 2023; Holmes et al., 2021; Sallam et al., 2024). Numerous studies indicated that ChatGPT can generate responses that are either factually incorrect or overly simplified, potentially causing misunderstandings if not properly moderated (Kotsis, 2024; Xiong, 2024), especially when there is an exclusive reliance on automated feedback (Kim, 2023; Weidener & Fischer, 2023). These debates highlight the need for balanced empirical investigations into the pedagogical integration of ChatGPT.

To summarise, existing studies on ChatGPT in language learning emphasize the influence of gender and individual characteristics, particularly prior technological experience, on learners' attitudes and behavioral intentions toward adopting ChatGPT. While perceived benefits, such as improvements in language skills and immediate personalized feedback, underscore its potential utility, concerns about academic integrity, over-reliance, and pedagogical limitations persist. This discourse, however, remains under-explored in the Gulf region, where socio-cultural and educational dynamics may uniquely shape technology adoption (Ekundayo et al., 2024). In Kuwait, contradictory findings in broader technology-acceptance research (e.g., disparities in digital literacy and gender specific adoption patterns) further complicate predictions about ChatGPT's integration. The absence of localized studies addressing these nuances, coupled with Kuwait's accelerating investment in AI-driven educational reforms, underscores a critical gap. To the researcher's knowledge, there are limited studies on AI in the Kuwaiti context (e.g., Alenezi, 2024; AlKandari, 2025), but not specifically on ChatGPT. Therefore, this study aims to investigate Kuwaiti learners' perceptions of ChatGPT, providing context-specific insights for policymakers and educators.

3. Methodology

3.1. Research Design and Procedure

This study employed a mixed-methods approach, following a sequential explanatory design (Cresswell, 2013). This design includes two distinct phases: first, it allows the collection of quantitative data, which provides generalizable and statistically robust findings, followed by the collection of qualitative data to further provide insights into the underlying reasons, attitudes, and other contextual factors that may elaborate on the quantitative findings. By integrating both types of data, the validity and reliability of data analysis can be improved. Furthermore, the quantitative data can help to inform the qualitative sampling; the initial quantitative phase can guide the purposeful selection of participants for the subsequent phase. As shown in Figure 1, a questionnaire was distributed to students in phase one using convenience sampling. This was followed by Phase 2, where 20 participants were selected using purposive sampling.

Before the study commenced, participants received a detailed explanation of the study's purpose, procedure, and the potential risks and benefits of participation. They were also provided with a written informed consent form, which they were required to complete and sign. They were also assured of their right to withdraw from the study at any time, without penalty. The students participated voluntarily and provided informed written consent prior to the commencement of the study's procedures. Phase 1 was conducted in September 2023, in which the questionnaire was administered online using Google Forms. A total of 108 responses were received within a week. Phase 2 involved conducting semi-structured interviews with 20 students who exhibited high and less positive attitudes towards using ChatGPT. These interviews aimed to gain deeper qualitative insights into students' perceptions and experiences with ChatGPT.

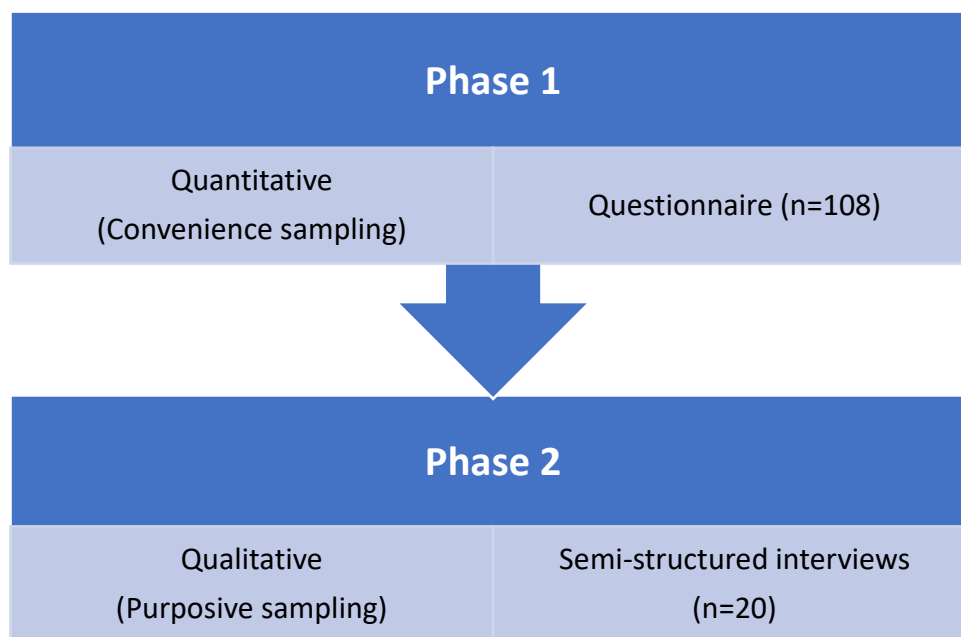


Figure 1. Research Design

3.2. Research Context and Participants

This study was conducted at the College of Basic Education during the fall semester of the 2023-2024 academic year. Due to the ease of access to the research participants, English major students were deliberately selected using convenience sampling. A total of 108 students participated in Phase 1 by completing the TAM questionnaire (Appendix A), and 20 students participated in Phase 2, selected through purposive sampling. Table 1 provides demographic information about the participants. All participants were undergraduate students recruited in the teachers' education

training program (i.e., pre-service EFL teachers) at the College of Basic Education. Participants were predominantly Kuwaiti (82.2%), with the majority being female (86.9%). The majority were third-year students (74.8%), aged 18–24 (79.4%). A large number of participants reported prior experience with technology (80.4%) and used ChatGPT on a weekly or monthly basis.

Table 1. Participants Demographic Data

Demographic data			
		F	%
What's your nationality?	Kuwaiti	88	82.2
	Non-Kuwaiti	19	17.8
What is your gender?	Male	14	13.1
	Female	93	86.9
What is your current level of education?	First year	9	8.4
	Second year	18	16.8
	Third year	80	74.8
How old are you?	From 18-24	85	79.4
	From 25-34	20	18.7
	from 35-44	2	1.9
How often do you use ChatGPT?	Never	11	10.3
	Daily	21	19.6
	Weekly	38	35.5
	Monthly	28	26.2
	Yearly	9	8.4
Do you have prior experience using technology to learn English?	No	21	19.6
	Yes	86	80.4

3.3. Data Collection Instruments

To answer the research questions, two data collection instruments were used, namely a questionnaire and semi-structured interviews (see Table 2). Quantitative data were collected first using the TAM questionnaire (Appendix A), which included demographic information and eight different TAM sections, including perceived usefulness, attitudes, behavioural intention, actual usage, perceived enjoyment, facilitating conditions, and technological complexity. The questionnaire was adapted from the previous TAM studies (Huang et al., 2022; Liu & Ma, 2023). Cronbach's Alpha

values for all TAM constructs exceeded 0.85, indicating excellent internal consistency. The total reliability of the scale, as measured across 40 items, was exceptionally high ($\alpha = 0.954$), confirming strong scale reliability.

Qualitative data were collected through semi-structured interviews with 20 students, who were selected from those who also responded to the quantitative data gathering instrument. Purposive sampling was used to select the participants; it refers to a non-probability sampling technique where participants are deliberately chosen based on specific characteristics that align with the research objectives. This study aimed to ensure a balanced representation of gender (male and female students) and a range of responses (both positive and negative attitudes) to the questionnaire items. After administering the questionnaire to a larger pool of students, their responses were reviewed, and the researcher identified which students gave predominantly positive and negative responses. The questions in the interview guide (Appendix B) aimed to elicit students' general perceptions about the use of ChatGPT. During the interviews, follow-up questions were asked to clarify participants' responses, and further prompts and clarification requests were made. The interviews lasted an average of 15 minutes, and all were conducted in a face-to-face format in the researcher's office, audio-recorded for transcription purposes.

Table 2. Research Questions and Data Collection Instruments

Research questions	Data source	Data collection methods
What are students' perceptions and experiences of ChatGPT across TAM constructs, including perceived ease of use, perceived usefulness, attitudes, behavioural intention, actual usage, perceived enjoyment, facilitating conditions, and technological complexity	Questionnaire responses (n=108) Interviews (n=20)	Online questionnaire (Google Forms). Semi-structured interviews
How do participants' perceptions of ChatGPT differ across gender groups?	Questionnaire responses (n=108) Interviews (n=20)	Online questionnaire (Google Forms). Semi-structured interviews
How do users with and without prior experience with technology differ in their acceptance and perceptions of ChatGPT?	Questionnaire responses (n=108) Interviews (n=20)	Online questionnaire (Google Forms). Semi-structured interviews
How do the core TAM constructs relate to each other in the context of Kuwaiti EFL students' use of ChatGPT?	Questionnaire responses (n=108)	Online questionnaire (Google Forms)

3.4. Data Analysis

The study employed descriptive and inferential techniques for quantitative data analysis using IBM SPSS version 25. For research question one, descriptive statistics were run, while an independent sample t-test was used for questions 2 and 3 and correlation analysis for answering question 4. Thematic analysis was employed to analyze the interview data. This method identifies, analyzes, and reports themes within the data (Braun & Clarke, 2006). The analysis was inductive and data-driven. The first step was familiarization with, and immersion in, the data to gain a sense of the overall

content. All interview transcripts were reviewed iteratively to gain a deeper understanding of the students' perceptions. This was followed by the inductive generation of initial open codes, including saving time and effort, enhancing L2 learning, and improving productivity and efficiency. This involved tagging data segments with codes that represented the essence of each segment. These codes were then further developed to present different themes related to the TAM constructs, which were derived through constant comparison and merging the codes into overarching themes, such as 'perceived usefulness' and 'ease of use', 'actual use of ChatGPT', and 'attitudes towards ChatGPT'. NVivo 12 was used to ensure systematic coding. To maintain the confidentiality of students, pseudonyms were used for the interview excerpts.

4. Results

4.1. Students' Perceptions of Using ChatGPT as a Learning Tool

Table 3 presents the quantitative descriptive statistics findings from the TAM-based survey, assessing constructs such as perceived ease of use, usefulness, attitudes, behavioral intention, actual use, enjoyment, facilitating conditions, and technological complexity. As shown in Table 3, the descriptive analysis revealed generally positive perceptions across all TAM constructs, with an overall mean score of 3.45. Perceived ease of use emerged as the most positively rated construct ($M = 3.92$, $SD = 0.741$), indicating that participants found ChatGPT to be intuitive and user-friendly. This was followed by perceived usefulness ($M = 3.68$, $SD = 0.749$), indicating a strong recognition of ChatGPT's potential benefits for language learning. Attitudes toward ChatGPT were moderately positive ($M = 3.61$, $SD = 0.927$), with a relatively high standard deviation suggesting some variability in participants' attitudes. Perceived enjoyment scored similarly ($M = 3.56$, $SD = 0.867$), demonstrating that students found ChatGPT engaging and pleasant to use. Actual use reported a mean of 3.50 ($SD = 0.872$), while behavioral/continuance intention scored 3.45 ($SD = 0.897$). The proximity of these scores suggests reasonable alignment between reported usage patterns and future usage intentions, though both fall slightly below the ease of use and usefulness perceptions. The construct of facilitating conditions received a moderate rating ($M = 3.34$, $SD = 0.670$), indicating adequate but potentially improvable support infrastructure and resources for ChatGPT use. The technological complexity exhibited the lowest mean score ($M = 2.50$, $SD = 1.096$) and the highest standard deviation, suggesting that students generally found ChatGPT straightforward to use, although with considerable individual variation in perceived complexity levels (see Appendix C for detailed descriptive statistical analysis for each statement in each construct).

Table 3. Students' Responses to the TAM Dimensions

	TAM constructs	Mean	Std. Deviation	Factors sorted by means
A	Perceived Ease of Use	3.92	0.741	1
B	Perceived Usefulness	3.68	0.749	2
C	Attitude	3.61	0.927	3
D	Behavioural/Continuance Intention	3.45	0.897	6
E	Actual Use	3.50	0.872	5
F	Perceived Enjoyment	3.56	0.867	4
G	Facilitating Conditions	3.34	0.670	7

H	Technological Complexity	2.50	1.096	8
Total		3.45	0.605	

Qualitative analysis corroborates the quantitative analysis presented in Table 3. As shown in Figure 2, several codes emerged from analyzing the interview data corresponding to TAM constructs, including perceived usefulness of ChatGPT, ease of use, actual use, and attitudes towards using ChatGPT. In-depth analysis revealed that both males and females expressed similar positive perspectives towards using ChatGPT. For example, the following quotes from two female students and two male students demonstrate that all of them believed ChatGPT saves their studying time, enhances their L2 skills, and helps them be more productive. They all believed that ChatGPT has potential benefits that could eventually improve their language skills:

"I think I am a fan of ChatGPT, it helps me to find the information easily, which saves my time and efforts, and saving time is important for me as a college student because I would have more time to focus on other things, such as analyzing, interpreting, and thinking critically" (S1, female, third-year college student)

"ChatGPT assisted me a lot not only to locate and verify information easily, which definitely saves time, but also to practice the English language. I found it really helpful in improving my writing skills and speaking abilities. I would definitely use it" (S2 female student, third-year college student).

"The affordances of ChatGPT especially its speediness to provide you with the knowledge that you're looking for is amazing, and that saves my efforts and time, I appreciate its ability to generate ideas within a click and that stimulates me to think about my writing, it is helpful to develop my English language writing skills" (S4 male student, third- year college student).

"I love to use ChatGPT because it helps me a lot. It is like an assistant who can accomplish a task with unbelievable speed, which saves our time as students. I value its ability to converse with me and correct my grammatical mistakes, which I think eventually develops my L2 skills" (S6 male student, second-year college student)

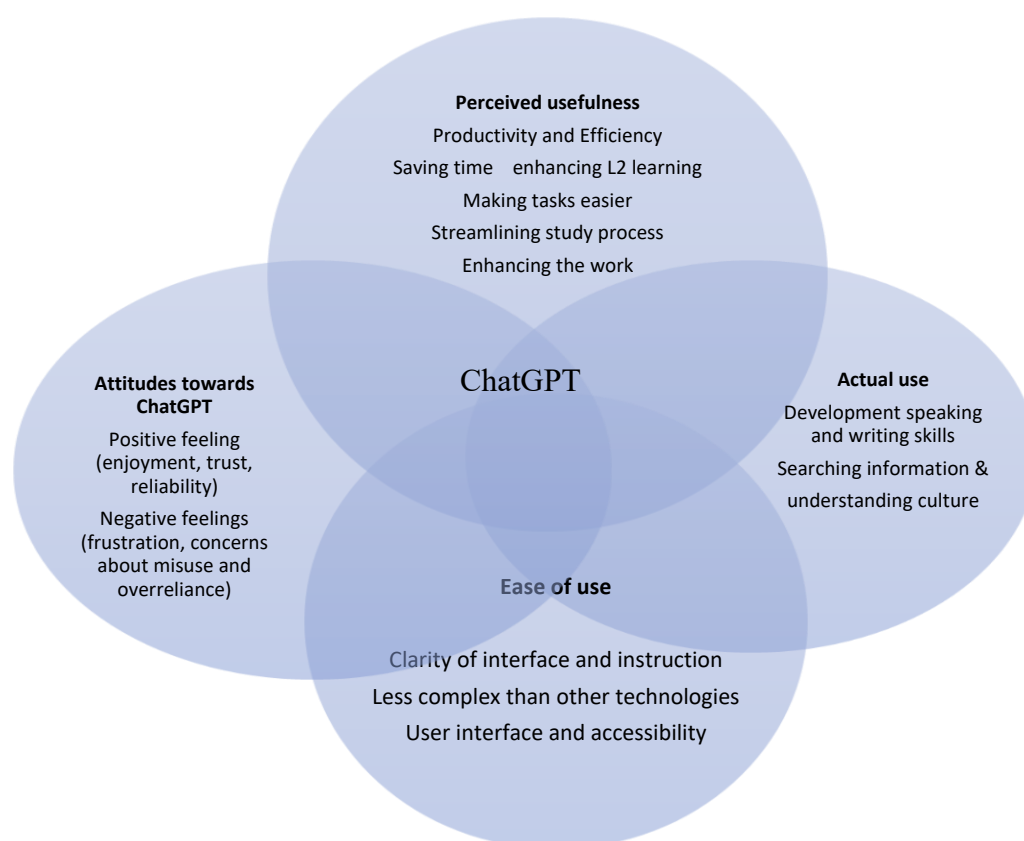


Figure 2. Thematic Analysis for Students' Perceptions of Using ChatGPT

The majority of students believed that ChatGPT is easy to use, which is a key factor influencing their frequent use of the tool. The following quotes demonstrate students' ability to use ChatGPT without any prior technical training, highlighting the clarity of the interface and instructions, the simplicity of ChatGPT, and its user-friendly interface. As the following student declared: "I think I am a user of ChatGPT because it is very easy to use and I don't have to develop my IT skills to use or to attend any training to be able to use very easy and straightforward" (S7 male, second- year college student". Other students said: "For me I am using ChatGPT because it doesn't need any skills, you only need to create an account and then use it easily" (S9 male, third- year college student), " I think that ChatGPT has a lot of user-friendly features such as the ability to converse with AI with simple prompts and adjusting settings to suit your personal preferences" (S12 female, third- year college student). Additional student added:

"I like using ChatGPT because it is easy. Once you log in, you can begin using it by typing questions, and it is very flexible and can handle a wide range of tasks easily and clearly with less effort. It is not complex at all" (S10 female, second-year college student).

Despite these positive attitudes, a few students (n=3) expressed some negative views and identified some drawbacks to using ChatGPT. There were concerns about possible over-reliance and academic misconduct behaviours. For example, the following quotes from two female students and one male student described students' concerns and fears: "I am worried because using ChatGPT too much may deteriorate my writing ability, I am over-relying on it, and sometimes I feel unable to write without using ChatGPT" (S 8 female, first-year college student). Another student stated that: "I am afraid of using ChatGPT, especially when working on my assignment, because I feel that I may cheat. Sometimes I found myself copying and pasting things from ChatGPT, and that's unacceptable" (S16, female, second-year college student). The following quote reassured this:

"I think using ChatGPT has some drawbacks for us as learners of English, I don't feel that interacting with AI is realistic it lacks real interaction also it provides a lot of unrelated information and sometimes misleading answers, I am conservative and would rather prefer not to use it to avoid any academic misconduct behaviors or academic deterioration" (S19 male, third- year college student).

To summarise, despite variations in individual attitudes, all students expressed generally positive perceptions of ChatGPT as a valuable tool for language learning, regardless of their gender. A small number of participants expressed some concerns about issues related to ChatGPT's use, such as over-reliance and academic integrity. The following sections present the results of the t-test, which statistically demonstrate the effects of gender and prior technology experience on TAM constructs and ChatGPT acceptance.

4.2. The Effect of Gender on TAM Constructs and ChatGPT Acceptance

Across all TAM constructs, the p-values are well above the conventional threshold of 0.05, indicating that gender does not have a statistically significant effect on students' perceptions or acceptance of ChatGPT (as presented in Table 4). Both male and female students reported similar levels of perceived ease of use, usefulness, enjoyment, attitudes, intention to continue to use, actual use, perceptions of facilitating conditions, and technological complexity.

Table 4. T-Tests and Gender Effect

		T-test according to gender					
		N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Perceived Ease of Use	Male	14	3.93	0.550	0.056	105	0.96
	Female	93	3.92	0.768			
Perceived Usefulness	Male	14	3.62	0.529	-0.312	105	0.76
	Female	93	3.69	0.779			
Attitude	Male	14	3.63	0.815	0.083	105	0.93
	Female	93	3.61	0.947			
Behavioral/Continuance Intention	Male	14	3.20	0.484	-1.105	105	0.27
	Female	93	3.48	0.940			
Actual Use	Male	14	3.31	0.580	-0.841	105	0.40
	Female	93	3.52	0.906			
Perceived Enjoyment	Male	14	3.33	0.599	-1.068	105	0.29
	Female	93	3.60	0.898			
Facilitating Conditions	Male	14	3.44	0.754	0.554	105	0.58

T-test according to gender							
		N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Technological Complexity	Female	93	3.33	0.660	1.055	105	0.29
	Male	14	2.79	0.909			
	Female	93	2.45	1.119	-0.191	105	0.85
	Male	14	3.42	0.384			
Total	Female	93	3.45	0.633			

4.3. The Effect of Prior Technology Experience on TAM Constructs and ChatGPT Acceptance

As shown in Table 5 below, prior technology experience emerged as a significant factor affecting both behavioural intention and actual use. Students with previous exposure to digital tools were more likely to use ChatGPT and intend to continue using it. This suggests that familiarity with technology positively influences students' willingness to use ChatGPT. Actual usage of ChatGPT was also significantly higher among students with prior technological experience. For all other TAM constructs, including perceived ease of use, perceived usefulness, attitude, perceived enjoyment, facilitating conditions, and technological complexity, no statistically significant differences were found between students with and without prior experience (all p-values > 0.05), indicating that prior experience did not significantly affect these other constructs.

Table 5. T-Test and Prior Technology Experience Effect

T-test according to prior technological experience							
Prior technological experience		N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Perceived Ease of Use	No	21	3.65	0.436	-1.837	105	0.07
	Yes	86	3.98	0.787			
Perceived Usefulness	No	21	3.48	0.453	-1.324	105	0.19
	Yes	86	3.72	0.800			
Attitude	No	21	3.32	0.717	-1.586	105	0.12
	Yes	86	3.68	0.962			
Behavioral/Continuance Intention	No	21	3.06	0.722	-2.263	105	0.03
	Yes	86	3.54	0.913			
Actual Use	No	21	3.15	0.812	-2.053	105	0.04
	Yes	86	3.58	0.869			

T-test according to prior technological experience

Prior technological experience		N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Perceived Enjoyment	No	21	3.35	0.749	-1.269	105	0.21
	Yes	86	3.62	0.889			
Facilitating Conditions	No	21	3.30	0.580	-0.312	105	0.76
	Yes	86	3.35	0.693			
Technological Complexity	No	21	2.52	0.955	0.121	105	0.90
	Yes	86	2.49	1.133			
Total	No	21	3.24	0.479	-1.744	105	0.08
	Yes	86	3.50	0.625			

Interview data indicate that students with prior technology experience are more likely to adopt and effectively use ChatGPT in their learning. Their familiarity with technology enables them to navigate ChatGPT's interface more intuitively and recognize its potential benefits for language learning. As two students stated:

"I am a user of technology, and I think that's why I immediately accepted using ChatGPT because I know how to use it technically. This experience gave me the confidence to explore its features without hesitation. I was able to quickly understand how to use it to assist me in my studies" (S7 male, second-year college student)

"Due to my advanced computer skills using ChatGPT was very easy and straightforward, I was able to download it and use it whenever I need to on my smartphone, unlike some of my friends who might feel overwhelmed by new technology, I found it intuitive and easy to use which motivated me to continue using it regularly" (S10 female, second-year college student)

Some students stated that using ChatGPT was not easy for them, and therefore, they do not intend to use it in the future because they are not familiar with AI. This further affirms that prior experience does affect actual use and intention to use. The following quotes reflect common sentiments from students who lack prior technological experience and highlight how this impacts their intention to adopt ChatGPT:

"I know ChatGPT is a trendy topic, and everyone is using it; however, I struggled to understand how to use it effectively because I am not familiar with AI tools, so I don't see myself using it again" (S15, female, second-year college student)

"I think that without prior similar experience with a similar platform, it was hard for me to feel comfortable with ChatGPT, which makes me hesitant to rely on and use it in the future" (S19 male, third-year college student).

"I am not a user of AI, so I felt complicated and overwhelmed, and I don't plan to use it in the future" (S5 female, second-year college student)

4.4. Correlation Between TAM Constructs

The statistical analysis shows strong support for the core TAM relationships and suggests an extended TAM model incorporating additional constructs. As shown in Table 6, the correlation of .817** between perceived usefulness and attitude represents one of the strongest relationships in the matrix, strongly supporting the TAM proposition that users' perception of a technology's usefulness significantly influences their attitudes towards using it. Perceived ease of use also shows significant correlations with multiple TAM constructs, including perceived usefulness (.697**), further support the TAM principle that technologies perceived as easier to use are also seen as more useful. Significant correlations are also found with attitudes (.655**) indicating that ease of use directly influences user attitudes, as well as behavioural intention (.590**) and actual use (.550**), demonstrating both direct and indirect pathways to adoption. The strong correlation (.770**) between behavioural/continual use intention and actual use validates the fundamental TAM assumption that intention is a strong predictor of actual technology usage. The perceived enjoyment construct shows consistently high correlations across all TAM variables, with particularly strong relationships with attitudes (.740**) and behavioural intention (.742**). This suggests that the TAM model incorporates hedonic motivation alongside utilitarian factors, representing an extended TAM approach.

Table 6. Correlation Matrix Results

	Correlations								
	Perceived Ease of Use	Perceived Usefulness	Attitude	Behavioural/Continuance Intention	Actual Use	Perceived Enjoyment	Facilitating Conditions	Technological Complexity	Total
Perceived Ease of Use	1	.697**	.655**	.590**	.550**	.500**	.432**	-.191*	.700**
Perceived Usefulness	.697**	1	.817**	.750**	.691**	.708**	.449**	-0.148	.839**
Attitude	.655**	.817**	1	.768**	.719**	.740**	.423**	-0.106	.849**
Behavioral/Continuance Intention	.590**	.750**	.768**	1	.770**	.742**	.524**	-0.068	.866**
Actual Use	.550**	.691**	.719**	.770**	1	.863**	.596**	-0.087	.865**
Perceived Enjoyment	.500**	.708**	.740**	.742**	.863**	1	.575**	-0.063	.850**
Facilitating Conditions	.432**	.449**	.423**	.524**	.596**	.575**	1	.236*	.747**
Technological Complexity	-.191*	-0.148	-0.106	-0.068	-0.087	-0.063	.236*	1	0.127
Total	.700**	.839**	.849**	.866**	.865**	.850**	.747**	0.127	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

To summarise, correlation analysis revealed strong positive relationships among the core TAM constructs. Notably: Perceived Usefulness and Attitude ($r = .817^{**}$); Attitude and Behavioural Intention ($r = .768^{**}$); Perceived Enjoyment and Actual Use ($r = .863^{**}$). Technological Complexity had weak negative correlations, indicating minor hindrances to the adoption of ChatGPT.

5. Discussion

The findings of this study indicate that Kuwaiti EFL learners have positive attitudes towards using ChatGPT. Additional finding suggests that gender does not have a statistically significant effect on Kuwaiti EFL students' acceptance of ChatGPT, while prior experience with technology plays a pivotal role in influencing their acceptance. These results suggest that familiarity with technology is a more critical factor than gender in this sociocultural context.

These findings align with the arguments of other recent studies, which suggest that there are generally positive attitudes towards using ChatGPT in language learning due to its perceived usefulness (Teng, 2024; Warschauer & Xu, 2024; Zhu & Wang, 2025). Congruent with previous studies' findings (e.g. Almansour, 2024; Hwang et al., 2025; Song & Song, 2023; Zhou et al., 2024), the integration of ChatGPT into English language classrooms has garnered positive responses from students, particularly in terms of perceived ease of use and perceived usefulness. Agreeing with Zou et al. (2024) and Almansour (2024), perceived usefulness and prior technology experience were significant determinants influencing the adoption of ChatGPT, with these factors outweighing the effect of gender variation.

In contrast to other studies conducted by Aksakalli and Daser (2025), Yilmaz et al. (2023), and Alotaibi et al. (2025), the current study's findings did not reveal a significant impact of gender on the TAM constructs. This suggests that, within the Kuwaiti context, male and female participants exhibited similar attitudes, perceived usefulness, perceived ease of use, and behavioural intentions regarding the adoption of ChatGPT for language learning. This result is consistent with recent research (e.g., Almansour, 2024; Zou et al., 2024), which also reported that gender was not a determining factor in technology acceptance when compared to other variables such as prior technology experience and perceived usefulness. The finding that gender was not a significant determinant of students' TAM constructs indicates a noteworthy shift in the landscape of technology engagement. Specifically, it suggests that both male and female students navigate and accept this technology similarly, contrasting with earlier studies that reported discrepancies in attitudes based on gender. These findings are consistent with those of Islahi & Nasrin (2019), who found no significant gender difference in students' attitudes towards information technology within certain educational settings. This also suggests a shift in the factors influencing technology adoption in the Kuwaiti educational setting, where individual experience and perceived benefits/usefulness now play a more prominent role than traditional demographic variables such as gender. It should be noted, however, that the disproportionately larger number of female participants (93) compared to male participants (14) may have influenced the overall gender-related results in this study. Therefore, these results should be interpreted with caution.

Prior technology experience has also been identified as a significant factor influencing behavioural intention and use of ChatGPT. The assertion that students with prior exposure to digital technologies are more likely to adopt and consistently use ChatGPT aligns with the findings articulated in the Technology Acceptance Model (TAM), which emphasizes perceived usefulness and ease of use as pivotal elements for technology adoption (Kemp et al., 2019). Digital literacy and prior experience are foundational components that facilitate the adoption process by cultivating user confidence and competence when engaging with new technologies (Huang & Liaw, 2018; Jorge-Vázquez et al., 2021). This finding contrasts with other studies conducted by Baytak (2023) and Jushermi et al. (2024). For example, Baytak (2023) notes that individual variances in prior exposure may not uniformly predict positive attitudes towards new technologies, suggesting that contextual factors and personal motivations also play significant roles. Moreover, Jushermi et al. (2024) reveal that while digital literacy significantly impacts acceptance, external factors such as socio-economic status and institutional support critically mediate this relationship, indicating that mere prior

experience may not suffice to predict technology adoption without addressing these broader contextual influences.

While many students in this study report positive attitudes towards using ChatGPT, concerns have also been raised regarding its limitations and challenges. In line with previous studies (Barrot, 2023b; Baek et al., 2024; Darwin et al., 2024; Kostka & Toncelli, 2023; Khurma et al., 2024; Yan, 2023), the findings indicate that a small number of students declared some concerns about using ChatGPT, such as the risk of inaccurate or biased information and diminishing critical thinking and collaborative learning opportunities by promoting passive consumption of information rather than active engagement (Gligorea et al., 2023; Holmes et al., 2021). Another significant concern is the risk of academic dishonesty, including plagiarism and overreliance on ChatGPT to generate content. These findings underscore the need for careful and critical integration of ChatGPT into language education. Agreeing with Yan (2023), Kostka & Toncelli (2023), and Baek et al. (2024), educators should provide guidance to students on how to use ChatGPT responsibly, thereby fostering their language skills rather than obtaining answers with ease. Also, the observation that technological complexity scored lowest in student attitudes towards ChatGPT suggests a dichotomy between effective usage and practical barriers students face with the tool's features or interface. This indicates a need for institutional support and instructional guidance to enhance users' experience. This aligns with Frank et al. (2004), who emphasize that guidance is necessary for overcoming the barriers that educators and students face, thereby enhancing the effectiveness and adoption of technological tools.

It is crucial to understand these findings in the light of Kuwait's sociocultural context, where significant digital transformation is underway as part of the Kuwait 2035 vision (Alhasan, 2024). This national strategy places a strong emphasis on integrating advanced technologies such as AI into education to foster innovation and digital literacy. Therefore, the overall positive attitudes towards using ChatGPT among students in this study reflect a growing receptivity to digital tools in the learning environment, likely influenced by ongoing efforts to modernize educational practices and infrastructure in Kuwait. Additionally, the lack of significant gender differences in attitudes towards ChatGPT further underscores the inclusive nature of Kuwait's digital transformation agenda, which aims to provide equal learning opportunities and bridge traditional divides. This finding suggests that initiatives to enhance digital skills and access are resonating across demographic groups, supporting the vision's goal of cultivating creative human capital and a highly skilled digital workforce. Moreover, the strong positive effect of prior experience with technology on students' attitudes and intention to use ChatGPT highlights the importance of sustained investment in digital literacy and exposure to emerging technologies. As Kuwait continues to invest in digital infrastructure and training, students with greater technological familiarity are better positioned to leverage AI tools like ChatGPT for academic growth.

In summary, these findings not only align with Kuwait's strategic objectives but also demonstrate the potential for AI-driven educational innovations to thrive in a context where digital transformation is a national priority. They reinforce the need for ongoing support, training, and equitable access to technology to ensure the benefits of digitalization are fully realized across the Kuwaiti society.

6. Conclusion

This study aimed to explore EFL students' perceptions of using ChatGPT adopting TAM. The results revealed that EFL students generally perceive ChatGPT positively, emphasizing its perceived usefulness and ease of use as key drivers of adoption. However, concerns about its potential negative impact on cognitive abilities and academic integrity emerged as notable barriers, despite overall acceptance. While gender did not significantly influence perceptions, students' prior experience with technology strongly correlated with their intention to use ChatGPT.

This study has several limitations. The study was conducted with a limited EFL students from the College of Basic Education. As a result, the findings may not be fully generalizable to all EFL students in different cultural, educational, and geographic contexts. The study relied on self-reported data, which are subject to social desirability bias and may not accurately reflect actual usage behaviours or long-term attitudes. While TAM provides a useful framework for understanding technology acceptance, it may not fully capture other relevant factors, such as motivation or language proficiency, that could also influence students' perceptions. This study also did not measure the long-term impact of ChatGPT use on students' cognitive abilities or academic performance, leaving open questions about sustained effects and potential unintended consequences. Additionally, most respondents were female, which may have influenced the observed gender differences in attitudes towards the use of ChatGPT. Future research should consider a more balanced gender representation to achieve a more comprehensive understanding of the role of gender in AI tool acceptance among EFL learners.

Despite these limitations, several implications can be drawn from the key findings of this study. Since prior experience with technology significantly influences acceptance of ChatGPT, designing training programs and support initiatives for less experienced users is strongly advised. These training initiatives could enhance user confidence, reduce technical barriers, and promote more equitable access to the benefits of ChatGPT. Additionally, since gender did not have a significant effect, training should focus on inclusive approaches that cater to the diverse needs of learners broadly, rather than on gender-specific strategies.

Future research should employ a longitudinal study design to track changes in students' perceptions, usage patterns, and academic outcomes over time. Also, there is a need to conduct cross-cultural studies and expand research to include students from different universities, cultural backgrounds, and proficiency levels, which would enhance the generalizability of the findings.

Declarations

Author Contributions. Maha Alghasab is the main author of this manuscript and produced all the materials written in this paper (conceptualization, methodology, data collection, analysis, writing-original draft, writing, reviewing, and editing).

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References

Abdaljaleel, M., Barakat, M., Alsanafi, M., Salim, N. A., Abazid, H., Malaeb, D., Mohammed, A. H., Hassan, B. A. R., Wayyes, A. M., Farhan, S. S., Khatib, S. E., Rahal, M., Sahban, A., Abdelaziz, D. H., Mansour, N. O., AlZayer, R., Khalil, R., Fekih-Romdhane, F., & Hallit, R., ... (2024). A multinational study on the factors influencing university students' attitudes and usage of ChatGPT. *Scientific Reports*, 14, Article 52549. <https://doi.org/10.1038/s41598-024-52549-8>

- Aksakalli, C., & Daşer, Z. (2025). Unlocking EFL learners' insights into ChatGPT use for L2 writing: The impacts of usage frequency and gender variations. *Current Psychology*, 44(9), 7957–7977. <https://doi.org/10.1007/s12144-025-07437-3>
- Alenezi, W. (2024). Potentiality and apprehensions of artificial intelligence in education: Perspectives of education staff. *International Journal of Education in Mathematics, Science and Technology*, 12(4), 942–956. <https://doi.org/10.46328/ijemst.4177>
- Alharathi, M. S. (2024). Beyond traditional language learning: EFL student views on ChatGPT in Saudi Arabia. *Arab World [Journal]*. <https://doi.org/10.31235/osf.io/7b34j>
- Alkandari, H. (2025). Students' learning in the time of artificial intelligence (AI): Students' perceptions of using AI tools to improve their language learning in Kuwait. *Educational Process International Journal*, 15(1), Article e2025154. <https://doi.org/10.22521/edupij.2025.15.154>
- Al-Khreshehm, M. (2024). The future of artificial intelligence in English language teaching: Pros and Cons of ChatGPT implementation through a systematic review. *Teaching. Research Quarterly*, 43, 54–80. <https://doi.org/10.32038/ltrq.2024.43.04>
- Allen, T. J., & Mizumoto, A. (2024). ChatGPT over my friends: Japanese EFL learners' preferences for editing and proofreading strategies. *RELIC Journal*. <https://doi.org/10.1177/00336882241262533>
- Almansour, N. (2024). Investigating factors influencing EFL learners' behavioural intentions to adopt ChatGPT for language learning. *Journal of Language Teaching and Research*, 15(6), 1910–1918. <https://doi.org/10.17507/jltr.1506.16>
- Alotaibi, H. M., Sonbul, S. S., & El-Dakhs, D. A. (2025). Factors Influencing the Acceptance and Use of ChatGPT among English as a Foreign Language Learners in Saudi Arabia. *Humanities and Social Sciences Communications*, 12(1), 628. <https://doi.org/10.1057/s41599-025-04945-2>
- Alsalem, M. S. (2024). EFL students' perception and attitude towards the use of ChatGPT to promote English speaking skills in the Saudi context. *Arab World English Journal*, 15(4), 73–84. <https://doi.org/10.24093/awej/vol15no4.5>
- Baek, C., Tate, T., & Warschauer, M. (2024). 'GhatGPT seems too good to be true': College students' use and perceptions of generative AI. *Computers and education. Artificial Intelligence*, 7. <https://doi.org/10.1016/j.caeai.2024.100294>
- Bao, Y., & Li, B. (2023). A preliminary study on graduate student instructors' exploration, perception, and use of ChatGPT. *International Journal of Computer-Assisted Language Learning and Teaching*, 13(1), 1–23. <https://doi.org/10.4018/IJCALLT.332873>
- Barrot, J. S. (2023a). Using automated written corrective feedback in the writing classrooms: Effects on L2 writing accuracy. *Computer Assisted Language Learning*, 36(4), 584–607. <https://doi.org/10.1080/09588221.2021.1936071>
- Barrot, J. S. (2023b). Using ChatGPT for Second Language Writing: Pitfalls and Potentials. *Assessing Writing*, 57. <https://doi.org/10.1016/j.asw.2023.100745>
- Baytak, A. (2023). The acceptance and diffusion of generative artificial intelligence in education: A literature review. *Current Perspectives in Educational Research*, 6(1), 7–18. <https://doi.org/10.46303/cuper.2023.2>
- Bodani, N., Lal, A., Maqsood, A., Altamash, S., Ahmed, N., & Heboyan, A. (2023). Knowledge, attitude, and practices of general population toward utilizing ChatGPT: A cross-sectional study. *Sage Open*, 13(4). <https://doi.org/10.1177/21582440231211079>

- Boudouaia, A., Mouas, S., & Kouider, B. (2024). A study on ChatGPT-4 as an innovative approach to enhancing English as a foreign language writing learning. *Journal of Educational Computing Research*, 62(6), 1289–1317. <https://doi.org/10.1177/07356331241247465>
- Creely, E. (2024). Exploring the role of generative AI in enhancing language learning: Opportunities and challenges. *International Journal of Changes in Education*, 1(3), 158–167. <https://doi.org/10.47852/bonviewIJCE42022495>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- Draxler, F., Buschek, D., Tavast, M., Hämäläinen, P., Schmidt, A., Kulshrestha, J., & Welsch, R. (2023). *Gender, age, and technology education influence the adoption and appropriation of LLMs*. arXiv preprint arXiv:2310.06556. <https://doi.org/10.48550/arXiv.2310.06556>
- Ekundayo, T., Khanm, Z., & Chaudhry, S. A. (2024). GhatGPT's Integration in GCC Higher Education: A Bibliometric Analysis of Trends. *Education and Information Technologies*, 29(1), 1–22. <https://doi.org/10.22521/edupij.2024.133.4>
- Elshaer, I. A., Hasanein, A. M., & Sobaih, A. E. E. (2024). The moderating effects of gender and study discipline in the relationship between university students' acceptance and use of ChatGPT. *European Journal of Investigation in Health, Psychology and Education*, 14(7), 1981–1995. <https://doi.org/10.3390/ejihpe14070132>
- Faisal, E. (2024). Unlock the potential for Saudi Arabian higher education: A systematic review of the benefits of ChatGPT. *Frontiers in Education*, 9. <https://doi.org/10.3389/feduc.2024.1325601>
- Frank, K. A., Zhao, Y., & Borman, K. M. (2004). Social capital and the diffusion of innovations within organizations: The case of computer technology in schools. *Sociology of Education*, 77(2), 148–171. <https://doi.org/10.1177/003804070407700203>
- Gligorea, I., Cioca, M., Oancea, R., Gorski, A.-T., Gorski, H., & Tudorache, P. (2023). Adaptive learning using artificial intelligence in e-learning: A literature review. *Education Sciences*, 13(12), 1216. <https://doi.org/10.3390/educsci13121216>
- Godwin-Jones, R. (2022). Partnering with AI: Intelligent writing assistance and instructed language learning. *Language Learning and Technology*, 26(2), 5–24. <http://doi.org/10125/73474>
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572–2593. <https://doi.org/10.1111/bjet.12864>
- Grassini, S., Aasen, M. L., & Møgelvang, A. (2024). Understanding university students' acceptance of ChatGPT: Insights from the UTAUT2 model. *Applied Artificial Intelligence*, 38(1), Article 2371168. <https://doi.org/10.1080/08839514.2024.2371168>
- Holmes, W., Porayska-Pomsta, K., Holstein, K., Sutherland, E., Baker, T., Shum, S. B., Santos, O. C., Rodrigo, M. T., Cukurova, M., Bittencourt, I. I., & Koedinger, K. R. (2022). Ethics of AI in education: Towards a community-wide framework. *International Journal of Artificial Intelligence in Education*, 32(3), 504–526. <https://doi.org/10.1007/s40593-021-00239-1>
- Horn, K. (2024). ChatGPT in English language learning: Exploring Perceptions and Promoting autonomy in a University EFL context. *The Electronic Journal for English as a Second Language TESL-EJ*, 28(1). <https://doi.org/10.55593/ej.28109a8>

- Hu, W.-C., & Škultéty, R. (2024). Unlocking the learning potential: ChatGPT as a virtual platform for cross-interaction in English language learning. *Eng. Proc.*, 74, 59. <https://doi.org/engproc2024074059>
- Huang, F., Teo, T., & Scherer, R. (2022). Investigating the antecedents of university students' perceived ease of using the Internet for learning. *Interactive Learning Environments*, 30(6), 1060–1076. <https://doi.org/10.1080/10494820.2019.1710540>
- Huang, H.-M., & Liaw, S.-S. (2018). An analysis of learners' intentions toward virtual reality learning based on constructivist and technology acceptance approaches. *The International Review of Research in Open and Distributed Learning*, 19(1). <https://doi.org/10.19173/irrodl.v19i1.2503>
- Huang, W., Hew, K. F., & Fryer, L. K. (2022). Chatbots for language learning -are they really useful? A Systematic Review of Chatbot-Supported Language Learning. *Journal of Computer Assisted Learning*, 38(1), 237–257. <https://doi.org/10.1111/jcal.12610>
- Hwang, M., Lee, E., & Lee, H.-K. (2025). Exploring EFL learners' acceptance of ChatGPT: Application of the extended technology acceptance model. *English Teaching*, 80(1), 45–69. <https://doi.org/10.15858/engtea.80.1.202503.45>
- Islahi, F., & Nasrin, N. (2019). Exploring teacher attitude towards information technology with a gender perspective. *Contemporary Educational Technology*, 10(1), 37–54. <https://doi.org/10.30935/cet.512527>
- Jorge-Vázquez, J., Náñez Alonso, S. L., Fierro Saltos, W. R., & Pacheco Mendoza, S. (2021). Assessment of digital competencies of university faculty and their conditioning factors: Case study in a technological adoption context. *Education Sciences*, 11(10), 637. <https://doi.org/10.3390/educsci11100637>
- Jushermi, J., Turnip, Y. D., & Musfar, T. F. (2024). Acceptance model for utilizing the e-marketplace Tokopedia with the Technology Acceptance Model among Pekanbaru city communities. *West Science Business and Management*, 2(1), 107–121. <https://doi.org/10.58812/wsbm.v2i01.562>
- Kemp, A., Palmer, E., & Strelan, P. (2019). A taxonomy of factors affecting attitudes towards educational technologies for use with technology acceptance models. *British Journal of Educational Technology*, 50(5), 2394–2413. <https://doi.org/10.1111/bjet.12833>
- Khanchel, H. (2023). Factors affecting social network use by students in Tunisia. *Human Systems Management*, 42(2), 131–148. <https://doi.org/10.3233/HSM-220017>
- Kim, S.-W. (2023). Change in attitude toward artificial intelligence through experiential learning in artificial intelligence education. *International Journal on Advanced Science, Engineering and Information Technology*, 13(5), 1953–1959. <https://doi.org/10.18517/ijaseit.13.5.19039>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal*, 54(2), 537–550. <https://doi.org/10.1177/00336882231162868>
- Kostka, I., & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *Teaching English as a Second or Foreign Language—TESL-EJ*, 27(3). <https://doi.org/10.55593/ej.27107int>
- Kotsis, K. T. (2024). Artificial Intelligence creates plagiarism or academic research? *European Journal of Arts, Humanities and Social Sciences*, 1(6), 169–179. [https://doi.org/10.59324/ejahss.2024.1\(6\).18](https://doi.org/10.59324/ejahss.2024.1(6).18)

- Li, B., Lowell, V., Wang, C., & Li, X. (2024a). A systematic review of the first year of publications on ChatGPT and language education: Examining research on ChatGPT's use in language learning and teaching. *Computers and education: Artificial Intelligence*.7 article:100266 <https://doi.org/10.1016/j.caeai.2024.100266>
- Liu, G., & Ma, C. (2024). Measuring EFL learners' use of ChatGPT in informal digital learning of English based on the technology acceptance model. *Innovation in Language Learning and Teaching*, 18(2), 125–138. <https://doi.org/10.1080/17501229.2023.2240316>
- Lo, C. K., Yu, P. L. H., Xu, S., Ng, D. T. K., & Jong, M. S. (2024). Exploring the application of ChatGPT in ESL/EFL education and related research issues: A systematic review of empirical studies. *Smart Learning Environments*, 11(1). <https://doi.org/10.1186/s40561-024-00342-5>
- Ma, M. (2025). Exploring the acceptance of generative artificial intelligence for language learning among EFL postgraduate students: An extended tam approach. *International Journal of Applied Linguistics*, 35(1), 91–108. <https://doi.org/10.1111/ijal.12603>
- Panagiotarou, A., Stamatiou, Y. C., Pierrakeas, C., & Kameas, A. (2020). Gamification acceptance for learners with different e-skills. *International Journal of Learning, Teaching and Educational Research*, 19(2), 263–278. <https://doi.org/10.26803/ijlter.19.2.16>
- Polakova, P., & Ivenz, P. (2024). The impact of ChatGPT feedback on the development of EFL students' writing skills. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2410101>
- Romero-Rodríguez, J.-M., Ramírez-Montoya, M.-S., Buenestado-Fernández, M., & Lara-Lara, F. (2023). Use of ChatGPT at university as a tool for complex thinking: Students' perceived usefulness. *Journal of New Approaches in Educational Research*, 12(2), 323–339. <https://doi.org/10.7821/naer.2023.7.1458>
- Sallam, M., Elsayed, W., Al-Shorbagy, M., Barakat, M., El Khatib, S., Ghach, W., Alwan, N., Hallit, S., & Malaeb, D. (2024). ChatGPT usage and attitudes are driven by perceptions of usefulness, ease of use, risks, and psycho-social impact: A study among university students in the UAE. *Frontiers in Education*, 9, Article 1414758. <https://doi.org/10.3389/feduc.2024.1414758>
- Sindermann, C., Yang, H., Elhai, J. D., Yang, S., Quan, L., Li, M., & Montag, C. (2022). Acceptance and fear of artificial intelligence: Associations with personality in a German and a Chinese sample. *Discover Psychology*, 2(1). <https://doi.org/10.1007/s44202-022-00020-y>
- Slamet, J. (2024). Potential of ChatGPT as a digital language learning assistant: EFL teachers' and students' perceptions. *Discover Artificial Intelligence*, 4(1), 46. <https://doi.org/10.1007/s44163-024-00143-2>
- Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: Assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, 14, Article 1260843. <https://doi.org/10.3389/fpsyg.2023.1260843>
- Su, Y., Lin, Y., & Lai, C. (2023). Collaborating with ChatGPT in argumentative writing classrooms. *Assessing Writing*, 57, <https://doi.org/10.1016/j.asw.2023.100752>
- Teng, M. F. (2024). 'ChatGPT is the companion, not enemies': EFL learners' perceptions and experiences in using ChatGPT for feedback in writing. *Computers and Education*, 7, Article 100270. <https://doi.org/10.1016/j.caeai.2024.100270>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>

- Vo, T. K. A., & Nguyen, H. (2024). Generative artificial intelligence and ChatGPT in language learning: EFL students' perceptions of technology acceptance. *Journal of University Teaching and Learning Practice*, 21(6). <https://doi.org/10.53761/fr1rkj58>
- Warschauer, M., & Xu, Y. (2024). Generative AI for language learning: Entering a new era. *Language Learning and Technology*, 28(2), 1–4. <https://hdl.handle.net/10125/73569>
- Weidener, L., & Fischer, M. (2023). Teaching AI ethics in medical education: A scoping review of current literature and practices. *Perspectives on Medical Education*, 12(1), 399–410. <https://doi.org/10.5334/pme.954>
- Marzuki, , Widiati, U., Rusdin, D., Darwin, , & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.223646>
- Xiao, Y., & Zhi, Y. (2023). An exploratory study of EFL learners' use of ChatGPT for language learning tasks: Experience and perceptions. *Languages*, 8(3), 212. <https://doi.org/10.3390/languages8030212>
- Xiong, H. (2024). Research on confusing responses based on ChatGPT. *Applied and Computational Engineering*, 57(1), 90–97. <https://doi.org/10.54254/2755-2721/57/20241315>
- Yan, D. (2023). Impact of ChatGPT on learners in a L2 writing practicum: An exploratory investigation. *Education and Information Technologies*, 28(11), 13943–13967. <https://doi.org/10.1007/s10639-023-11742-4>
- Yilmaz, H., Maxutov, S., Baitekov, A., & Balta, N. (2023). Student attitudes towards ChatGPT: A technology acceptance model survey. *International Educational Review*, 1(1), 57–83. <https://doi.org/10.58693/ier.114>
- Yildiz, C. (2024). ChatGPT integration in EFL education: A path to improved speaking self-efficacy. *Novitas-ROYAL (research on Youth and language)*, 18(2), 167–182.
- Zhang, B., Zhu, Y., Deng, J., Zheng, W., Liu, Y., Wang, C., & Zeng, R. (2023). 'I am here to assist your tourism': Predicting continuance intention to use AI-based chatbots for tourism. Does gender really matter? *International Journal of Human-Computer Interaction*, 39(9), 1887–1903. <https://doi.org/10.1080/10447318.2022.2124345>
- Zhu, M., & Wang, C. (2025). A systematic review of artificial intelligence in language education: Current status and future implications. *Language Learning and Technology*, 29(1), 1–29. <https://hdl.handle.net/10125/73606>
- Zhou, Y., Wu, X., & Qu, K. (2024). The role of ChatGPT in English language learning: A hedonic motivation perspective on student adoption in Chinese universities. *Language Teaching Research Quarterly*, 43, 132–154. <https://doi.org/10.32038/ltrq.2024.43.08>

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Appendix

Appendix A. The Questionnaire

Q1. What is your nationality?

Q2. What is your gender?

Q3. What is your current level of education?

Q4. How old are you?

Q5. How often do you use ChatGPT?

Q6. Do you have prior experience using technology to learn English?

Please indicate your level of agreement with the following statements using the Likert scale:

Table A1.

Perceived Ease of Use
Q1. I find ChatGPT very convenient to use.
Q2. I find it easy to understand the content provided by ChatGPT.
Q3. I think it's easy to learn how to use ChatGPT.
Q4. It is easy for me to become skillful at using ChatGPT.
Perceived Usefulness
Q5. It is easy for me to remember how to use ChatGPT.
Q6. I believe that ChatGPT can help me improve the quality of my EFL learning.
Q7. I find ChatGPT useful in my extracurricular EFL studies.
Q8. I think ChatGPT can provide me with more EFL learning opportunities.
Q9. I think ChatGPT can help me improve my EFL learning abilities
Q10. ChatGPT can create an effective learning environment for EFL learning
Attitude
Q11. ChatGPT is a very attractive learning tool
Q12. Learning English with ChatGPT is very interesting.

Q13. I enjoy learning English with ChatGPT.

Q14. Using ChatGPT for learning English is a good idea.

Q15. I believe in the potential of ChatGPT for learning English.

Behavioral/Continuance Intention

Q16. I am willing to spend time and effort to learn how to use ChatGPT better.

Q17. I expect to use ChatGPT frequently in the future for English learning purposes.

Q18. I will continue to learn and use ChatGPT to facilitate my language learning in the future.

Q19. It is likely that I will continue using ChatGPT in my language learning in the future

Q20. I will make every effort to use ChatGPT for English learning.

Actual Use

Q21. I use ChatGPT to increase my interest and motivation in learning English.

Q22. I use ChatGPT to improve my English skills.

Q23. I use ChatGPT to efficiently gather and integrate English learning information.

Q24. I use ChatGPT to help me better understand the English language and culture.

Q25. I use ChatGPT to enhance my performance in English language learning.

Perceived Enjoyment

Q26. Using ChatGPT makes English learning more interesting.

Q27. Using ChatGPT to learn English is pleasant.

Q28. I find using ChatGPT for English learning to be enjoyable.

Facilitating Conditions

Q29. When I encounter difficulties in using ChatGPT to learn English, guidance is available to me in selecting a website to use.

Q30. When I encounter difficulties in using ChatGPT to learn English, specialized instruction is available to me.

Q31. When I encounter difficulties in using ChatGPT to learn English, a specific person is available to provide assistance

Q32. When I encounter difficulties in using ChatGPT to learn English, I know where to seek assistance

Q33. When I encounter difficulties in using ChatGPT to learn English, I am given timely assistance.

Q34. I have the necessary resources to use ChatGPT.

Q35. I possess the essential skills to use ChatGPT.

Q36. Given the resources, opportunities and knowledge, it is easy for me to use ChatGPT to learn English

Technological Complexity

Q37. Learning English with ChatGPT is so complicated that it is difficult to understand what is going on

Q38. It takes too long to learn how to use ChatGPT to learn English such that it is not worth the effort.

Q39. Learning English with ChatGPT is a complex activity.

Q40. I have trouble learning how to use ChatGPT to learn English.

The questionnaire can be found at this link:

https://forms.office.com/Pages/ResponsePage.aspx?id=-uG9rizUPU2PEloPROgDiQgBF9pYUdVFmJu_KPA7r_pURDQyRVBOU0k4TFpEOEVGSktPSIRXNDRJTC4u

Appendix B Interview Guiding Questions

1. How well do you know ChatGPT, and have you used it for learning languages?
2. What impressions do you have about language learning with ChatGPT?
3. What are the principal advantages of learning languages with ChatGPT?
4. Could you discuss any specific example where ChatGPT was beneficial in your language learning process?
5. In your experience, does ChatGPT have any shortcomings in providing precise or useful information?
6. Do you experience any confusion or frustration with responses from ChatGPT?
7. How does ChatGPT compare to conventional language teaching approaches?

Appendix C: Descriptive Statistical Analysis

Table 1. Perceived Ease of Use

	Perceived ease of use	F	%	F	%	F	%	F	%	F	%	Mean	Std. Deviation	Items sorted by means
a1	I find ChatGPT very convenient to use.	3	2.8	3	2.8	29	27.1	48	44.9	24	22.4	3.81	0.913	3
a2	I find it easy to understand the content provided by ChatGPT.	1	0.9	4	3.7	28	26.2	45	42.1	29	27.1	3.91	0.875	2
a3	I think it's easy to learn how to use ChatGPT.	1	0.9	2	1.9	13	12.1	55	51.4	36	33.6	4.15	0.775	1
a4	It is easy for me to become skillful at using ChatGPT.	2	1.9	8	7.5	28	26.2	40	37.4	29	27.1	3.80	0.985	4

Table 2. Perceived Usefulness

		Strongly disagree		Disagree		Neutral		Agree		Strongly agree				
	Perceived usefulness	F	%	F	%	F	%	F	%	F	%	Mean	Std. Deviation	Items sorted by means
b1	It is easy for me to remember how to use ChatGPT.	1	0.9	3	2.8	13	12.1	55	51.4	35	32.7	4.12	0.798	1
b2	I believe that ChatGPT can help me improve the quality of my EFL learning.	3	2.8	11	10.3	38	35.5	32	29.9	23	21.5	3.57	1.029	4

b3	I find ChatGPT useful in my extracurricular EFL studies.	1	0.9	9	8.4	40	37.4	40	37.4	17	15.9	3.59	0.890	3
b4	I think ChatGPT can provide me with more EFL learning opportunities	1	0.9	6	5.6	38	35.5	42	39.3	20	18.7	3.69	0.873	2
b5	I think ChatGPT can help me improve my EFL learning abilities	3	2.8	12	11.2	31	29.0	43	40.2	18	16.8	3.57	0.992	5
b6	ChatGPT can create an effective learning environment for EFL learning.	2	1.9	11	10.3	39	36.4	39	36.4	16	15.0	3.52	0.935	6

Table 3. Attitudes

		Strongly disagree		Disagree		Neutral		Agree		Strongly agree				
Attitudes		F	%	F	%	F	%	F	%	F	%	Mean	Std. Deviation	Items sorted by means
c1	ChatGPT is a very attractive learning tool	4	3.7	11	10.3	28	26.2	40	37.4	24	22.4	3.64	1.057	3
c2	Learning English with ChatGPT is very interesting.	3	2.8	7	6.5	33	30.8	41	38.3	23	21.5	3.69	0.975	1
c3	I enjoy learning English with ChatGPT.	2	1.9	20	18.7	33	30.8	28	26.2	24	22.4	3.49	1.093	5
c4	Using ChatGPT for learning English is a good idea.	5	4.7	9	8.4	30	28.0	37	34.6	26	24.3	3.65	1.082	2

c5	I believe in the potential of ChatGPT for learning English.	5	4.7	9	8.4	37	34.6	32	29.9	24	22.4	3.57	1.074	4
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Table 4. Behavioral/Continuance Intention

Behavioral/Continuance Intention		Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Std. Deviation	Items sorted by means
		F	%	F	%	F	%	F	%	F	%			
d1	I am willing to spend time and effort to learn how to use ChatGPT better.	5	4.7	22	20.6	33	30.8	35	32.7	12	11.2	3.25	1.056	4
d2	I expect to use ChatGPT frequently in the future for English learning purposes.	2	1.9	12	11.2	34	31.8	36	33.6	23	21.5	3.62	1.006	1
d3	I will continue to learn and use ChatGPT to facilitate my language learning in the future.	5	4.7	13	12.1	28	26.2	42	39.3	19	17.8	3.53	1.067	3
d4	I will likely continue using ChatGPT in my language learning in the future	3	2.8	15	14.0	25	23.4	44	41.1	20	18.7	3.59	1.037	2
d5	I will make every effort to use ChatGPT for English learning.	4	3.7	21	19.6	42	39.3	25	23.4	15	14.0	3.24	1.045	5

Table 5. Actual Use

		Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Std. Deviation	Items sorted by means
Actual use		F	%	F	%	F	%	F	%	F	%			
e1	I use ChatGPT to increase my interest and motivation in learning English.	4	3.7	20	18.7	34	31.8	38	35.5	11	10.3	3.30	1.011	5
e2	I use ChatGPT to improve my English skills.	3	2.8	15	14.0	29	27.1	42	39.3	18	16.8	3.53	1.022	3
e3	I use ChatGPT to efficiently gather and integrate English learning information.	2	1.9	8	7.5	35	32.7	41	38.3	21	19.6	3.66	0.941	1
e4	I use ChatGPT to help me better understand the English language and culture	8	7.5	15	14.0	28	26.2	35	32.7	21	19.6	3.43	1.175	4
e5	I use ChatGPT to enhance my performance in English language learning.	2	1.9	14	13.1	34	31.8	36	33.6	21	19.6	3.56	1.011	2

Table 6. Perceived Enjoyment

		Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Std. Deviation	Items sorted by means
Perceived enjoyment		F	%	F	%	F	%	F	%	F	%			
f1	Using ChatGPT makes English learning more interesting.	4	3.7	11	10.3	36	33.6	37	34.6	19	17.8	3.52	1.022	3
f2	Using ChatGPT to learn English is pleasant.	1	0.9	12	11.2	35	32.7	43	40.2	16	15.0	3.57	0.912	2
f3	I find using ChatGPT for English learning to be enjoyable.	2	1.9	13	12.1	32	29.9	39	36.4	21	19.6	3.60	0.999	1

Table 7. Facilitating Conditions

		Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Std. Deviation	Items sorted by means
Facilitating conditions		F	%	F	%	F	%	F	%	F	%			
g1	When I encounter difficulties in using ChatGPT to learn English, guidance is available to me in selecting a website to use.	3	2.8	16	15.0	47	43.9	33	30.8	8	7.5	3.25	0.902	5
g2	When I encounter difficulties in using ChatGPT to learn English, specialized instruction is available to me.	4	3.7	17	15.9	52	48.6	28	26.2	6	5.6	3.14	0.884	6

g3	When I encounter difficulties in using ChatGPT to learn English, a specific person is available to provide assistance	7	6.5	26	24.3	37	34.6	27	25.2	10	9.3	3.07	1.066	8
g4	When I encounter difficulties in using ChatGPT to learn English, I know where to seek assistance	2	1.9	16	15.0	40	37.4	37	34.6	12	11.2	3.38	0.938	4
g5	When I encounter difficulties in using ChatGPT to learn English, I am given timely assistance.	6	5.6	17	15.9	51	47.7	26	24.3	7	6.5	3.10	0.941	7
g6	I have the necessary resources to use ChatGPT.	2	1.9	10	9.3	32	29.9	45	42.1	18	16.8	3.63	0.937	2
g7	I possess the essential skills to use ChatGPT.	3	2.8	10	9.3	39	36.4	38	35.5	17	15.9	3.52	0.965	3
g8	Given the resources, opportunities and knowledge, it is easy for me to use ChatGPT to learn English	2	1.9	9	8.4	34	31.8	40	37.4	22	20.6	3.66	0.961	1

Table 8. Technological Complexity

		Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Std. Deviation	Items sorted by means
Technological complexity		F	%	F	%	F	%	F	%	F	%			
h1	Learning English with ChatGPT is so complicated that it is difficult to understand what is going on	27	25.2	29	27.1	26	24.3	19	17.8	6	5.6	2.51	1.208	2

h2	It takes too long to learn how to use ChatGPT to learn English such that it is not worth the effort.	28	26.2	32	29.9	23	21.5	17	15.9	7	6.5	2.47	1.223	3
h3	Learning English with ChatGPT is a complex activity.	26	24.3	25	23.4	28	26.2	22	20.6	6	5.6	2.60	1.220	1
h4	I have trouble learning how to use ChatGPT to learn English.	32	29.9	27	25.2	25	23.4	18	16.8	5	4.7	2.41	1.213	4