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EFL Instructors' Perspective on Using AI Applications in English as a Foreign Language Teaching and Learning

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Abstract

This study aimed to explore the perspectives of EFL instructors working in a variety of universities in the UAE on the effectiveness of AI applications in the EFL classroom. EFL teachers need to use AI applications in ways that are aligned with instructional goals and support student learning. A quantitative approach was used, and data was gathered from a survey of 46 EFL instructors. The results showed that the instructors strongly relied on AI applications to facilitate tasks, offer data-driven insights to improve instructional strategies and customize the learning process for each student. They also positively valued the benefits that AI applications bring to their classrooms for improving the teaching process. Notably, the results showed that the years of teaching experience had a statistically significant impact on the means of EFL instructors' perspectives regarding the benefits of adopting AI apps in EFL classrooms. The results also showed that, despite teaching experience, there were no significant differences in perceptions regarding the challenges of utilizing AI apps. This is probably because EFL students are accustomed to using technology in their lectures. Due to their benefits in English language instruction, the study suggests incorporating AI applications into the EFL teaching process.

Keywords:

Artificial Intelligence Applications;
EFL Instructors' Perception;
Teaching and Learning.

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1- Introduction

The use of artificial intelligence (AI) applications (apps) in the English as a Foreign Language (EFL) classroom has been increasing in recent years, as technology continues to play a growing role in language education. There is growing evidence that AI applications can provide valuable support to EFL students, helping to improve language skills, increase engagement, and provide personalized feedback [1].

English as a foreign language is a crucial subject for students around the world, as it opens up a world of opportunities for them to communicate and engage with others globally. In recent years, the use of technology, especially artificial intelligence (AI), has become increasingly common in the EFL classroom to make the learning experience more engaging, effective and productive. AI-powered applications, such as language learning software, chatbots, and voice recognition systems, have the potential to enhance the EFL teaching and learning process. This would raise students' awareness of and motivation for learning [2, 3].

Studies have shown that AI technology can provide formative feedback to learners in real-time, allowing them to make adjustments to their language production and improve their performance, internalize language structures and improve their language skills. Students can benefit from this by speaking more fluently and effectively, as well as by feeling more comfortable using the language in everyday situations. Moreover, the use of flexible, simple, and time-

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saving AI could greatly facilitate their daily activities. The use of multimedia and an AI system can also assist students in developing their overall language abilities, which demonstrate their ability to learn in a situational manner and their greatness [4, 5]. Additionally, AI apps can offer tailored feedback and practice opportunities depending on students' language proficiency and unique learning requirements, combining the strengths of assessment and feedback to improve learning results [6].

Furthermore, AI applications can help teachers save time by automating certain routine tasks, such as grading and providing feedback [7]. In addition, AI applications can make language learning more engaging and interactive, which can help increase students' motivation to learn English and enhance their ability to make decisions and predictions [8]. AI can also promote learner independence by using speech recognition software. With the aid of this technology, students can practice speaking in public while receiving immediate feedback on their intonation and pronunciation.

Overall, the integration of AI applications into EFL teaching practices has the potential to support student learning and help improve language skills in the classroom. EFL teachers need to use AI applications in ways that are aligned with instructional goals and support student learning. Furthermore, AI technology can provide teachers with data-driven insights into students' language learning progress and strengths and weaknesses, which can inform instructional decision-making [9].

1-1- Integrating AI to Foster EFL Learner Performance

Many studies have explored the potential of AI to foster learner performance in EFL contexts, and have reported on the benefits and challenges of doing so. By delivering individualized and adaptable learning experiences, the incorporation of artificial intelligence (AI) into EFL classes offers the potential to promote learner independence. A variety of AI-based tools, including intelligent tutoring systems, speech recognition software, and machine translation software, can be used to support language learning and promote autonomy in the learning process [2, 3, 4, 10].

One of the main advantages of using AI in EFL classrooms is the ability to personalize learning. For example, AI-based language tutoring systems can improve learner performance in various language skills, such as grammar, vocabulary, and pronunciation [2, 11]. It can also track students' progress and adapt the level of difficulty to their abilities, providing them with personalized feedback and recommendations. This can help students feel more motivated and confident in their language-learning journey.

Research has shown that using machine translation tools to assist students in reading and communicating in the target language can improve learner autonomy. With the use of these tools, students may quickly and accurately translate terms or phrases that they are unfamiliar with, improving their comprehension of texts and their ability to engage in conversations and activities [12-14].

However, the integration of AI in EFL classrooms also presents challenges, such as the cost and technical expertise required to set up and maintain the systems, as well as the need to ensure that the AI algorithms are culturally appropriate and unbiased [15]. According to Holstein et al. [16] and Lin et al. [17], adopting AI in the EFL environment is also conservative because less-experienced teachers frequently fail to implement efficient responses to analytics, which causes their hesitation and lower acceptability.

Halaweh [18] stated that The United Arab Emirates (UAE) is the first nation to establish a State Minister for Artificial Intelligence. The UAE's adoption of AI at the societal and governmental levels has ushered in a new era of digital administration. He continued by noting that implementing AI will benefit individuals, businesses, and organizations. The use of AI in EFL classrooms can be an important topic as it can significantly improve the quality of language learning. AI will have an impact on the entire area if fully implemented, especially in the area surrounding the UAE. Although AI has been used in other Middle Eastern industries, it has not yet been fully incorporated into the region's educational system [19].

1-2- AI Technology and Classroom Application

Artificial intelligence (AI) technology is the ability of computers to carry out tasks like learning, problem-solving, and decision-making that often need human intelligence. Numerous applications of artificial intelligence (AI) in education exist, including customized learning, personalized tutoring, and digital grading. Two AI apps may be used by EFL teachers in their classrooms: Duolingo (*https://www.duolingo.com*), which emphasizes learning vocabulary and phrases in the target language and offers more grammar practice, and Lingvist (*https://apps.apple.com/us/app/lingvist*), which is used for grammar, vocabulary, and pronunciation lessons. Learning is also made more enjoyable by giving points for completing a lesson.

Lingvist is a language-learning platform that provides classes in a variety of languages, including English. To personalize the learning experience for each user, the platform employs artificial intelligence and machine learning algorithms. The classes at Lingvist are designed to teach vocabulary and grammar in context, with an emphasis on

practical language skills. The platform employs spaced repetition to assist users in memorizing new vocabulary, as well as reading and listening tasks to reinforce learning. Lingvist also employs machine learning and artificial intelligence to personalize each user's learning experience. This can help students progress at their own pace while focusing on the areas where they need to improve the most. Furthermore, Linguist's use of spaced repetition may aid English language learners in improved memorization of new vocabulary. This could lead to better long-term retention of newly learnt vocabulary and more successful language acquisition. Overall, Lingvist can be a useful supplement to other approaches to language acquisition [20].

Duolingo is a well-known language-learning platform that provides classes in a variety of languages. It employs a gamified approach to language learning, which makes it enjoyable and engaging for users. The lessons in the courses cover several areas of the language, including grammar, vocabulary, and pronunciation. As they finish lessons and move through the course, they receive points and badges. Duolingo has changed English instruction in a variety of ways, including making English more accessible to people all around the world. The platform is free and online, making it simple for anybody with an internet connection to access English language learning resources. Furthermore, Duolingo encourages students to keep improving their English skills by offering prizes and tracking their progress. In general, Duolingo has had a positive impact on the teaching and learning of English as a second language. While it is not a replacement for formal instruction, it may be a beneficial tool for language learners looking to improve their English skills [21-23].

2- Literature Review

The use of AI in EFL classrooms has been the subject of numerous studies, both qualitative and quantitative, to assess its impact on language learning outcomes and teacher and student attitudes. A study by Mukhallafi [24] employed a questionnaire to investigate several AI methodologies and their suitable applications for instructing and learning English, as well as the effectiveness of these applications, their practicality, and the requirements for applying them. The findings indicated a variety of effective AI teaching and learning tactics for English, but relatively little actual application of these strategies for teaching and learning English. The teaching and learning of English requires the employment of strategies with a high level of engagement and simulation, including interactive smart translation, communicative language education approaches, and voice communication. Similarly, a study by Sumakul et al. [10] examined how teachers felt about using AI in their EFL classes. According to the study, all teachers had favourable opinions on the usage of AI in the classroom because it enhances student learning and teaching. It also suggests that when incorporating AI into EFL classrooms, teachers' technological and pedagogical expertise should be taken into account, along with the motivating levels of the students.

Moreover, Jiang [2] looked into how AI supports the teaching and learning of English as a Foreign Language. This study aims to provide a concise yet comprehensive overview of AI in the context of English as a Foreign Language by summarizing and identifying the six major applications of AI, namely automatic evaluation systems, neural machine translation tools, intelligent tutoring systems, AI chatbots, intelligent virtual environments, and affective computing in ITSs. The review also reveals a dearth of current research on using AC in the context of EFL and investigating the pedagogical and moral implications of AI in the EFL context. In the end, issues from both the technical and teacher viewpoints are highlighted, along with potential future research areas, hopefully providing fresh views for further investigation.

In a similar vein, a study by Abalkheel [19] examined difficulties and offered recommendations on how Saudi EFL instructors should adjust while maintaining learners' cognitive and psychological well-being. It also questioned whether AI had a novel role in raising the effectiveness and quality of Saudi education. The results showed that, despite having access to platforms and apps driven by technology, EFL instructors still faced several difficulties, including insufficient training, incompetence, limited accessibility, poor web infrastructure, modest technological assistance, low motivation, and attention to learners with deficits. As a result, AI could be able to fill in the gaps and solve some of the problems.

Furthermore, a study conducted in China by Zou et al. [25] examined the effects of social network-based communication on students' practice of speaking English with the aid of AI-speaking apps. The findings showed that when utilizing AI apps to practice their spoken English, students generally had favourable sentiments toward interactive activities. The results also demonstrated that, in the context of AI, social network-based interaction can significantly enhance learners' speaking abilities.

In conclusion, the earlier research demonstrates how AI has a good effect on English instruction in EFL classrooms. Applications of AI have been found to enhance language acquisition in general and to boost student motivation and language proficiency [2, 10, 24]. Nonetheless, it is crucial to take into account the limitations of AI in language acquisition and to employ it in addition to, not as a substitute for, conventional teaching techniques. Despite the growing body of research on the use of AI in EFL teaching and learning, there are still several gaps in the existing literature. One gap is the limited focus on the perspectives of teachers and students on the effectiveness of AI in EFL teaching and learning. This is particularly important, as teachers and students are the primary users of AI applications in the EFL

classroom, and their views can provide valuable insights into the benefits and challenges of using AI in EFL teaching and learning. This study addresses a noteworthy research gap as there is no prior research has been conducted on the use of AI applications in the EFL classroom for improving language learning in the UAE. To address this gap, this study aims to assess the benefits and challenges of using AI applications in the EFL classroom in the United Arab Emirates. By exploring these aspects, the research aims to provide valuable insights into the potential of AI applications in enhancing the quality and effectiveness of EFL classrooms and contribute to the understanding of the role of AI in the EFL teaching and learning process.

2-1- Objectives of the Study

Taking into account the findings above and recommendations from previous studies, the problem of this research is defined as the lack of studies that investigated the perspective of EFL university instructors on the effectiveness of using AI applications in EFL classrooms in the United Arab Emirates. In addition, the low level of linguistic proficiency among English language learners and the use of conventional methods for teaching and learning languages need an evaluation of the effectiveness of AI applications in EFL classrooms from the perspective of EFL university instructors. As a result, the study sought to determine the potential educational benefits that AI apps may provide for instructors as well as explore the real-world use of AI applications in the classroom.

This research aimed to assess the benefits and challenges of using AI applications in EFL classes and provide informative findings and suggestions for teachers working with students at all levels. Thus, the current study seeks to provide answers to the following questions:

1. What perspectives do EFL instructors have on the benefits of using AI applications in the EFL classroom in the United Arab Emirates?
2. What perspectives do EFL instructors have on the challenges of using AI applications in the EFL classroom in the United Arab Emirates?
3. Are there any statistically significant differences (α= 0.05) in the EFL instructors' perceptions of the benefits of using AI applications in the EFL classroom due to teaching experience?
4. Are there any statistically significant differences (α= 0.05) in the EFL instructors' perceptions towards the challenges of using AI applications in the EFL classroom due to teaching experience?

3- Research Methodology

3-1- Study Approach

This study follows the descriptive research methodology, which aims to investigate the perspectives of EFL instructors working in a variety of universities in the UAE on the effectiveness of AI applications in the EFL classroom. The questionnaire was used as a tool for data collection to achieve the study's goal. The methodology used in this study as well as the steps taken to arrive at the results are represented in Figure 1.

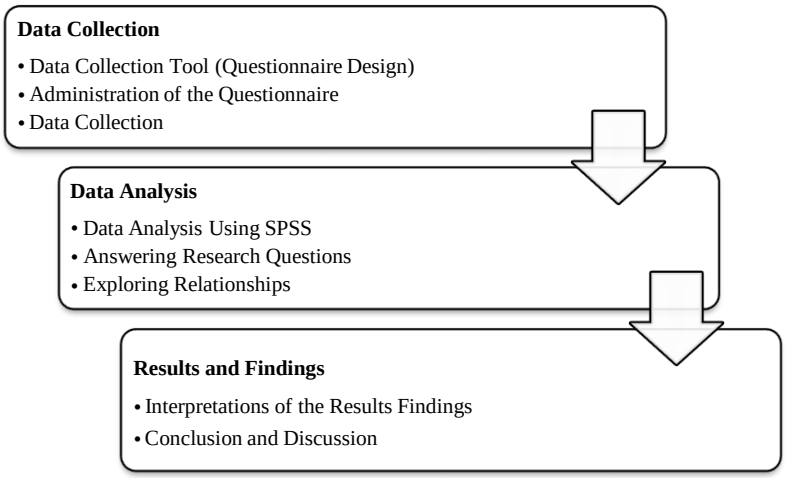

Figure 1. Research Methodology Flowchart

3-2- Study Sample

For the sake of the study, 46 males (16) and females (30) EFL instructors working in a variety of universities in the UAE were chosen at random due to their compatibility with the nature of the study and its aims during the first semester of the academic year 2023-2024 as shown in Table 1.

Table 1. Participants' Information

Variable	Categories	N	Percentage
Gender	Male	16	25
	Female	30	65
	Total	46	100
Teaching Experience	Less than 5 years	10	22
	6-10 years	21	46
	More than 11 years	15	32
	Total	46	100

3-3- Study Instrument

After consulting previous studies and the theoretical framework related to the subject, the study relied on a questionnaire with three sections: the first section consisted of demographic data. The second section covered EFL instructors' perspectives on the benefits of using AI apps in the classrooms, totalling (23) items divided into three domains as shown in Figure 2: "Personalized Feedback, Practice, and Adaptive Learning" (6 items), "Improve English Language Acquisition" (8 items) and "Increase Engagement, Motivation, Teaching Efficiency) (9 items).

Figure 2. The Benefits of AI Applications Flowchart

In addition to the third section which covered EFL instructors' perspectives on the challenges of using AI apps in the classrooms, totalling (5) items. A five-point Likert scale was used to evaluate the 28 items, with the following response options: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). The converse is true for negative assertions, as the following criteria were used to judge the vocabulary answers of the research sample based on the weighted averages of the phrases and the averages of the axes, as given in Table 2.

Table 2. Five-Grade Scale for The Statements of the Axes of the Study Tool

Weight	Responses	Level	Criteria
1	Strongly disagree	1-<1.80	Very low
2	Disagree	1.80-<2.60	Low
3	Neutral	2.60-<3.40	Medium
4	Agree	3.40-<4.20	high
5	Strongly agree	4.20-5.0	Too high

3-4- Validity and Reliability

When the scale was presented in its original form to a panel of education and instructional technology professionals, face validity was used to assess the validity of the items, and the items with an agreement rate of 81% were preserved. Items that needed to be corrected were changed, while items that did not match the required agreement rate were eliminated. The scale's final version has 28 components. This procedure guaranteed the scale's validity. The study questionnaire was also given to an experimental sample of 20 participants, and the internal consistency stability coefficient between the tool and the study paragraphs was computed using the Cronbach alpha equation on the study sample. To ascertain those values, Table 3 also displays the reliability coefficient (Cronbach Alpha) of the device.

Table 3. The Reliability Coefficient (Cronbach Alpha)

Tool	Cronbach Alpha
All items	0.921

3-5- Data Collection and Analysis

The participants were given a link to a questionnaire that contained an explanation of the purpose of the study and an invitation to participate voluntarily to collect data. For a month and a half, data gathering was conducted. After the data-gathering phase ended, statistical tests were run in SPSS using the data that had been imported from Google Sheets to assess the reliability and answer the study questions. The study topics were addressed and the sample demographics were ascertained by employing descriptive statistics, which include mean scores, frequencies, percentages, and standard deviations.

4- Results

In response to the study's first question, "What perspectives do EFL teachers have on the benefits of using AI applications in the EFL classroom?", and based on Table 2, the items were arranged as indicated in Table 4, which displays the items that assess the degree of relevance of the benefits and challenges of using AI applications in the EFL classroom as well as the means, standard deviations, and level (order of importance) for all domains.

Table 4. EFL Instructors' Perceptions of AI Applications' Benefits in the EFL Classroom

Domains	Mean	SD	Level	Rank
Personalized Feedback, Practice, and Adaptive Learning	4.03	0.578	High	1
Improve Language Acquisition	3.81	0.345	High	3
Increase Engagement, Motivation, Teaching Efficiency	4.02	0.313	High	2
Overall score	3.95	0.165	High	

The means ranged from (3.81-4.03), as shown in Table 4. The domain of "Personalized Feedback, Practice, and Adaptive Learning" had the highest mean (4.03), while the domain of "Improving Language Acquisition" had the lowest mean (3.81). As a whole, the mean for the benefits of using AI applications in the EFL classroom was (3.95). For each domain, the averages and standard deviations of the estimations made by the research sample were calculated independently as follows:

Personalized Feedback, Practice, and Adaptive Learning Domain

Table 5 shows the means and standard deviations of "Personalized Feedback, Practice, and Adaptive Learning Domain".

Table 5. EFL Instructors' Perceptions of Personalized Feedback, Practice, and Adaptive Learning

Rank	Statement	Mean	SD	Level
3	AI-based language learning applications can offer tailored feedback and practice opportunities depending on students' language proficiency and unique learning requirements	4.11	0.812	High
4	AI-based language learning applications can combine the strengths of assessment and feedback to improve learning results	4.10	0.901	High
2	AI-based language learning applications can provide real-time feedback and guidance to help them internalize language patterns and advance their language abilities	4.15	0.869	High
6	AI-based language learning applications can provide individualized learning experiences and adjust to students' needs and levels of proficiency	4.02	0.761	High
1	AI-based language learning applications can provide instant feedback on students' language performance, helping them to identify areas that need improvement	4.17	0.884	High
5	It is difficult to rely on AI-based language learning applications feedback, as it is not always correct	4.06	0.812	High
	Overall score	4.10	0.578	High

The results revealed that "Personalized Feedback, Practice, and Adaptive Learning" was the top-ranked domain for AI application benefits in EFL classrooms. According to Table 5, the results show that the means ranged from (4.02-4.17). The item with the highest mean, item (5), stated that "AI-based language learning applications can provide instant feedback on students' language performance, helping them to identify areas that need improvement," at 4.17, and item

(4), which states that "AI-based language learning applications can provide individualized learning experiences and adjust to students' needs and levels of proficiency," scored the lowest at 4.02. As shown in Table 5, it is worth noting that all items were at a high level, and the overall score was high (4.10). This indicates that AI-based language learning applications can provide personalized feedback and practice in EFL classrooms effectively.

Improving Language Acquisition Domain

Table 6 shows the means and standard deviations of the “Improving Language Acquisition” domain.

Table 6. EFL Instructors’ Perceptions of Improving Language Acquisition

Rank	Statement	Mean	SD	Level
9	AI-based language learning applications can assist students develop their overall language abilities	3.85	0.966	High
8	AI-based language learning applications could greatly facilitate students’ daily activities	4.01	0.905	High
12	AI-based language learning applications can demonstrate students’ ability to learn in a situational manner and their greatness	3.70	0.934	High
7	AI-based language learning applications can significantly improve students’ vocabulary and grammar knowledge	4.12	1.020	High
13	AI-based language learning applications chatbot for pronunciation practice can improve students’ pronunciation skills	3.63	0.927	Medium
10	AI-based language learning applications can improve students’ reading comprehension and writing skills	3.82	0.963	High
14	AI-based language learning applications can improve students’ listening skills	3.61	0.938	Medium
11	AI-based language learning applications enhance EFL students' speaking skills	3.72	0.962	High
	Overall score	3.81	0.345	High

The findings showed that the "Improving Language Acquisition Domain" domain ranked third among the benefits of AI applications in EFL classrooms. Table 6 presents the results, which indicate that the means varied between 3.61 and 3.92. "AI-based language learning applications can significantly improve students’ vocabulary and grammar knowledge," according to the item (7), which had the highest mean score of (3.92). "AI-based language learning applications can improve students’ listening skills," according to item (14), which had the lowest score of (3.61). It is important to note that the majority of the items were at a high level, as indicated in Table 6, and the overall score was generally high (3.81). This suggests that language learning apps powered by AI can effectively enhance language acquisition in EFL courses.

Increasing Engagement, Motivation, and Teaching Efficiency Domain

Table 7 shows the means and standard deviations of the “Increasing Engagement, Motivation, and Teaching Efficiency Domain”.

Table 7. EFL Instructors’ Perceptions of Increasing Engagement, Motivation, and Teaching Efficiency

Rank	Statement	Mean	SD	Level
15	AI applications make language learning more flexible, accessible, and convenient	4.04	0.886	High
16	AI applications increase students engagement and motivation to learn English	3.98	0.907	High
17	AI applications provide students with interactive language learning opportunities, even outside of the traditional classroom setting	3.96	0.925	High
18	AI applications can help teachers save time by providing immediate feedback	3.93	0.924	High
19	AI applications can make language learning more engaging and fun through the use of games and interactive activities	4.67	0.912	High
20	AI applications can provide teachers with data-driven insights into students' language learning progress	3.94	0.828	High
21	AI applications can provide teachers with data-driven insights into students' strengths and weaknesses	3.92	0.932	High
22	AI applications enhance teaching efficiency and instructional decision-making	3.88	0.902	High
23	AI applications can save teachers time by automating repetitive tasks and grading	3.86	0.912	High
	Overall score	4.02	0.313	High

The results also showed that "Increasing Engagement, Motivation, Teaching Efficiency Domain" was the second most beneficial AI application in EFL classrooms. Table 6 shows that the mean ranged from (3.86- 4.67), with item 19, " AI applications can make language learning more engaging and fun through the use of games and interactive activities," ranking first with an average of (4.03), and item 23, "AI applications can save teachers time by automating repetitive tasks and grading," ranking last with an average of (3.82). It is noticeable that Table 6 shows that every item was at a

high level, and the total score was generally high. This shows that AI-powered language learning applications can successfully raise student interest, engagement, and teaching effectiveness in EFL classes. Table 7 reveals that instructors had a positive attitude toward using AI applications in the classroom, with an overall mean of (4.02).

Furthermore, the averages and standard deviations of the participants' replies have been calculated in response to the second question posed by the study, which asked, "What perspectives do EFL teachers have on the challenges of using AI applications in the EFL classroom?" The results are displayed in Table 8.

Table 8. EFL Instructors' Perceptions of the Challenges of Using AI Applications in The EFL Classroom

Rank	Statement	Mean	SD	Level
28	Technical problems, such as lack of internet connectivity, can hinder the effective use of AI applications in the EFL classroom	3.84	0.934	High
26	Implementing AI applications in the classroom can be expensive, and schools may not have the resources to purchase and maintain the necessary technology	3.91	0.907	High
24	AI applications may not have enough content to meet the needs of all students	3.92	0.876	High
27	AI applications can limit opportunities for students interaction and face-to-face communication in the language learning process	3.82	0.892	High
25	AI applications may lack cultural awareness, which can impact the authenticity of language learning experiences	3.65	0.935	Medium
Overall score		3.83	0.259	High

The average of the challenges associated with using AI applications in EFL classrooms, as indicated by Table 8, was 3.92. The highest ranking item, item 24, was "AI applications may not have enough content to meet the needs of all students," with an average of 3.92, while item 25, "AI applications may lack cultural awareness, which can impact the authenticity of language learning experiences," held the lowest average of 3.65. Table 8 makes it clear that all of the items were at a high level, and the overall mean for the challenges of using AI applications from instructors' perspective was (3.83) with a high degree. This demonstrates that there were challenges encountered by educators and learners when utilizing AI applications in EFL classes.

To answer the third question, "Are there any statistically significant differences (α= 0.05) in the EFL instructors' perceptions of the benefits of using AI applications in the EFL classroom due to the years of teaching experience? means and standard deviations of the instructors' scores were calculated according to their teaching experience, as shown in Table 9.

Table 9. EFL Instructors' Perceptions of the Benefits of AI Applications Due Teaching Experience

Years of Experience	F	Mean	Std. Deviation
Less than 5 years	10	2.7461	0.00010
6-10 years	21	4.0010	0.58541
More than 11 years	15	3.9281	0.52417
Total	46	3.5584	0.32171

The average experience level of EFL teachers was 2.7461 for less than five years, 4.0010 for six to ten years, and 3.9281 for more than eleven years, according to Table 9.

Based on the available data, it seems that experience influences the variations among the three variable levels. In order to ascertain whether the differences were static, one-way ANOVA tests were performed. The One Way Anova test results depending on teaching experience are shown in Table 10.

Table 10. ANOVA Test's Results Due to Teaching Experience Variable

	Source	Sum of Squares	df	Mean Square	F	Sig.
Experience	Between Groups	6.098	2	3.040	9.028	<0.001
	Within Groups	75.012	44	0.329		
	Total	81.11	46			

* Correlation is significant at the 0.05 level

Due to years of teaching experience, Table 10 shows that there are statistically significant differences between the means of EFL instructors' perspectives towards the benefits of using AI applications in EFL classrooms due to years of teaching experience. The statistical value (F) was (9.028), with significance (0.001), which is statistically significant at the level (α= 0.05). Given that the mean for EFL teachers with less than five years of teaching experience was 2.7461,

with standard deviation (00010), the mean for those with six to ten years of teaching experience was 4.0010, with standard deviation (0.58541), and the mean for those with more than eleven years of teaching experience was 3.9281, with standard deviation (0.52417).

Additionally, as Table 11 illustrates, the Tukey HSD Post Hoc Test was calculated to determine the origins of variations in EFL Teacher perspectives towards the use of AI applications in EFL classrooms.

Table 11. Post Hoc Test Due to Teaching Experience

(I) Years of Teaching Experience	(J) Years of Teaching Experience	Mean Difference (I-J)	Sig.
Less than 5 years	5-10 years	0.17258	0.140
	More than 11 years	1.14560*	<0.000
6-10 years	Less than 5 years	-0.17258	0.140
	More than 11 years	0.98302*	0.003
More than 11 years	Less than 5 years	-1.14560*	<0.000
	5-10 years	-0.98302*	0.003

*Correlation is significant at the 0.05 level.

Table 11 demonstrates that differences in the instructors' teaching experience are statistically significant at the level ($\alpha = 0.05$). According to the research, EFL teachers with less than five years of teaching experience think that using AI applications in the classroom has a greater effect on encouraging successful instruction than those with more than 11 years of expertise. Furthermore, compared to teachers with 11 years or more of teaching experience, those with 6–10 years of teaching experience believe that AI applications have a more significant effect on EFL classrooms.

In order to respond to the study's fourth question, "Are there any statistically significant differences ($\alpha = 0.05$) in the EFL instructors' perceptions towards the challenges of using AI applications in the EFL classroom due to teaching experience?", means and standard deviations of the EFL instructors' perceptions towards the challenges of using AI applications in the EFL classroom due to teaching experience were calculated as shown in Table 12.

Table 12. EFL Instructors' Perceptions of the Challenges of Using AI Applications Due to Teaching Experience

Years of Experience	F	Mean	Std. Deviation
Less than 5 years	10	3.413	0.587
6-10 years	21	3.657	0.856
More than 11 years	15	3.078	0.865
Total	46	3.383	0.158

Table 12 shows how the means of the sample members' responses to the study instrument were compared according to their teaching experience using multiple analyses of variance. The information at hand suggests that the sample members' teaching experience did not appear to have any statistically significant effects on the average responses to the instrument. Additionally, in Table 13, a three-way analysis of variance was employed to illustrate the statistical significance of the mean differences in EFL Teacher perspectives towards the challenges of using AI applications in EFL classrooms.

Table 13. A Three-Way Analysis of Variance Due to Teaching Experience

Years of Experience	Sum of Squares	df	Mean Square	F	Sig.
Less than 5 years	3.521	2	1.623	3.036	0.223
6-10 years	5.314	2	1.213	3.276	0.084
More than 11 years	5.215	2	1.611	3.158	0.081
Error	2.41.476	44	0.864		

* Correlation is significant at the 0.05 level.

Table 13 demonstrates that the average responses of the sample members to the instrument as a whole do not change statistically significantly based on their prior teaching experience. This could be the case since AI application tutoring systems provide teachers with individualized guidance, so that the teachers' previous teaching experience has no bearing on how they integrate AI technologies into their lesson plans. These systems can adjust their instruction and provide targeted guidance and feedback. Furthermore, independent of their level of teaching experience, AI may provide teachers with access to educational resources like articles, movies, or interactive simulations that match the interests and learning goals of the students.

5- Discussion

The findings of the current study show that English as a Foreign Language instructors in the UAE have an enthusiastic view of the advantages of utilizing AI apps in the classroom. The results show that AI-powered language learning applications can successfully improve language acquisition in EFL courses and offer individualized practice and feedback in EFL classrooms. The findings also offer various insightful perspectives on the utilization of AI in EFL classrooms.

AI Applications' Benefits in the EFL Classroom: the present study indicates that the majority of respondents agreed that using AI applications in EFL classes has numerous benefits. The mean and standard deviations were calculated individually for each domain to examine how EFL instructors responded to using AI applications in the classroom. The overall mean and standard deviations for the benefits of utilizing AI apps in the EFL classroom across all domains are displayed in Table 4, and the value of 3.95 suggests that the participants were utilizing AI applications to a significant extent which is in line with findings of [2, 10, 24, 25] which highlighted that all teachers had positive perceptions on the usage of AI in the classroom because it enhances student learning and teaching.

Personalized Feedback, Practice, and Adaptive Learning Domain: according to the current study, most respondents thought that AI-based language learning applications can provide personalized feedback and adaptive learning in EFL classrooms effectively. This result aligns with the study made by Jiang et al. [2] and Mukhallafi [24] which emphasized a variety of effective AI teaching and learning tactics for English. They also stressed the students' progress and adapted the level of difficulty to their abilities, providing them with personalized feedback and recommendations.

Improving Language Acquisition: the study found that the participants specified AI apps as a tool for improving language acquisition. The findings showed that the EFL instructors perceived AI-based language learning applications positively because language learning apps powered by AI can effectively enhance language acquisition in EFL courses. This result aligns with the findings of [2, 25] which revealed the importance of AI to support the teaching and learning of English as a Foreign Language by summarizing and identifying six major applications of AI. In addition, utilizing AI apps to practice spoken English, students generally had favourable sentiments toward interactive activities which significantly enhance learners' speaking abilities.

Increasing Engagement, Motivation, and Teaching Efficiency: the present study showed that AI applications in EFL classrooms increase students' engagement, motivation and teaching efficiency. It also revealed that most instructors had a positive attitude toward using AI applications in the classroom, with an overall mean of (4.02). This indicates that AI-powered language learning applications can successfully raise student interest, engagement, and teaching effectiveness in EFL classes. They were assertive in using AI apps and found them useful this aligns with the findings of Sumakul et al. [10] which suggest that all teachers had favorable opinions on the usage of AI in the classroom because it enhances student learning and teaching. It also suggests that when incorporating AI into EFL classrooms, teachers' technological and pedagogical expertise should be taken into account, along with the motivating levels of the students.

The Challenges of Using AI Applications in The EFL Classroom: the present study identified several challenges encountered by educators and learners when utilizing AI applications in EFL classes, including a lack of cultural awareness, which can impact the authenticity of language learning experiences, lack of internet connectivity, lack of content to meet the needs of all students. As well as it is expensive, and schools may not have the resources to purchase and maintain the necessary technology. The results supported the Abalkheel [19] study on the contribution of AI to improving the efficacy and quality of education; yet, EFL teachers continued to encounter several challenges.

The Benefits of AI Applications Due Teaching Experience: the current study found that there were statistically significant differences between the means of EFL instructors' perspectives towards the benefits of using AI applications in EFL classrooms due to years of teaching experience. This indicated that the use of AI apps in EFL classrooms is certainly impacted by the instructors' prior teaching expertise. This is due to the fact that instructors' prior teaching expertise has a significant bearing on the effectiveness of AI apps in EFL classes. Professional teachers may be better equipped to deal with any emerging technical problems and integrate AI apps into their lesson plans. According to Holstein et al. [16] and Lin et al. [17], adopting AI in the EFL environment is also conservative because less-experienced teachers frequently fail to implement efficient responses to analytics, which causes their hesitation and lower acceptability.

The Challenges of Using AI Applications Due to Teaching Experience: the study demonstrates no statistically significant differences in the mean responses of the study participants to the challenges of using AI apps as a whole based on the study's factors (teaching experience). This is probably due to the fact that teachers were already familiar with the use of AI apps. Apps like Duolingo, and Lingvist, which emphasize learning grammar, vocabulary, phrases, and pronunciation and make learning more fun by awarding points for finishing a lesson, have grown in popularity as tools for improving teaching and learning experiences in the classroom [20, 21, 23]. These results demonstrate the benefits of using AI apps in EFL classes, which can offer interesting exercises, rapid feedback, and individualized learning experiences that can improve language acquisition.

6- Conclusion

The study investigated EFL instructors' perspectives towards the implementation of AI applications in EFL classrooms. The findings consistently showed that educators value the contribution that AI applications make to their classrooms. This is because AI may simplify administrative tasks, provide data-driven insights to enhance instructional strategies and tailor the learning process for individual students. Therefore, the results of this study can provide valuable insights into the effective use of AI in EFL teaching and learning and contribute to the understanding of the role of AI in teaching the English language. Additionally, the participants' positive perceptions of AI-based language learning applications suggested that these tools can instantly provide feedback on students' language proficiency, assisting teachers in identifying areas for improvement, customizing learning experiences, and adapting to each student's needs and skill level. Further, the majority ensures that AI-based language learning programs may greatly raise students' interest and engagement levels while also considerably enhancing their vocabulary and grammatical knowledge. A large number of participants also mentioned how useful AI applications are for EFL classes, citing their ability to save teachers' time while utilizing games and interactive activities to make language learning more enjoyable and engaging.

To sum up, this study emphasizes how important it is to use AI apps in EFL instruction. Academic achievement, creativity, comprehension, enjoyment, and deep learning are all greatly aided by them. Additionally, rapid feedback, interactive learning, and AI technologies can increase students' motivation, enhance their language skills, and give them greater self-assurance when speaking English.

6-1- Recommendations

In light of the findings of the study, the researcher recommends the following:

- Promoting the advantages of utilizing AI apps and their importance in teaching the English language by motivating teachers to create educational software with an AI basis.
- Organizing training sessions to inspire teachers to employ AI applications when teaching the English language in the classroom.
- Raising awareness among university instructors about the limitations of Al apps and the need for human connection and feedback in language acquisition instead of relying completely on them.

6-2- Limitations

Some limitations of this study may inspire further research in this area. The study is limited to EFL instructors working in a variety of universities in the UAE for the academic year 2023/2024 in the first semester. The study was also limited to the benefits and challenges of using AI apps for EFL teachers, which were included in the study tool, and included only years of experience as a study factor.

7- Declarations

7-1- Author Contributions

Conceptualization, W.H. and A.B.; methodology, W.H.; software, A.R.; validation, W.H. and A.B.; formal analysis, W.H.; investigation, A.R.; resources, A.B.; data curation, W.H.; writing—original draft preparation, W.H.; writing—review and editing, A.B. and W.H.; visualization, A.B.; supervision, W.H.; project administration, A.R. All authors have read and agreed to the published version of the manuscript.

7-2- Data Availability Statement

Data sharing is not applicable to this article.

7-3- Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7-4- Institutional Review Board Statement

Not applicable.

7-5- Informed Consent Statement

Approvals were obtained from the Universities where the study was conducted.

7-6- Conflicts of Interest

The authors declare that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

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Appendix I: Questionnaire

Dear Respondents:

We are conducting research on **"***EFL Instructors' Perspective on Using AI Applications in English as a Foreign Language Teaching and Learning***"**. In this regard, we are asking for your precious time and effort to answer all the questions in the survey questionnaire that are important and helpful for the completion of the study. Rest assured that all data gathered from you will be kept at the highest level of confidentiality. Your positive response to this request will be a valuable contribution to the success of the study and will be highly appreciated.

Thank you very much for your cooperation.

Respectfully,

The Researchers

First Section: Participants' Information

1. Gender:

□ Male □ Female

2. Teaching Experience

□ Less than 5 years

□ 6-10 years

□ More than 11 years

Second Section: The Benefits of AI Apps in the EFL Classrooms

AI Applications' Benefits in the EFL Classroom							
Personalized Feedback, Practice, and Adaptive Learning							
No	**Statement**	**1**	**2**	**3**	**4**	**5**	
1	AI-based language learning applications can offer tailored feedback and practice opportunities depending on students' language proficiency and unique learning requirements						
2	AI-based language learning applications can combine the strengths of assessment and feedback to improve learning results						
3	AI-based language learning applications can provide real-time feedback and guidance to help them internalize language patterns and advance their language abilities						
4	AI-based language learning applications can provide individualized learning experiences and adjust to students' needs and levels of proficiency						
5	AI-based language learning applications can provide instant feedback on students' language performance, helping them to identify areas that need improvement						
6	It is difficult to rely on AI-based language learning applications feedback, as it is not always correct						
Overall score							
Increasing Engagement, Motivation, Teaching Efficiency							
No	**Statement**	**1**	**2**	**3**	**4**	**5**	
7	AI-based language learning applications can assist students develop their overall language abilities						
8	AI-based language learning applications could greatly facilitate students' daily activities						
9	AI-based language learning applications can demonstrate students' ability to learn in a situational manner and their greatness						
10	AI-based language learning applications can significantly improve students' vocabulary and grammar knowledge						
11	AI-based language learning applications chatbot for pronunciation practice can improve students' pronunciation skills						
12	AI-based language learning applications can improve students' reading comprehension and writing skills						
13	AI-based language learning applications can improve students' listening skills						
14	AI-based language learning applications enhance EFL students' speaking skills						
Overall score							

Improving Language Acquisition Domain						
No	**Statement**	**1**	**2**	**3**	**4**	**5**
15	AI applications make language learning more flexible, accessible, and convenient					
16	AI applications increase students engagement and motivation to learn English					
17	AI applications provide students with interactive language learning opportunities, even outside of the traditional classroom setting					
18	AI applications can help teachers save time by providing immediate feedback					
19	AI applications can make language learning more engaging and fun through the use of games and interactive activities					
20	AI applications can provide teachers with data-driven insights into students' language learning progress					
21	AI applications can provide teachers with data-driven insights into students' strengths and weaknesses					
22	AI applications enhance teaching efficiency and instructional decision-making					
23	AI applications can save teachers time by automating repetitive tasks and grading					
	Overall score					

Third Section: The Challenges of AI Apps in the EFL Classrooms

The Challenges of Using AI Applications in The EFL Classroom						
No	**Statement**	**1**	**2**	**3**	**4**	**5**
24	Technical problems, such as lack of internet connectivity, can hinder the effective use of AI applications in the EFL classroom					
25	Implementing AI applications in the classroom can be expensive, and schools may not have the resources to purchase and maintain the necessary technology					
26	AI applications may not have enough content to meet the needs of all students					
27	AI applications can limit opportunities for students interaction and face-to-face communication in the language learning process					
28	AI applications may lack cultural awareness, which can impact the authenticity of language learning experiences					
	Overall score					