

***Navigating AI-Mediated English Learning: Algerian EFL Students' Perceptions and Experiences with ChatGPT***Haddaoui Soumia .Mohamed Lamine Debaghine Setif 2 University (Algeria)\*,  
[s.hadaoui@univ-setif2.dz](mailto:s.hadaoui@univ-setif2.dz)<https://orcid.org/0000-0003-0569-1122>**Abstract:**

This study explores the integration of ChatGPT, an AI-powered conversational agent, in English as a Foreign Language (EFL) learning among Algerian university students. Adopting a mixed-methods approach, the study collected quantitative data from a survey of ninety five (95) Master One students at the department of English Setif 2 University, and qualitative data through focus group discussions with twelve (12) participants. The findings indicate that ChatGPT is frequently used for grammar correction, writing practice, and vocabulary enhancement, with users reporting moderate to high perceived improvements, particularly in writing fluency and grammatical accuracy. However, the tool was found to be less effective in supporting speaking and reading development. While learners expressed enthusiasm for ChatGPT's immediacy and accessibility, concerns emerged regarding overreliance on AI-generated feedback and the tool's limited cultural relevance. Thematic analysis revealed additional insights into learner autonomy, engagement, and the indispensable role of teacher feedback. Grounded in Constructivist and Sociocultural Theory, the study concludes that ChatGPT may serve as a valuable supplement to EFL instruction, provided it is integrated thoughtfully within a balanced, context-sensitive pedagogical framework. The findings may have implications for language teaching practices, curriculum design, and future AI development in culturally diverse educational settings.

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## INTRODUCTION

In recent years, artificial intelligence (AI) technologies have transformed language education by offering personalized feedback, simulating authentic communication, and fostering learner autonomy. Among these tools, ChatGPT—a conversational agent developed by OpenAI—has gained considerable attention for its potential to support language acquisition in informal and formal contexts. In English as a Foreign Language (EFL) settings, where learners often face constraints such as limited access to native speakers, overcrowded classrooms, and inadequate resources, AI-driven applications may offer meaningful, scalable solutions (Coghlan & Brydon-Miller, 2014).

However, the advent of Large Language Models (LLMs) in 2023 has catalyzed a paradigm shift from computer-assisted tools to AI-mediated co-creativity. Recent scholarship suggests that these generative systems do not merely supplement instruction but fundamentally reconfigure the authorial process in second language acquisition (Su & Yang, 2023); (Moorhouse, Yeo, & Wong, 2024).

Despite the global momentum in adopting AI-enhanced educational tools, empirical research on their implementation in under-resourced or technologically evolving contexts remains limited. In Algeria, where digital infrastructure and pedagogical integration of AI are still developing, the extent to which learners engage with ChatGPT, and how they perceive its educational value, remains underexplored. This study responds to this research gap by examining Algerian EFL learners' perceptions and practices related to ChatGPT use.

Given the exploratory nature of this investigation, the study does not assess direct gains in language proficiency but instead focuses on self-reported experiences. Specifically, it aims to examine the contexts in which learners use ChatGPT, the perceived affordances and limitations of the tool, and the underlying motivations influencing their engagement. The study is guided by three primary objectives:

1. To explore how Algerian EFL learners perceive and evaluate ChatGPT as a tool for language learning.
2. To examine the contexts and frequency of ChatGPT use among learners.
3. To identify the motivational and contextual factors shaping learners' engagement with the tool.

By situating these objectives within established theoretical frameworks- Constructivism and Sociocultural Theory- this study offers a nuanced understanding of AI integration in EFL education, particularly within the Algerian context. The findings aim to contribute to the growing body of literature on AI-mediated language learning and provide insights for educators, policymakers, and developers seeking to implement such technologies in diverse educational environments.

## 1. ARTIFICIAL INTELLIGENCE IN LANGUAGE LEARNING

Artificial Intelligence (AI) has emerged as a transformative force in education, offering adaptive learning pathways, real-time feedback, and data-driven insights that inform both instructional design and learner development (Zhai & Ma, 2022). In the field of language education, AI-driven tools provide a range of affordances, including customized instructional content, automated error detection, and instant corrective feedback tailored to individual learner profiles. These technologies have been shown to foster learner autonomy, enhance communicative competence, and support collaborative learning environments (Coghlan & Brydon-Miller, 2014)

Technological advancements in natural language processing (NLP) and machine learning have enabled AI systems to simulate human-like interactions with increasing accuracy. Conversational agents, intelligent tutoring systems, and automated writing evaluators are now capable of diagnosing linguistic errors, tracking learner progress over time, and adjusting instructional strategies accordingly (Alhawiti, 2014); (Zhai & Ma, 2022). These innovations address long-standing challenges in EFL contexts, particularly those characterized by large class sizes, limited instructional time, and a scarcity of proficient interlocutors.

Furthermore, the global integration of AI into curricula reflects a growing recognition of its pedagogical value, especially in English as a Foreign Language (EFL) setting where access to high-quality, interactive, and scalable instruction remains a pressing concern (Coghlan & Brydon-Miller, 2014). The application of AI in EFL education has extended far beyond traditional computer-assisted language learning (CALL), encompassing tools that simulate dialogue, deliver real-time pronunciation analysis, and scaffold learners' written and oral output. In this context, AI technologies are not merely supplementary; they are increasingly positioned as core components of modern language instruction.

## 1.1. Overview of AI Tools Used in EFL

Among the most widely adopted AI-powered tools in EFL classrooms is the automated writing evaluation (AWE) system, which utilizes NLP algorithms to identify grammatical, lexical, and stylistic issues in learner compositions (Coghlan & Brydon-Miller, 2014). These systems not only provide individualized feedback but also alleviate the corrective workload of instructors by facilitating more efficient revision processes.

Intelligent tutoring systems (ITS), another key category of AI applications, are designed to deliver structured lessons and adaptive assessments based on learners' evolving performance metrics. By dynamically adjusting content difficulty and instructional pacing, ITS platforms ensure that learners receive timely, targeted support. This level of personalization has been shown to enhance learner engagement and accelerate language development.

Conversational agents and chatbots represent a particularly promising innovation in EFL instruction. These tools enable learners to engage in simulated dialogues, ask questions, and receive corrective input in real time (Alhawiti, 2014). In settings where access to native speakers or trained educators is limited, such tools can create opportunities for authentic communicative practice (Brown, 2020). Additionally, speech recognition technologies provide phonetic feedback through visual cues-such as pitch contour graphs-supporting learners in refining their pronunciation and intonation (Coghlan & Brydon-Miller, 2014).

## 1.2. Benefits and Limitations

A key advantage of AI in EFL instruction is its ability to deliver personalized learning experiences. Through continuous data analysis, AI systems can identify individual strengths and weaknesses, adjusting content and pacing to support each learner's trajectory (Zhai & Ma, 2022). This individualization enhances motivation and learning efficiency by aligning tasks with learners' actual needs and competencies (Alhawiti, 2014). Moreover, AI applications can be accessed flexibly outside the classroom, allowing learners to engage in on-demand practice, which is particularly valuable in under-resourced or rural areas

Nonetheless, several limitations must be acknowledged. First, there is the risk of overreliance on automated feedback, which may lead to superficial engagement with language input and reduce opportunities for deeper metacognitive processing (Coghlan & Brydon-Miller, 2014). Second, cultural

and contextual mismatches can occur when AI systems are trained on corpora that do not reflect local linguistic or cultural norms (Zhai & Ma, 2022). This may result in learner confusion or disengagement, particularly when examples and scenarios are not relevant to the learner's sociocultural environment.

Beyond sociolinguistic misalignment, contemporary research in 2024 emphasizes the necessity of Critical AI Literacy. (Ng, Leung, Chu, & Qiao, 2023) argue that without 'evaluative judgement' which is the ability to critically interrogate algorithmic outputs for hallucinations and bias, learners remain vulnerable to the reification of native-speakerism and the erosion of autonomous voice in academic prose.

Technical limitations are also significant. Stable internet access, sufficient hardware capacity, and a minimum level of digital literacy are prerequisites for effective AI tool use-requirements that may not be met in all educational contexts, including some regions in Algeria (Hamadi, 2025). Educators and policymakers have also raised pedagogical and ethical concerns, including issues related to data privacy, the transparency of algorithmic decision-making, and the authenticity of AI-generated feedback (Alhawiti, 2014).

In summary, AI-driven tools offer valuable opportunities to personalize and extend EFL instruction, yet their adoption must be critically evaluated in light of local infrastructure, pedagogical goals, and ethical considerations. With careful integration into instructional design-supported by teacher training and culturally responsive content-AI technologies can contribute significantly to more inclusive, engaging, and effective language education (Zhai & Ma, 2022).

## 2. EMERGENCE OF CHATGPT AS A LEARNING TOOL

Among the most recent and influential AI applications in language education is ChatGPT, developed by OpenAI. Based on the Generative Pre-trained Transformer (GPT) architecture, ChatGPT employs deep neural networks to produce contextually coherent, human-like responses to user inputs (Brown, 2020); (OpenAI, 2024, 2024). Its advanced natural language processing (NLP) capabilities enable it to maintain extended conversational threads, adapt to varying linguistic registers, and provide near-instantaneous feedback on syntax, vocabulary, and pragmatics. These features position ChatGPT as a virtual language partner, offering EFL learners opportunities for autonomous practice and interactive engagement outside traditional classroom environments (Alhawiti, 2014).

## 2.1. Theoretical Framework

The integration of ChatGPT into English as a Foreign Language (EFL) pedagogy can be interpreted through two complementary theoretical lenses: Constructivism and Sociocultural Theory. Constructivism, grounded in the work of Piaget (1970), posits that knowledge is actively constructed by learners through meaningful engagement and reflection. In constructivist learning environments, students interact with authentic tasks, collaborate with peers, and apply critical thinking to internalize new knowledge (Steffe & Gale, 2012). This learner-centered paradigm encourages autonomy, exploration, and problem-solving-principles that align closely with the functionalities of ChatGPT. By interacting with the tool, learners can simulate real-world scenarios, pose spontaneous questions, and receive timely, tailored feedback, thereby constructing linguistic competence through experiential engagement (Hiver, Al-Hoorie, & Mercer, 2021).

Sociocultural Theory, derived from Vygotsky's (1978) foundational insights, emphasizes the social nature of learning and the central role of mediation in cognitive development. Learning, according to this perspective, occurs within the Zone of Proximal Development (ZPD); the space between what learners can do independently and what they can achieve with guidance. Tools such as ChatGPT may serve as forms of mediated assistance or distributed cognition, providing support that approximates the role of a more capable peer or instructor (Lantolf & Thorne, 2009). By scaffolding learners through progressively complex interactions, ChatGPT can support linguistic growth in ways aligned with sociocultural principles (Swain & Deters, 2007).

For instance, when students engage with ChatGPT in tasks such as composing an argumentative essay or simulating a service inquiry, they are exposed to context-relevant language and receive corrective input that reflects their evolving needs. These interactions not only reinforce language form and function but also promote dialogic engagement, an essential component of sociocultural learning environments (Vygotskij & Cole, 1981); (Brown, 2020). While the system lacks human emotion and intentionality, it nonetheless creates a space for negotiation of meaning, prompting learners to revise, clarify, and extend their utterances (Alhawiti, 2014).

Taken together, Constructivism and Sociocultural Theory provide a robust framework for conceptualizing ChatGPT as both a cognitive and social learning tool. When integrated thoughtfully, the system can support learner autonomy, scaffold language development, and offer interactive opportunities that align

with contemporary theories of second language acquisition (Hiver, Al-Hoorie, & Mercer, 2021).

## 2.2. Functionality and Features of ChatGPT

ChatGPT is underpinned by the GPT architecture, a family of large language models trained on vast datasets to learn complex linguistic patterns (Brown, 2020). Unlike earlier rule-based systems, ChatGPT uses deep learning to generate syntactically and semantically appropriate responses across a broad range of topics. Its design supports both written and spoken interactions, making it versatile for practicing various language modalities (Alhawiti, 2014).

One of ChatGPT's core strengths is its ability to maintain contextual continuity, enabling learners to engage in extended conversations that simulate real-world discourse. It can also provide granular feedback on grammar, vocabulary usage, and sentence construction, although this feedback may vary in depth and accuracy. Importantly, the tool is accessible through multiple digital platforms, including mobile devices and web interfaces, thus promoting flexible, location-independent learning. However, ChatGPT may occasionally produce inaccurate, vague, or culturally irrelevant responses, particularly when dealing with ambiguous prompts or region-specific topics (Brown, 2020). Additionally, the model lacks affective sensitivity and cannot replace the nuanced interaction, empathy, or pedagogical insight provided by trained instructors (Zhai & Ma, 2022). Despite these drawbacks, its utility as a supplementary tool in EFL contexts- especially for autonomous practice and form-focused instruction- is considerable.

## 2.3. Related Research Studies

Although ChatGPT's educational applications are relatively recent, emerging research has begun to explore its efficacy in supporting second language acquisition. Pilot studies indicate that learners who use ChatGPT for conversational and writing practice report improved fluency, increased motivation, and greater confidence in language use (Coghlan & Brydon-Miller, 2014); (Alhawiti, 2014)). These outcomes are attributed to the tool's immediate feedback, interactivity, and flexibility, which collectively enhance learner engagement (Godwin-Jones, 2022).

More recent empirical investigations conducted between 2023 and 2024 have further refined our understanding of generative AI's efficacy. For instance, Su and Yang (2023) demonstrated that while generative tools significantly alleviate writing anxiety among L2 learners, they simultaneously necessitate a

redefinition of prompt-engineering competence as a core linguistic skill. Furthermore, (Moorhouse, Yeo , & Wong, 2024) highlight the emerging 'ownership dilemma' in academic writing, suggesting that the integration of ChatGPT requires a shift in pedagogical focus from the production of text to the critical management of generated content. These 2024 insights underscore the porous boundary between human and algorithmic authorship in modern EFL contexts.

Some studies also suggest that ChatGPT can promote learner autonomy, allowing students to initiate learning activities, explore diverse topics, and engage in reflective dialogue without time or institutional constraints (Godwin-Jones, 2022). This is particularly advantageous in under-resourced or rural contexts where access to trained language instructors may be limited (Hamadi, 2025).

Nevertheless, researchers have noted potential drawbacks. Overreliance on AI-generated feedback may inhibit deeper cognitive processing or reduce opportunities for peer collaboration and self-correction (Zhai & Ma, 2022). Ethical concerns have also been raised regarding data privacy, the opacity of machine learning algorithms, and the accuracy of feedback provided by the system (Alhawiti, 2014).

In the Algerian context, the digitalization of education is steadily progressing, and early initiatives have begun integrating AI-based tools into EFL instruction. While concerns remain regarding content accuracy and the risk of learners receiving oversimplified or culturally discordant responses, studies suggest that ChatGPT can function effectively as a complementary resource when integrated into a broader pedagogical strategy.

### 3. RESEARCH DESIGN AND METHODOLOGY

This exploratory study investigates how Algerian EFL learners perceive and utilize ChatGPT, with particular attention to their attitudes, motivations, and the contexts in which they engage with the tool. In alignment with the study's overarching aim, the following research questions were developed:

1. How do Algerian EFL learners perceive ChatGPT as a language learning tool?
2. What are the primary contexts and purposes for which learners use ChatGPT?
3. What factors influence learners' attitudes and motivations toward using ChatGPT in language learning?

To address these questions, a mixed-methods design was employed, integrating both quantitative and qualitative approaches. Data were collected through a structured survey and focus group discussions. This combination enabled the capture of broad usage trends and in-depth insights into learners' experiences, offering a more comprehensive understanding of ChatGPT's educational impact.

### 3.1. Setting and Sample

The study was conducted at Setif 2 University, targeting Master One students enrolled in the department of English during the 2024 academic year. Out of 187 students, 95 completed the survey, yielding a response rate of approximately 50.8%. Convenience sampling was used, with participant selection based on availability and willingness to participate. For the qualitative component, 12 students from the same cohort voluntarily participated in a focus group discussion. The group was deliberately composed of learners with varying levels of familiarity and engagement with ChatGPT to ensure a diversity of perspectives.

### 3.2. Data Collection Instruments and Procedures

To gather both quantitative and qualitative data, a mixed-methods approach was employed. A structured questionnaire comprising closed- and open-ended items was administered during class hours to maximize participation. The questionnaire was self-designed by the researcher and pilot tested with 20 students prior to the data collection phase. Content validity of the survey was established through expert review, while the pilot test ensured reliability, yielding a Cronbach's alpha of .78.

It aimed to capture demographic information, frequency and purpose of ChatGPT usage, and learners' self-perceived improvements in various language skills. To complement the survey data, a semi-structured focus group discussion was conducted with 12 volunteer participants. Guided by the framework of (Dörnyei, 2007), the discussion explored motivations, perceived benefits, challenges, and broader attitudes toward ChatGPT use in language learning. The 50-minute session was audio-recorded, transcribed, and thematically analyzed.

### 3.3. Data Analysis Procedures

Quantitative data obtained from the survey were analyzed using SPSS (Version 28). Descriptive statistics- such as frequencies, percentages, and means- were calculated to summarize usage patterns and perceived language

improvements. To assess differences between frequent and infrequent ChatGPT users, independent-samples t-tests were conducted. The qualitative data from the focus group discussion were analyzed thematically following (Braun, 2006) six-phase framework: familiarization, coding, theme generation, theme review, theme definition, and final reporting. An inductive approach guided the construction of themes, with particular emphasis on learner engagement, perceived benefits, and concerns related to AI-mediated language learning.

### 3.4. Scope and Limitations

This study focuses on a specific cohort of Master One EFL students at Setif 2 University during the 2024 academic year, which limits the generalizability of the findings to other contexts or learner populations. The scope is further confined to students' self-reported experiences with ChatGPT, excluding other AI tools and broader digital learning environments. Several limitations should be noted: the use of convenience sampling may have introduced selection bias; the modest sample size restricts broader applicability; and reliance on self-reported data raises the risk of social desirability bias. Additionally, the structured nature of some survey items may have constrained responses. While the study centers solely on ChatGPT, excluding comparisons with other tools, it nonetheless offers valuable insights into AI-assisted language learning in a relatively underexplored context.

## 4. Findings and Discussion

This section presents the results of the quantitative and qualitative analyses and discusses their implications for Algerian EFL education and future research. The first subsection focuses on the survey results, supported by figures and statistical interpretation.

### 4.1. Quantitative Results

#### 4.1.1. Demographic Profile of Respondents

As summarized in Table 1, the participant pool was characterized by a predominantly young, female demographic, with 61.1% identifying as female and 57.9% falling within the 23–26 age range. Notably, over half of the respondents (55.8%) reported an intermediate level of digital proficiency, while only a small fraction (15.8%) identified as having basic skills. This suggests that the vast majority of participants possessed a functional level of digital literacy, positioning them as "digital natives" who are well-equipped to navigate the complexities of AI interfaces like ChatGPT.

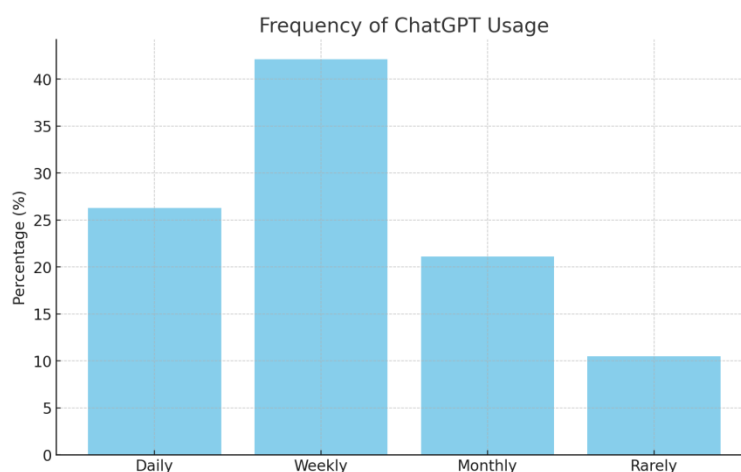
Table 1: Demographic Characteristics of the Respondents (N = 95):

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Female	58	61.1%
	Male	37	38.9%
Age Range	21-22 years	40	42.1%
	23-26 years	55	57.9%
Digital Proficiency	Basic	15	15.8%
	Intermediate	53	55.8%
	Advanced	27	28.4%

#### 4.1.2. Frequency of ChatGPT Usage

Students were asked how often they used ChatGPT for language learning. As illustrated in Figure 1.

Figure 1. Distribution of student responses regarding the frequency of ChatGPT use (N = 95).



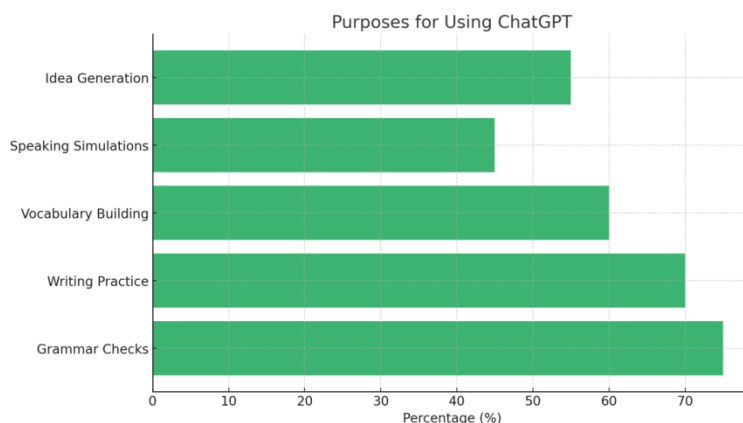
Students were asked to quantify their engagement with ChatGPT. As illustrated in Figure 1, a combined 68.4% of students used the tool on a frequent basis (daily or weekly), whereas only a marginal 10.5% reported rare use.

This distribution indicates that ChatGPT has moved beyond being a novelty and is now firmly integrated into learners' academic routines. The high proportion of daily and weekly users implies a growing reliance on AI for autonomous learning. However, the presence of the 21.1% monthly user group suggests that access, familiarity, or individual motivation may still pose barriers.

### 4.1.3. Purpose of ChatGPT Use

As shown in Figure 2, the primary purposes of ChatGPT use include grammar checks (75%), writing practice (70%), and vocabulary building (60%). Lower usage was reported for idea generation (55%) and speaking simulations (45%).

Figure 2. Reported purposes for using ChatGPT (multiple responses possible).



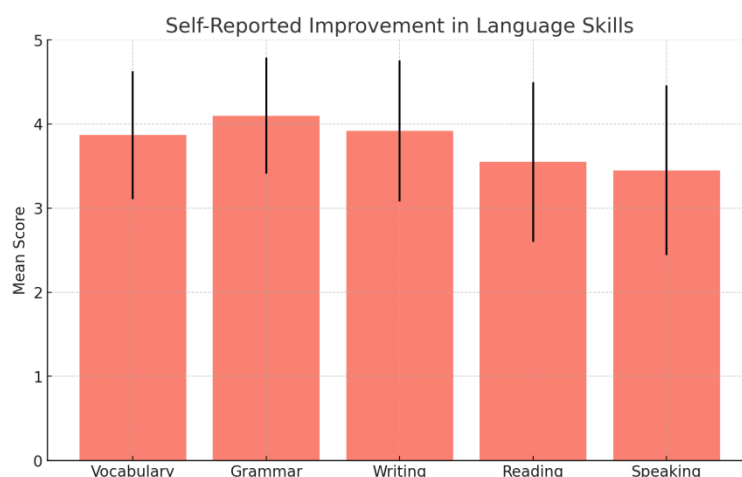
This suggests that learners use ChatGPT primarily as a form-focused, written language assistant, rather than as a tool for dialogic or spoken practice. The underutilization of speaking simulations may reflect either technological limitations (e.g., lack of voice interface) or a pedagogical gap in promoting spoken language tools.

This hierarchy of usage suggests that learners perceive ChatGPT primarily as a sophisticated proofreader and text-editor rather than a conversational partner. The 30% gap between grammar-focused use and speaking simulations reflects a clear pedagogical boundary: students currently utilize AI for static, written accuracy rather than dynamic, oral fluency.

### 4.1.4. Self-Reported Improvement in Language Skills

Students rated their perceived improvement across five skill areas on a 5-point Likert scale. The mean ratings, summarized in Figure 3, reveal that grammar ( $M = 4.10$ ) and writing ( $M = 3.92$ ) received the highest scores, followed by vocabulary ( $M = 3.87$ ). Reading ( $M = 3.55$ ) and speaking ( $M = 3.45$ ) scored lower.

Figure 3. Self-reported improvements in various language skills. Error bars represent standard deviations.



Overall, participants reported moderate to high perceived improvements. Grammar received the highest mean score ( $M = 4.10$ ,  $SD = 0.69$ ), closely followed by writing ( $M = 3.92$ ,  $SD = 0.84$ ) and vocabulary ( $M = 3.87$ ,  $SD = 0.76$ ). These findings suggest that students believe ChatGPT helps them refine form-focused aspects of language, likely due to immediate corrective feedback (Coglan & Brydon-Miller, 2014). Notably, reading and speaking scored somewhat lower, indicating that although learners recognize some benefits of these skills, they may be less likely to rely on ChatGPT for receptive or interactive oral practice.

An independent samples t-test revealed statistically significant differences between daily users and rare users in grammar ( $t(33) = 2.52$ ,  $p < .05$ ) and writing ( $t(33) = 2.37$ ,  $p < .05$ ). These results suggest that higher frequency of ChatGPT use correlates with greater perceived improvement in these areas. These findings support SLA theories (Coglan & Brydon-Miller, 2014) regarding the necessity of iterative feedback; however, they also highlight that ChatGPT's impact is currently imbalanced, favoring structural accuracy over communicative oral competence.

#### 4.1.5. Learners' Attitudes toward ChatGPT

The questionnaire also included Likert-scale items examining students' attitudes toward ChatGPT, focusing on perceived ease of use, usefulness, motivation, and potential drawbacks (e.g., overreliance, lack of contextual understanding).

Table 2: Summary of Attitudinal Survey Items (N = 95)

Item	Mean (M)	SD	Interpretation
ChatGPT is easy to navigate.	4.20	0.61	Positive
ChatGPT feedback motivates me to learn English.	4.05	0.72	Moderately Positive

I worry about becoming too dependent on ChatGPT for corrections.	3.40	1.05	Mild Concern
Using ChatGPT is an effective way to improve my skills.	4.18	0.66	Positive
I find ChatGPT's content sometimes lacks cultural relevance.	2.75	1.20	Neutral to Slight Concern

The attitudinal data in Table 2 suggests a high level of user satisfaction tempered by moderate ethical awareness. The highest mean was recorded for "ease of navigation" ( $M = 4.20$ ), indicating that the user interface poses no significant barrier to adoption.

As illustrated in Table 2, respondents generally agreed that ChatGPT is easy to navigate ( $M = 4.20$ ,  $SD = 0.61$ ) and motivating ( $M = 4.05$ ,  $SD = 0.72$ ). Additionally, the item "Using ChatGPT is an effective way to improve my skills" garnered a mean of 4.18, reflecting a positive consensus on its educational value (Alhawiti, 2014). However, concerns emerged regarding potential overreliance on the AI ( $M = 3.40$ ,  $SD = 1.05$ ). While this score does not indicate a high level of anxiety, it suggests that a subset of students is aware of the risks associated with substituting AI support for autonomous learning or teacher-led feedback (Zhai & Ma, 2022). Regarding cultural relevance, the item "I find ChatGPT's content sometimes lacks cultural relevance" scored a mean of 2.75, implying that learners are relatively neutral on this issue. Students may not yet critically reflect on or encounter ChatGPT's limitations in navigating Algerian or regional cultural contexts, although some do recognize potential mismatches with local norms. Learners may be so focused on linguistic accuracy that they overlook the Western-centric biases inherent in AI-generated content, presenting a clear opportunity for the integration of intercultural competence into the curriculum.

#### 4.1.6. Discussion

The discussion focuses on interpreting the observed learner behaviors through constructivist and sociocultural perspectives. This section examines how learners' strategy use and engagement reflect active knowledge construction, peer-mediated scaffolding, and metacognitive regulation, consistent with Vygotskian and constructivist principles. The empirical configurations emerging from this data set indicate that frequent engagement with ChatGPT is positively correlated with enhanced learner self-efficacy, specifically within the domains of morpho-syntactic precision and compositional fluency. This phenomenon may be theoretically framed through the lens of

Vygotsky's (1978) Zone of Proximal Development (ZPD), wherein the Large Language Model (LLM) functions as a "digital more knowledgeable other" (MKO). By providing instantaneous, non-judgmental corrective feedback, the AI acts as a low-stakes scaffold that effectively lowers the affective filter (Krashen, 1982), thereby allowing learners to navigate linguistic complexities that might otherwise remain beyond their autonomous reach. However, a notable pedagogical paradox is observed regarding the underutilization of AI for oral communication ( $M = 3.45$ ). While the literature often emphasizes the multimodal potential of AI, these results suggest a conceptual boundary in learner perception: students appear to treat ChatGPT as a static corrective tool for written accuracy rather than a dynamic interlocutor for communicative fluency. This discrepancy highlights a critical gap in technological affordances; without explicit teacher mediation or the integration of Task-Based Language Teaching (TBLT) frameworks that prioritize voice-interface features, the tool remains relegated to the periphery of the communicative classroom. Furthermore, the neutrality regarding cultural relevance ( $M = 2.75$ ) constitutes perhaps the most significant sociolinguistic finding of this study. The participants' apparent indifference to the cultural alignment of AI outputs suggests a potential uncritical assimilation of the Western-centric norms inherent in LLM training data. As cautioned by (Zhai & Ma, 2022), this risks the further marginalization of local Algerian sociolinguistic identities and regional varieties of English.

Consequently, there is an urgent imperative for EFL curricula to transcend basic functional literacy in favor of Critical AI Literacy. Educators must empower students to interrogate AI-generated content for inner-circle hegemony and "native-speakerism" biases that may conflict with local cultural and linguistic ecologies. Finally, while the high levels of student receptivity are encouraging, the data concerning perceived overreliance ( $M = 3.40$ ) necessitates a rigorous re-evaluation of digital mediation strategies. To mitigate the risks of cognitive offloading-whereby students substitute AI-generated suggestions for autonomous critical reflection-pedagogical intervention must focus on AI-assisted rather than AI-driven methodologies. Learners require specialized training to distinguish between statistically probable linguistic forms and contextually valid communication in real-world scenarios. These quantitative trends provide the essential evidentiary foundation for the qualitative narratives explored in the subsequent section.

It should be emphasized that these findings are context-specific, reflecting the experiences of 95 students from Setif 2 University. Interpretations are therefore bounded by this cohort and instructional environment, and should not be generalized to all Algerian EFL learners.

## 4.2. Qualitative Results

The focus group discussions yielded seven thematic categories that illuminate students' nuanced experiences with ChatGPT in the context of EFL learning. These themes offer a complementary perspective to the quantitative results, reinforcing the tool's perceived benefits while highlighting its limitations and contextual considerations.

### 4.2.1. Enhanced Engagement

A dominant theme across participants was the heightened sense of engagement and motivation when using ChatGPT. Students consistently reported that the tool's interactive feedback and real-time responsiveness made language practice more dynamic and less monotonous than traditional methods. As one student articulated, "ChatGPT is more fun and interesting than just reading textbooks. I feel like I'm talking to someone who can correct me right away" (P4). This echoes findings by (Godwin-Jones, 2022) who emphasized the motivational potential of AI-driven tools through their immediacy and adaptability. The data suggest that learners perceived ChatGPT as not merely functional, but also affectively engaging; a key factor in sustaining practice and persistence in autonomous learning.

### 4.2.2. Accessibility of Resources

Participants also emphasized the accessibility and flexibility that ChatGPT affords. The ability to engage with the tool at any time- particularly outside classroom hours- was widely viewed as a major advantage. As one participant noted, "Even after class, I can practice writing or ask ChatGPT questions. I don't have to wait until the next lesson to get answers" (P7). This aligns with (Godwin-Jones, 2022), who argues that mobile and web-based AI tools reduce temporal and geographic constraints, especially in contexts with limited access to teachers or physical resources. The finding reinforces the role of AI as a continuity mechanism that extends learning beyond institutional boundaries.

### 4.2.3. Concerns about Overreliance

Despite recognizing ChatGPT's utility, students frequently voiced concerns about becoming overly dependent on the tool. Several learners admitted to accepting corrections passively, without engaging in deeper reflection or understanding. As one participant stated, "ChatGPT makes it easy to correct my mistakes, but sometimes I don't take the time to understand why it's correcting me." This reflects what SLA scholars identify as shallow processing, which can undermine long-term acquisition (Zhai & Ma, 2022).

Furthermore, learners expressed ambivalence about whether AI feedback could substitute for teacher explanation. "ChatGPT is great for practicing at home, but I still need my teacher to explain complex grammar points and provide more personalized feedback," remarked one student. Others noted the

emotional gap in AI interaction; specifically, the absence of encouragement, empathy, or motivational cues that human teachers provide. These concerns underscore the need for pedagogical mediation, where instructors scaffold the appropriate use of AI within structured learning environments.

#### 4.2.4. Cultural Relevance

The theme of cultural relevance surfaced when students evaluated the extent to which ChatGPT could reflect local norms and sociocultural contexts. While most participants appreciated the global reach of the tool, some highlighted its limitations when dealing with Algerian-specific cultural references. As one student put it: "Sometimes I ask about cultural references in Algeria, and ChatGPT gives me very generic or irrelevant answers" (P10). This supports findings by (Alhawiti, 2014), who noted that AI models often fail to capture local nuances due to their training on predominantly Western corpora. While this shortcoming did not render the tool unusable, it limited its contextual adaptability, a critical aspect for culturally embedded language learning.

#### 4.2.5. Lower Improvements in Speaking and Reading Skills

Although participants reported notable improvements in writing and grammar, they felt that speaking and reading received comparatively less benefit from ChatGPT. The reasons were both technological and pedagogical. Students observed that while ChatGPT supports written interaction, it lacks the aural and prosodic elements necessary for speaking fluency. As one student stated, "ChatGPT is great for writing practice, but it cannot help me improve my pronunciation or fluency when speaking."

In the case of reading, students appreciated the ability to clarify vocabulary and ask questions about texts, but they lamented the absence of guided reading strategies and interpretive support. One participant explained, "ChatGPT helps with vocabulary, but it doesn't guide you through reading a full article and understanding its deeper meaning." These observations align with SLA theories emphasizing that interaction, scaffolding, and collaborative tasks are essential for developing higher-order literacy skills, elements that are largely absent in AI-mediated reading tasks.

#### 4.2.6. Teacher Guidance

A recurring theme was the critical role of teacher mediation in complementing ChatGPT use. Participants emphasized that while AI could provide immediate corrections, teachers remained indispensable for explaining rules, linking concepts to prior knowledge, and offering emotional and motivational support. As one student put it: "If I get something wrong repeatedly, I still need my teacher to explain it in Arabic or French, and to connect it to what we studied in class" (P9). This finding directly supports Sociocultural Theory (Vygotskij & Cole, 1981); (Lantolf & Thorne, 2009),

which posits that meaningful learning is mediated by expert guidance within a socially and linguistically relevant context.

#### 4.2.7. Learner Autonomy

Finally, many students reported increased learner autonomy through their engagement with ChatGPT. The tool's nonjudgmental nature enabled them to experiment with vocabulary and syntax more freely. "I can try new vocabulary or complex sentences without feeling embarrassed if I make mistakes, because ChatGPT just corrects me," explained one student (P1). This aligns with constructivist learning principles, which emphasize the importance of low-stakes experimentation and iterative practice for cognitive growth (Hiver, Al-Hoorie, & Mercer, 2021). By providing a risk-free environment, ChatGPT appears to foster confidence and independence, two essential components of self-directed learning.

#### 4.3. Interpretation of Results

This section synthesizes quantitative and qualitative findings to elucidate underlying mechanisms of learner engagement. Observed patterns are interpreted through the lenses of sociocultural and constructivist frameworks, emphasizing how collaborative interaction, reflective practice, and contextual factors shape strategy use and learning outcomes.

The findings of this study reveal notable trends in how Algerian EFL learners engage with ChatGPT as a language learning tool. The quantitative results indicated a high frequency of use, especially for grammar and writing-related tasks, where students reported the most significant perceived improvements. These form-focused activities benefit from ChatGPT's capacity to provide immediate, personalized feedback, an affordance that has been emphasized in prior research on AI-enhanced language learning (Godwin-Jones, 2022)

Students who interacted with ChatGPT more frequently reported greater gains in writing fluency and grammatical accuracy, supporting the idea that repeated exposure and iterative feedback cycles can contribute to deeper internalization of language rules. However, this correlation must be interpreted cautiously, as it is based on self-reported perceptions rather than objective performance data.

In addition, while learners praised ChatGPT's accessibility and motivational appeal, they noted its cultural limitations, especially in handling Algerian-specific topics or sociocultural nuances. These findings confirm that although AI tools are powerful, they are not culturally neutral, and may inadvertently marginalize regional language practices or values (Alhawiti, 2014).

Lower self-reported improvements in speaking and reading suggest that ChatGPT is less effective in developing skills requiring real-time interaction,

prosody, and inferencing. These limitations underscore the enduring value of teacher-mediated, interactive instruction for supporting oral fluency and deeper comprehension processes.

All interpretations are specific to the current cohort and learning environment at Setif 2 University and should not be generalized to the broader population of Algerian EFL learners.

#### 4.4. Pedagogical Implications

The findings carry significant implications for EFL pedagogy in Algeria and comparable contexts. First, the widespread adoption of ChatGPT suggests a strong learner demand for AI-enhanced tools. Teachers should consider incorporating such tools into instructional practices, especially for writing, vocabulary, and grammar-focused tasks. Doing so can foster greater learner autonomy and provide opportunities for personalized, asynchronous practice (Hiver, Al-Hoorie, & Mercer, 2021). However, the concerns about overreliance highlight the importance of critical AI literacy. Educators must guide students in using ChatGPT not as a crutch, but as a scaffold for developing their metalinguistic awareness. One pedagogical strategy could involve prompting learners to analyze and explain ChatGPT's corrections, thereby reinforcing grammatical knowledge and fostering metacognitive engagement.

The issue of cultural relevance calls for a hybrid pedagogical model that integrates global tools with locally meaningful content. Teachers can bridge the gap by embedding ChatGPT into activities that are contextualized with Algerian themes, values, or linguistic features, thus promoting culturally responsive language education. Moreover, given ChatGPT's limitations in enhancing oral communication and deep reading, teachers should maintain a strong emphasis on interactive, face-to-face activities. These include dialogic role plays, peer discussions, and guided reading circles, none of which can be fully replicated by current AI models.

Ultimately, teacher presence remains indispensable. While ChatGPT can support language development through repetitive, form-focused tasks, only human educators can offer affective support, dialogic feedback, and context-sensitive guidance essential for holistic language learning (Lantolf & Thorne, 2009)

#### 4.5. Recommendations

Based on the findings of this study, several practical and research-oriented recommendations can be made. At the institutional and classroom levels, it is recommended that AI-based tools such as ChatGPT be formally integrated into EFL curricula, particularly for grammar, vocabulary, and writing instruction, where learners reported the most significant improvements. However, this

integration should be pedagogically guided and supplemented by teacher-led instruction to prevent overreliance on AI-generated feedback.

Teachers should be encouraged to design hybrid tasks in which students use ChatGPT for initial drafts or grammar checks but engage in reflective practices- such as explaining corrections or identifying recurring errors- to foster deeper learning and critical thinking. To support this, professional development programs should be offered to train educators in effective AI integration, raising awareness of both the pedagogical benefits and the limitations of such tools.

On the technological front, developers of AI language tools should prioritize expanding ChatGPT's functionalities to address the current gaps in speaking and reading skill development. This could involve incorporating speech recognition, pronunciation feedback, and interactive reading comprehension support. Furthermore, greater cultural adaptability is needed; AI tools must begin to incorporate region-specific knowledge and sociolinguistic nuance to ensure their relevance in non-Western educational contexts.

In terms of future research, longitudinal studies are recommended to explore the long-term impact of ChatGPT on language development, learner autonomy, and engagement. Additionally, studies focusing on the socio-cultural implications of using AI tools in postcolonial or multilingual educational settings, such as Algeria, would further inform the ethical and pedagogical framing of AI-assisted learning environments.

#### 4.6. Challenges and Limitations of ChatGPT Use

Despite its perceived benefits, the findings of this study also highlight several important limitations and challenges associated with the integration of ChatGPT into EFL learning contexts. A primary concern reported by participants was the risk of overreliance on AI-generated feedback, which may lead to superficial learning. Students admitted to accepting corrections passively without fully engaging in reflection or attempting to understand the underlying grammatical or lexical principles. This tendency undermines the development of critical thinking, metalinguistic awareness, and self-editing skills, which are crucial for long-term language acquisition.

In addition, students reported minimal gains in speaking and reading skills, emphasizing that ChatGPT lacks interactive oral capabilities and auditory feedback mechanisms. Unlike classroom conversations or peer interaction, AI-generated dialogues do not include the prosodic, emotional, or paralinguistic features essential for developing fluency and communicative competence. Reading comprehension was also found to be under-supported, as the tool does not offer guided reading tasks, collaborative discussions, or the scaffolding necessary for higher-order textual analysis.

Finally, while ChatGPT can simulate dialogue, it cannot replicate the human elements of teaching, including affective support, individualized

scaffolding, and pedagogical judgment. The absence of these elements makes it unsuitable as a standalone solution, particularly for learners who require encouragement, motivation, and clarification tailored to their evolving needs. These findings underscore the importance of treating ChatGPT as a complementary resource, best used under the guidance of skilled educators who can contextualize its output and ensure balanced integration into a pedagogically sound learning environment.

## CONCLUSION

This study examined Algerian EFL learners' engagement with ChatGPT, focusing on perceptions, usage patterns, and pedagogical implications. The findings, based on mixed methods data, show that ChatGPT is particularly effective for grammar, writing, and vocabulary tasks due to its immediacy and corrective feedback, with frequent users reporting greater perceived gains in language proficiency. However, concerns emerged regarding overreliance on AI feedback, limited impact on speaking and reading, and insufficient cultural relevance. These challenges highlight the need for a balanced, teacher-guided integration of AI tools, positioning ChatGPT as a supplement-not a substitute-for human instruction. Grounded in Constructivist and Sociocultural frameworks, the study reinforces the importance of active learning, mediation, and context in language acquisition.

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