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Exploring Factors Influencing the Adoption of ChatGPT as a Supportive Tool in EFL Lesson Creation

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Abstract

This quantitative study explores the key factors that shape teachers' use of ChatGPT as a valuable tool for lesson creation. It also identifies the challenges that may hinder its effective adoption. A mixed-methods approach was used to collect data, including three participants who were chosen for in-depth interviews and 198 EFL teachers who were given questionnaires under various circumstances. Factors such as perceived usefulness, perceived ease of use, and social influence were explored based on the theory of the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) and data analysis used the SmartPLS software to conduct Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings showed important connections between these factors and how they influenced teachers' intention to use ChatGPT in planning daily lessons. The study also highlighted difficulties in utilizing Chat GPT, offering practical suggestions for educators and policymakers to improve technology integration in EFL settings.

Keywords: *Chat GPT, EFL, technology adoption, TAM, UTAUT*

Introduction

In recent years, with the rapid development of technology in most fields, artificial intelligence (AI) tools such as ChatGPT have played an important role in the educational context and in English as a Foreign Language (EFL) teaching as well. AI provides teachers with useful tools for supporting and creating effective and interesting lesson plans tailored to the aims of any lesson. In fact, technology helps build systems, thinking and acting like humans, capable of achieving our aims (Akgun & Greenhow, 2021, cited in Lai et al., 2023). ChatGPT, which stands for Chat Generative Pre-Training Transformer, is a text-based AI chatbot that can answer and generate humanlike responses (Zeng & Mahmud, 2023). It was developed and launched by OpenAI in November 2022. ChatGPT is a powerful AI chatbot and large language model that can simulate human conversations on various topics (Lai et al., 2023). The present study will only focus on ChatGPT 3.5 since it is a freely accessible AI chatbot for all users. ChatGPT can answer teachers' and students' questions in an educational context. , stated Nguyen and Tran (2023) pointed out that EFL teachers can use ChatGPT to generate creative and engaging

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activities or exercises tailored to different learners' levels and learning objectives, which helps EFL teachers focus on learners-centered activities. By typing specific requirements appropriate to teaching lessons, teachers can benefit from suggested lesson plan ideas with a variety of creative activities and exercises, which help teachers reduce workload in lesson preparation, and pay more attention to learner-centered interaction and teaching methods. There is no doubt that the potential advantages ChatGPT brings to lesson creation; however, it is unavoidable that teachers may face some emerging challenges of ChatGPT usage, including authentic language use and appropriateness, data bias, and teacher confidence and preparedness. Understanding the factors influencing EFL teachers' adoption of ChatGPT is essential for optimizing its integration into teaching practices.

AI technologies in education have been widely adopted, as has Chat GPT. However, few studies in specific fields of Chat GPT's adoption within teachers' perception in lesson creation can be found, especially in specific context of EFL. Most studies address the broader use of digital tools in education but fail to provide insights into the challenges and benefits associated with ChatGPT in EFL contexts, where more and more young EFL teachers tend to adopt ChatGPT as a supportive tool in their lesson preparation whereas there is limited training in AI using in such those contexts. Consequently, this study fills this gap by exploring the factors influencing EFL teachers' behavioral intention (BI) and actual use (AU) of ChatGPT for lesson preparation in the new EFL context of ChatGPT. This could help educators and policymakers with ChatGPT adoption and integration into lesson planning effectively.

This study aims to investigate the factors that influence the adoption of ChatGPT as a supportive tool in EFL lesson creation, using the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). The paper also mentions the emerging challenges teachers may deal with in using ChatGPT to support their lesson preparation. Both teachers' and learners' perspectives in studies of technology adoption are quite important because as Pham and Le (2024) stated, ChatGPT is considered as an effective supportive tool for both teachers and learners in their teaching and learning process. However, the scope of our research is focused on EFL teachers' perceptions in their lesson preparation before the class. Using a mixed quantitative and qualitative method, this research will provide in-depth insights for teachers and policymakers to integrate technology in EFL teaching.

Literature review

ChatGPT in EFL education

Technology has quickly gained ground in EFL education, and ChatGPT has emerged as a popular AI tool for teachers and students due to its increasing benefits. It supports teachers in planning lessons by offering creative suggestions for tasks, activities, grammar exercises, and vocabulary practice, along with sample dialogues and reading passages tailored to the specific needs of their students. These activities and exercises can be used as in-class activities or homework assignments. Thanks to Chat GPT, teachers' workload is reduced, and it saves teachers time for paying attention to learners-centered interactions. In fact, Brown (2022) stated ChatGPT can assist teachers with conversational simulations, grammar explanations, and

reading patterns, which are diverse and meet learning needs. Thus, ChatGPT is considered a supportive, professional development tool that provides teachers with suggestions for relevant plans and teaching strategies based on best practices in language education (Huang, Hew& Fryer , 2022). It is ChatGPT that teachers can use to generate a wide range of educational resources, including lesson plans, games, quizzes, worksheets, and reading materials. This can reduce teacher preparation time while still giving them high-quality materials that suit their students' needs. Furthermore, Lam and Le (2024) pointed out that ChatGPT can be utilized to create resources that meet different learning styles, making the classroom more inclusive. According to Octavio et al. (2024), ChatGPT can assist teachers with lesson planning by providing unique ideas for lesson topics, appropriate materials, and suggested activities for grammar and vocabulary exercises, quizzes, and worksheets. Furthermore, ChatGPT not only provides ideas for lesson plans, but also offers cultural insights and suggests new vocabulary terms and phrases appropriate for various competence levels. Consequently, those researchers confirmed that in terms of time-saving aspects, ChatGPT can save teachers time by creating teaching tasks automatically such as assessment and administration. The study highlighted that the teachers used ChatGPT to alleviate her workload and considered it an indispensable tool for their work. Dornburg and Davin (2024) also claimed that ChatGPT can reduce instructor effort by proposing the lesson planning process. ChatGPT, for example, can quickly offer new and exciting lesson ideas that fit the needs and objectives of students, saving teachers time and effort in class preparation. ChatGPT, when provided with suitable and specific prompts, can assist in creating diverse classroom resources for different teaching needs, reducing teacher stress.

ChatGPT plays an important role in students' study. They consider ChatGPT a personal tutor that answers all questions and gives them feedback (UNESCO, 2023). In fact, it offers students preparations for their different tasks in class and a variety of sources for self-study. ~~Jones and Richards~~ Ngo (2024) with her study on vocabulary acquisition stated that one primary benefit of ChatGPT is to provide learners with conversations simultaneously in natural language when they need suggestions and solutions for their emerging problems in the learning process. By doing this, students can practice and improve their vocabulary, reading and writing skills as well. It is obvious that EFL learners lack of opportunities to interact with foreigners, ChatGPT stimulates learners' interactions in a safe and flexible environment. Moreover, according to Kiryakova and Angelova (2023), students can practice language skills with ChatGPT through 24/7 conversations and dialogues anytime and anywhere, reducing their anxiety but stimulating their motivation, interests, and engagement in language learning acquisition.

A number of recent studies have shown that new technologies such as ChatGPT can help reduce teacher burdens and facilitate differentiated learning, making it a vital resource in modern education. However, the goal of this research is on teachers' perspectives on using technologies such as ChatGPT to benefit their profession. By incorporating these AI capabilities into education, educators can concentrate on creating learner-centered environments while providing fair access to quality education.

Factors Influencing the Adoption of ChatGPT as a Supportive Tool in EFL Lesson Creation

Theoretical Background of TAM and UTAUT

Examining the factors that impact the adoption of AI-based methods, particularly the evolution of ChatGPT, is crucial for equipping EFL teachers with a thorough grasp of how to incorporate ChatGPT into their instructional techniques. The study draws on the Technology Acceptance Model (TAM) (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) as its theoretical foundation. Perceived usefulness (PU) and perceived ease of use (PEOU) are two main components of the TAM to assess technology acceptance (Davis,1989) and social influence (SI) is a factor from UTAUT (Venkatesh et al., 2003). TAM and UTAUT have been widely used to investigate ChatGPT adoption, even though both originated long ago because of their effective assessment and forecasting of individuals' acceptance and utilization of a given technology. To support differentiated learning, there are a variety of research employed the two as theoretical frameworks to investigate ChatGPT adoption. The study of Zogheib and Zogheib (2024) about understanding university students' adoption of ChatGPT, emphasizing the importance of perceived usefulness and perceived ease of use applied TAM to evaluate the students' perceptions of ChatGPT acceptance. Moreover, Polyportis and Pahos in their study of students' adoption of the ChatGPT chatbot in higher education discovered factors influencing the students' acceptance of ChatGPT also based on UTAUT. In EFL teachers' perceptions of ChatGPT adoption, numerous of empirical research have applied TAM and UTAUT such as a study of Mutammimah et al. (2024) assisted teachers in Indonesia and comparable regions in understanding and adopting ChatGPT in English language teaching. This research adapted the TAM framework to investigate English teachers' perspectives on the intention to adopt ChatGPT. The study found that perceived usefulness and perceived ease of use significantly influenced teachers' behavioral intentions to integrate ChatGPT into their teaching practices. The study of Apata et al. (2024) with the topic 'pre-service teachers' perceptions and utilization of ChatGPT in higher institutions using UTAUT theory' also applied the UTAUT framework to assess pre-service teachers' perceptions and utilization of ChatGPT in higher education contexts within an emerging economy. Especially, at the 21st AsiaCALL international conference, many articles used the TAM to assess user acceptance of ChatGPT in English language learning and teaching. One of these was the study by Bui and Luu (2024), which looked at the usage of Chat-GPT 3.5 for vocabulary learning. As a result, these studies found that TAM and UTAUT can be used to more correctly assess teachers' adoption of ChatGPT, providing valuable insights into the factors that drive technology integration in educational contexts.

Factors Influencing the Adoption of ChatGPT

Perceived Usefulness (PU) and research hypothesis

The first factor influencing the adoption of ChatGPT in EFL lesson planning is perceived usefulness, a key component of the TAM to assess technology acceptance (Davis,1989). Perceived usefulness (PU) implies to the degree which users believe the usefulness of technology can enhance their job performance. In the English teaching context, this refers how effectively ChatGPT assists teachers in designing creative and productive lesson plans. Examining the relationship between PU and Behavioral Intention (BI), and Actual Use (AU) in a long run is consistent with exploring EFL teachers' perceptions of Chat GPT's benefits in lesson creation and this exploration informs the development of the hypothesis.

Teachers today face increasing pressure to innovate their lesson plans and cater to different learning styles. ChatGPT will serve as a valuable resource to help teachers strengthen both the

quality and creativity of their lessons. It can generate interesting ideas and design a variety of exercises and activities suitable for different skill levels, aligning with lessons' goals... Zheng and Mahmud (2023) confirmed that ChatGPT is a powerful tool because of its capabilities for planning lessons and for assessment purposes. In addition, most users are likely to use ChatGPT because of its time efficiency and productivity. EFL teachers tend to spend hours writing down a wordlist or create reading comprehension questions, or grammar exercises appropriate to the available passage in the students' textbook or a certain topic from the course outline. With Chat GPT, teachers will be given all necessary vocabulary, reading comprehension questions based on the students' textbook to a wide range of grammar exercises. In fact,-Nguyen (2024) found that with ChatGPT, busy teachers are in favor of using ChatGPT because it helps them generate input texts and create different kinds of test tasks. Thus, ChatGPT helps EFL teachers reduce workload by shortening time for preparations and simplifying lesson procedures, which gains work productivity (Zheng & Mahmud, 2023). With Chat GPT, teachers can spend less time on repetitive tasks and more on fostering interactive, student-centered learning. Moreover, ChatGPT is a valuable tool for collecting information and generating materials appropriate for different learners' levels and learners' needs in different contexts, so Zhou and Li (2023) pointed out that ChatGPT can support important requirements in a mixed-ability EFL classroom context. Zheng and Mahmud (2023) also explained that if teachers provide it with clear instructions including topics, levels, objectives, etc., it can be able to create personalized teaching materials such as a detailed lesson plan, including goals, materials, exercises, and specific activities for the lesson based on learner's levels and interests. Another benefit of ChatGPT is that educators may access a multitude of online materials and current information using Chat GPT. The availability of up-to-date procedurally relevant resources improves the learning experience in a worldwide learning environment, which is why this aspect is extremely helpful (Wang, et al., 2022). It is ChatGPT that can extract main points from passages, generate summaries, offer practice questions and answers, and provide series of grammar exercises and writing tasks with different writing styles, EFL teachers can access updated and varied resources using ChatGPT (Lai, Cheung, and Chan, 2023). Wangdi, Dhendup, & Gyelmo (2023) said that ChatGPT can help non-native English-speaking EFL teachers generate appropriate language materials, verify grammar, and suggest idiomatic terms, enhancing their confidence in giving high-quality lectures because of its academic languages. It was ChatGPT language that Zeng and Mahmud (2023) stated that the language and writing from chatbot is clear, persuasive and well-written.

The correlation between PU and Behavioral Intention to Use (BI) was well-established in TAM technology adoption literature (Davis, 1989), which PU had a direct impact on BI. Within the EFL context, if teachers find ChatGPT a useful tool for creating effective lesson plans, they are more likely to employ it in their teaching practices to improve their work performance (Venkatesh and Davis, 2000). In terms of empirical evidence, Al-Marzouqi et al. (2024) proved that EFL teachers' perceptions of the use of digital technologies strongly influenced their desire to use these tools in their teaching. Similarly, another study of Kostka and Toncelli (2023) found that teachers who recognized the benefits of AI-powered educational tools were more inclined to include them in lesson plans. Evaluation of the relationship between perceived usefulness (PU) and the actual use (AU) of AI tools like ChatGPT is important for educators and policymakers to ensure that these tools are effectively integrated into education. AU refers to how frequently and successfully teachers incorporate these digital tools into their teaching practices. According to the theory of TAM (Davis, 1989), PU directly influences BU, and indirectly impacts AU. It is meant in EFL setting that EFL teachers are more likely to intend to use it and have a habit of using it more frequently when they find ChatGPT a beneficial supportive tool for their lesson creation (Venkatesh and Davis, 2000). It was demonstrated in

the study of Al-Gahtani's (2016) about a variety of AI tools including ChatGPT that PU has a major impact on AU, especially in educational settings. According to the study, if teachers got the infrastructure and support that they needed, they could adopt educational technologies when they thought they were beneficial for their work. If educators perceive a clear connection between Chat GPT's capabilities and their learning objectives, they are more willing to use it too. Wangdi, Dhendup, and Gyelmo (2023) claimed that it is possible to increase Chat GPT's perceived usefulness (PU) and promote actual use (AU) by demonstrating how it might assist in achieving learning objectives. After reviewing the literature mentioned above, it is clear that PU is a significant component of BI, which ultimately affects AU. Consequently, the following hypothesis is proposed as follows:

H1 *Perceived Usefulness (PU) positively impacts Behavioral Intention to use (BI) ChatGPT in lesson planning.*

Perceived Ease of Use (PEOU) and research hypothesis

Perceived Ease of Use (PEOU), the second feature of Technology Acceptance Model (TAM), strongly influences digital tools like Chat GPT's acceptance as well. Davis (1989) highlighted that the more user-friendly technology was, the more likely people were to adopt it. According to Davis (1989), PEOU relates the extent that users thought utilizing a particular digital tool would be "free of effort". This factor is much like Effort Expectancy (EE) in the theoretical framework of UTAUT (Venkatesh et al., 2003). In EFL context of teaching, PEOU has a profound impact on the integration of ChatGPT in lesson creation. This section clarifies how PEOU influences in EFL context of teaching and its relationship with BI and AU. In EFL teaching context, ChatGPT helps teachers not only write content for the lessons creatively but also simplify teachers' work by brainstorming interesting ideas and suggesting tasks, activities, or examples, which reduces teachers' workload and time for lesson preparation because Dornburg and Davin (2024) highlighted how ChatGPT can be a valuable asset for EFL teachers, helping them to create effective and engaging lessons while reducing their workload. ChatGPT even from general prompts can create quick lesson plans with suggested reading passages, questions for reading comprehension checking, and vocabulary and grammar exercises, saving teachers' time for preparation and leave more time for learner's interaction.

An interface's design is crucial for any AI-powered tool, so is Chat GPT. It is easy for users to integrate these AI-powers such as ChatGPT in their lessons creation when it has clear instructions, intuitive interfaces, and simple navigation. According to Lai, Cheung, and Chan (2023), ChatGPT is in "the easy-to-use interface", which provides users with immediate assistance and can be accessed all the time. That explained why Zhou and Li (2023) stated that teachers who wish to include technology in their lesson plans but may not have advanced technical skills tend to choose digital tools with user-friendly interface.

According to TAM (Davis 1989), PEOU directly influenced BI. If EFL teachers find digital tools friendly to use, easy to access, and provide immediate assistance, they are ready to use them as a supportive tool for their lesson creation. Firstly, as in a study from Teo et al. (2019), when teachers find ChatGPT simple to use, it minimizes their worry and perceived effort required to incorporate ChatGPT into their lesson preparation, which increases their willingness to utilize the technology. Moreover, Chou et al. (2022) also agreed that both the attitude employed, and the usefulness of the cognition have an impact on the intention to use. It is strongly related to their willingness to take on this technology that educators believe that AI information technology would improve their future teaching ability. PEOU affects not only BI directly but also AU indirectly. In his research, Davis (1989) determined that if EFL teachers found technology easy to use without sophisticated adjustment, they are not only willing to use

it but also use it more frequently, which increases actual use. Not only are easy-to-use tools installed more quickly, but they are also used for extended periods of time. To fully benefit from ChatGPT in EFL instruction, this constant use is necessary (Venkatesh et al. 2003). Based on the analysis above, it is clear that PEOU is an important aspect of BI that subsequently has an indirect impact on AU. Therefore, the author would like to propose the following hypothesis:

H2 *Perceived Ease of Use (PEOU) positively impacts Behavioral Intention to use (BI) ChatGPT in lesson planning.*

Social Influence (SI) and research hypothesis

Finally, social influence (SI) has an impact on how ChatGPT is used to create EFL courses. According to Venkatesh et al.'s (2003) UTAUT model, this idea is essential to understanding how humans have adapted to and utilized new technologies. SI describes how the people around us—such as our colleagues, peers, or leaders—can impact our decisions about adopting new tools. For teachers of EFL, the attitudes and actions of these influential figures play a significant role in whether they choose to use ChatGPT for planning lessons and teaching. This section focuses on what social factors are, how they influence the adoption of Chat GPT, and the relationship between these SI, BI, and AU afterward. In fact, we live in an era where information technology is widely developed and promoted, particularly in the context of EFL teaching, where our colleagues' attitudes and behaviors can influence our willingness to use new technologies for education. For example, Chou et al. (2022) stated that when teachers found that their peers were using Chat GPT, which was beneficial for their lesson preparation, then teachers were more likely to use it too. Moreover, aspects of culture affect the way individuals adopt new tools. If we live in a society or work in a school where ICT or advanced digital tools are highly applied and recommended, we are in turn encouraged to use tools like ChatGPT (Chou et al., 2022). Support from institutions or schools also plays a key role in the adoption and implementation of these AI tools for education, including ICT training courses, facilities for access, encouragement from school leaders, etc.

Based on theory from UTAUT (Venkatesh et al., 2003), teachers frequently feel pressured to follow the standards that their peer group appreciates. In his research, he mentioned that teachers intend to use ChatGPT if it becomes common among their peers or if educational authorities push it. From other empirical studies, it was assumed that seeing other colleagues, who served as role models, experience successfully using ChatGPT in their teaching would inspire other teachers to adopt the tool (Al-Marzouqi et al. 2024). In terms of the AU of ChatGPT, SI can directly affect whether teachers move from intention to actual application of ChatGPT as a supportive tool for their teaching practices. If teachers can see their colleagues applying innovations such as ChatGPT in their teaching successfully, they will wish to use it more frequently, which creates a supportive environment for implementing new tools for educational purposes (Chou et al., 2022). In addition, Kiryakova and Angelova (2023) confirmed that if the institutions actively engaged these powerful tools like ChatGPT in their school framework that motivate teachers to make use of the benefits of ChatGPT, as a result, teachers would implement it in their daily preparation. Thus, the following hypothesis is developed to examine the effects.

H3 *Social Influence (SI) positively impacts Behavioral Intention to use (BI) ChatGPT in lesson planning.*

These factors (PU, PEOU, and SI) collectively and directly impact BI, the intention of using ChatGPT in an EFL context, and in turn all these factors indirectly impact AU. Considering the final fundamental relationship between BI and AU, it is said that both Davis (1989) with TAM

and Venkatesh et al. (2003) with UTAUT argued that BI directly influences AU; the more users intend to adopt technology, the higher the users' actual use is over a longer period of time. Based on the relationship between these elements as analyzed above, the following hypothesis is proposed:

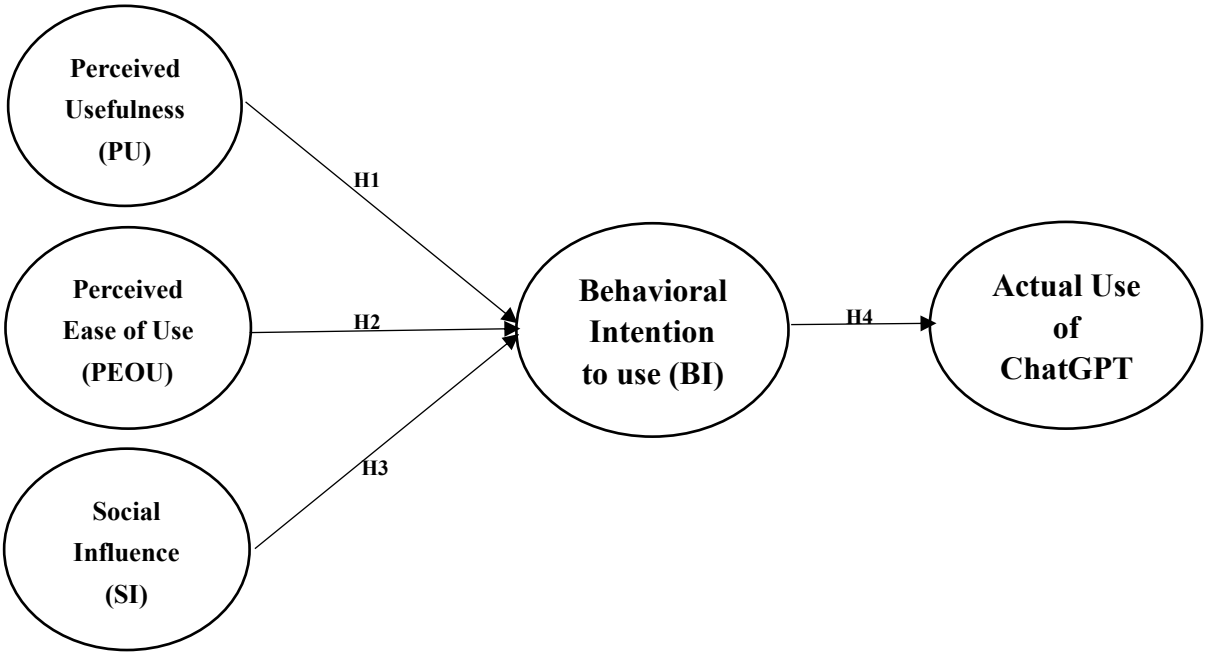
H4: Behavioral Intention to use (BI) positively impacts Actual Use of ChatGPT (AU) in lesson planning.

The TAM and UTAUT model will be used to map the data of the first research question, which is the perceived factors of using ChatGPT as a supportive tool for EFL teachers. Four key factors (PU, PEOU, and SI) can motivate EFL teachers and lead to the BI, individual's willingness to use a technology, and the AU, which is how frequently EFL teachers use ChatGPT as a supportive tool for their lesson preparation.

Proposed Research Model

From the previous studies and based on the Theoretical Background of The Technology Acceptance Model (TAM) developed by Davis (1989) and The Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), the following research model is inherited and proposed.

Figure 1:
A proposed research model



(Source: Author's summary and proposal)

The proposed research model for this study encompasses components from both TAM and UTAUT. This research model includes four factors including perceived usefulness (PU), perceived ease of use (PEOU), and social influence (SI) as determinants of BI, which directly influence BI, then leads to actual use (AU) of Chat GPT. The objective of this model is to offer an in-depth understanding of these factors that impact EFL teachers' adoption of ChatGPT for lesson planning.

Challenges of Integrating ChatGPT in Lesson Creation

AI tools such as ChatGPT offer opportunities in educational settings by providing instant feedback, personalized learning experiences, and access to vast amounts of information. However, when teachers adopt them in lesson creation, they may face many challenges that require thoughtful consideration.

Authentic Language Use and Appropriateness

Arif et al. (2023) highlight issues that relate to ChatGPT's ability to facilitate authentic language use and communication, mostly due to its processing of data and outdated information. While such a model is excellent in generating text, it tends to miss the sophisticated meaning of idiomatic expressions, colloquialisms, and cultural references that are crucial to natural language interactions. This may lead to the flatform being able to create text based on patterns in data, but being unsuccessful in forming new ideas or insights that go beyond existing information. Such limitation could hinder the depth of learning experiences and innovation in the content of the lesson, as educators may rely more on responses rather than encouraging critical thinking and exploration (Clark & Van Kessel, 2023).

AI models which are built on large datasets may also struggle with accuracy and appropriateness in many different linguistic contexts (Graefen & Fazal, 2024). These models seem to lack the capacity to interpret subtle cues, infer intentions, or adapt responses based on situations, making some of the outputs redundant and even irrational to a human user. A study carried out by Khoshafaf (2023) has stated the incapacity of ChatGPT in handling highly technical or specialized content that needs domain-specific expertise. By comparing translation created by ChatGPT and that by human translators, the paper found that ChatGPT often uses simple sentences with overall accuracy, but it cannot have the deep understanding that human translation has. Further, the reliability of ChatGPT is usually challenged by the idiomatic language, in which it failed to decipher colloquial terms in the Arabic culture as the researcher had claimed. As a result, users might get responses that are grammatically correct but culturally or contextually inappropriate.

Data Bias

Generative models can show biases originated from their training data. If the datasets used to train AI models are biased, the responses may reflect and reinforce these biases (Graefen & Fazal, 2024; Crompton et al., 2024). Subtle stereotypes or cultural prejudices could manifest themselves in the responses, and if left unchecked, it could influence learners' perceptions and understanding. Ray (2023) has compiled the biases that ChatGPT might have, including cultural and linguistic ones that may not fully capture the diversity of human experiences. It may also reinforce gender and racial stereotypes from its training data, such as associating certain professions with specific gender or race. When recommending content to users, the model might prioritize information that aligns with users' existing beliefs, contributing to "filter bubbles and polarization" (2023, p.147). Additionally, it is not uncommon to see ideological biases in their answers, leading to content that favors certain political, social, or economic viewpoints and potentially distorting perspectives. Obviously, educators are advised that informed decision based on scientific research is irreplaceable (Graefen & Fazal, 2024), even by powerful devices such as ChatGPT.

Teacher Confidence and Preparedness

Educators' confidence and preparedness to apply AI tools into their teaching practices are pivotal. Crompton et al. (2024) has put forward challenges that many users of technology face, namely concerns about technical difficulties, fear of the unknown and their inability to manage

and interpret AI-generated responses effectively. This apprehension could prevent the adoption and effectiveness of AI tools in improving learning outcomes.

Research Questions

To fulfill the purpose of the study, the survey was seeking to answer the following research questions:

1. What are the perceived factors of using ChatGPT as a supportive tool for EFL teachers?
2. What are the main challenges to the adoption of ChatGPT in EFL lessons planning?

Methods

Pedagogical Setting & Participants

The study was conducted in the context of EFL education (English as a Foreign Language) to investigate the main factors of EFL teachers' perceptions of the adoption of ChatGPT as a supportive tool for lesson creation. This paper took place in a variety of educational institutions ranging from English language centres, international schools, private schools, public schools to colleges or universities. Alam and Mohanty (2023) noted the kind of institution, and its innovative culture can have a big impact on how educational technology is adopted, the various institutions were selected to make sure a diverse representation of teaching environment where ChatGPT acceptance can be integrated.

The participants in the study were 198 EFL Vietnamese teachers drew from a diverse pool of participants from various participating schools, including English teachers from language centres, international schools, private schools, public schools to colleges or universities. Those teachers vary in their age from 22 to 60, gender, and experience of English teaching from newbie teachers to master teacher because educators with varying amounts of experience can offer valuable perspectives on how useful and efficient new technologies are when creating lesson plans. Some teachers are English teacher-to-be whose major is in English teaching, and most of them got a certain degree from Bachelor to Doctorate degree. There was such a wide range of sample that ensure the exploration of EFL teachers' viewpoints of the factors influencing the adoption of ChatGPT because as Hui and Wold (1982) cited in Vinh and Tri (2023) stated, the higher the sample size, the more accurate the estimate is. Of the 219 returned questionnaires, 198 respondents (90.4% of the total respondents) indicated their experience of using ChatGPT. Only the responses from those with ChatGPT experience were included in this study. After removing invalid answer sheets, the remaining 198 valid votes were included in the analysis, processing the following steps.

Furthermore, 3 EFL instructors were chosen to participate in thorough qualitative interviews to gain a deeper understanding of their experiences and viewpoints regarding the utilization of ChatGPT for lesson planning. Details of the sample demographic information was shown in Table 1

Table 1.

Teachers' demographic characteristics (n=198)

Characteristics		Numbers	Percentage %
Teaching contexts	Total	198	
	Language centers	98	49.5%
	High schools	12	6.1%
	Secondary schools	6	3%
	International schools	4	2%
	Universities		
	Others (Ss with major	41	20.7%
	in English teaching)	37	18.7%
Teaching Experience	Total	198	
	Less than 1 year	35	17.7%
	1 – 5 years	107	54.0%
	6 – 15 years	35	17.7%
	More than 15 years	21	10.6%
Teaching Qualifications	Total	198	
	Bachelor's degree	146	73.2%
	Master's degree	37	18.3%
	Doctorate	7	4.5%
	Others (Ss with major in English teaching)	8	4.0%
Usage of AI/ ChatGPT	Total	219	
	Yes	198	
	No	21	

Design of the Study

The research used a mixed-methods strategy. Both quantitative and qualitative methods were employed to investigate the factors impacting the integration of ChatGPT in EFL lesson suggestion. A survey questionnaire for quantitative approach was used to distribute to 198 EFL teachers to validate the proposed hypothesis and measure the variables based on the theoretical framework of the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). Five constructs were carefully selected as reliable indicators, leading to the addition of 17 questions in the survey. Table 2 presents the variables, instruments, and sources of the items.

Table 2.
Details of Questionnaire items

Factors	Items	Instruments	Sources
Perceived Usefulness (PU)	PU1	Using ChatGPT improves the quality and creativity of my teaching materials.	Modified from Davis (1989)
	PU2	ChatGPT makes lesson planning more effective through a variety of interesting, suggested teaching tasks and activities.	
	PU3	ChatGPT saves me time in creating lessons by suggesting related activities, tasks, and exercises.	
	PU4	ChatGPT provides valuable and up-to-date resources for different learning levels, styles and learner's needs.	
Perceived Ease of Use (PEOU)	PEOU1	ChatGPT is easy to use for suggesting EFL lesson plans.	Modified from Venkatesh and Davis (1996)
	PEOU2	ChatGPT offers a user-friendly interface for everyone.	
	PEOU3	I can quickly learn how to use ChatGPT for lesson creation.	
	PEOU4	Using ChatGPT is free and does not require much effort.	
Social Influence (SI)	SI1	My colleagues and friends suggest I should use ChatGPT as a supportive tool for lesson planning.	Modified from Venkatesh and Davis (2000)
	SI2	The success of other colleagues using ChatGPT motivates me to use it.	
	SI3	There is a cultural push in my institution to adopt new technologies like ChatGPT.	
	SI4	My institution encourages and supports teachers in using ChatGPT for lesson preparation.	
Behavior Intention to use ChatGPT (BI)	BI1	ChatGPT presents a valuable opportunity to explore because of its usefulness.	Modified from UTAUT model (Venkatesh et al., 2003) and UTAUT 2 model (Venkatesh et al., 2012)
	BI2	I intend to use ChatGPT for lesson planning because of its usability	
	BI3	I will recommend ChatGPT to other colleagues and friends for lesson preparation.	
Actual Use of ChatGPT (AU)	AU1	I regularly use ChatGPT to generate teaching materials such as worksheets, exercises, role plays, etc.	Modified from UTAUT model (Venkatesh et al., 2003) and UTAUT 2 model (Venkatesh et al., 2012)
	AU2	I often use ChatGPT to prepare for different classroom activities.	

A qualitative research approach was employed, with data collected through a semi-structured interview with three educators experienced in using ChatGPT for lesson creation. The interview focused on the participant's experiences, challenges, and perceptions of AI tools in educational contexts. A thematic analysis was then used to identify recurring themes and patterns.

Data collection & analysis

The analysis was performed using Partial Least Square-Structural Equation Modelling (PLS-SEM) with SmartPLS software 3.0 to estimate SEM models using path models with latent variables. SEM was utilized because of many measurement items versus constructs, and it detects the association between dependent and independent variables concurrently instead of individual testing of correlations (Hair et al., 2017). According to Hair et al. (2016), steps for testing the reliability of the measurement model—the questionnaire items include reviewing Cronbach's alpha (CA), composite reliability (CR), outer loading coefficient. The constructs' convergent and discriminant validity were also examined using average variance extracted (AVE), AVE (Fornell - larcker), and Heterotrait-Monotrait (HTMT). Secondly, the SEM structural model's fit was assessed using the variance inflation factor (VIF), R square value (R^2), path coefficient (β), cohen (f^2), and SRMR. P value in the end was utilized to validate the proposed hypotheses.

Integration of the mixed method and Data Triangulation

This study used a mixed-methods approach, incorporating quantitative and qualitative data to answer the two research issues completely. The quantitative method was used to investigate the elements that influence Chat GPT acceptance in EFL lesson preparation, whilst the qualitative method was used to observe instructors' worries regarding ChatGPT use. Integrating these methodologies results in a more in-depth study of the factors influencing Chat GPT adoption in EFL lesson planning.

To answer research question one, the primary quantitative approach was a questionnaire issued to 198 EFL teachers, which aimed to determine the perceived factors of ChatGPT uptake.

The qualitative phase consisted of semi-structured interviews with three EFL teachers to explore the main challenges associated with Chat GPT adoption in lesson planning, which answered research question two. Quantitative data provided a broad understanding of the relationships between constructs (e.g., PU, PEOU, SI, BI, AU), while qualitative data offered deep insights into specific challenges, such as technical difficulties and data bias. These interview findings enhance the quantitative data by stating how useful and efficient ChatGPT is in lessons creation within EFL teachers' contexts.

Results

Results of evaluating the reliability and validity of the measurement scale:

Table 3.

Summary results of coefficients in model PLS-SEM

Factors	Items	Outer loading	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)	VIF
Perceived Usefulness (PU)	PU1 PU2 PU3 PU4	0.847 0.836 0.840 0.759	0.839	0.892	0.674	1.887 2.063 1.965 1.610
Perceived Ease of Use (PEOU)	PEOU1 PEOU2 PEOU3 PEOU4	0.828 0.800 0.837 0.766	0.778	0.857	0.603	1.683 1.628 1.812 1.260
Social Influence (SI)	SI1 SI2 SI3 SI4	0.835 0.786 0.840 0.859	0.850	0.899	0.689	1.861 1.620 2.477 2.610
Behavior Intention to use ChatGPT (BI)	BI1 BI2 BI3	0.829 0.914 0.894	0.853	0.911	0.774	1.767 2.656 2.420
Actual Use of ChatGPT (AU)	AU1 AU2	0.945 0.935	0.868	0.938	0.883	2.430 2.430

Cronbach's Alpha (CA) Analysis: The proposed research model, which has five factors, needs to be evaluated. Table 3 summarizes and presents the findings of the CA coefficient performed with the SmartPLS 3.0 software, showing that all factors were dependable with CA coefficient, which was greater than 0.7, specifically ranging from 0.778 – 0.868 (Nunnally et al., 1994). As a result, the scale reliability of all variables is appropriate.

Composite Reliability (CR) and outer loading: Table 3 demonstrates that all values of outer loading of each indicator (to see the relationship between factors and their variables) are higher than 0.7 (the smallest value is 0.759). Thus, as confirmed by Ringle et al. (2013), the reliability of the scale is ensured. In addition, composite reliability (CR) is used to examine the inner consistency. The results from Table 3 show that the CR of each factor is greater than 0,7 (ranging from 0.857 to 0,938). Overall, the composite reliability for all constructs is higher than 0.8. Thus, it has proven that the scale has good internal consistency reliability.

Evaluation of the convergent validity of the scale: The results of the study in Table 3 showed that the Average Variance Extracted (AVE) of the factors was greater than 0.5, ranging from 0.603 to 0.883. Therefore, each structure represents good convergent validity of the

measurement scale (Hair et al., 2017).

Evaluation of the discriminant validity of the scale: The results analysis presented in Table 4 shows that the discriminant validity for any latent variable achieved by the square root 2 of the AVE (diagonals in bold) are higher than for diagonal correlations (Hair et al., 2017). In addition, in order to assess the scale's discriminant validity, the study was estimated using the Heterotrait-Monotrait Ratio method (HTMT), and the results showed that the HTMT indicators for all pairs of study variables of the first level factor variables were below 0.9, satisfying the standard conditions (Hair et al., 2016), (Table 5).

Table 4.

Fornell-Larcker Criterion

	AU	BI	PEOU	PU	SI
AU	0.940				
BI	0.709	0.880			
PEOU	0.493	0.655	0.776		
PU	0.571	0.658	0.598	0.821	
SI	0.546	0.614	0.521	0.470	0.830

Table 5.

Heterotrait-Monotrait Ratio (HTMT)

	AU	BI	PEOU	PU	SI
AU					
BI	0.819				
PEOU	0.581	0.790			
PU	0.662	0.768	0.716		
SI	0.633	0.713	0.628	0.548	

The analysis results above indicated that the scale or questionnaire items used in the research model achieved outstanding reliability and validity. Consequently, this scale is going to be used in structural model analysis.

Results of Evaluating the fit of the structural model

Analysis of multicollinearity in the PLS-SEM model: Table 3 reveals that the VIF result falls below 5, accounting for the maximum of 2.656, while the minimum is 1.260, exceeding 0.2. As a result, the latent variables do not occur the multicollinearity, which shows that all factors do not overlap.

Analysis of the adjusted R-squared coefficient: In addition, the suitability of the structural model is verified by the value of R^2. The analysis result shows that the R^2 adjusted value of the model intention to use ChatGPT was 0.595 and the R^2 adjusted value of the model the actual use of ChatGPT was 0.501, which met the statistical standard for model suitability, from 0.33 to 0.67. Therefore, the R^2 adjusted of the model is assumed to be moderate (Hair et al., 2017), as shown in Table 6.

Table 6.

R and R^2 accreditation

	R Square	R Square Adjusted	Results
BI	0.601	0.595	Moderate
AU	0.503	0.501	Moderate

Analysis of Path Coefficient: According to Nguyen et al. (2024), the structural path coefficient or the standardized Beta coefficient from the results illustrated in the path diagram after calculation are the path weights connecting the structures with each other. The results of the analysis in Table 7 show that the impact coefficients in the relationship between the independent variables are: perceived usefulness, perceived ease of use, and social influence.

Evaluation of the classification of influence size base on $f^{2:}$ Then, the author used the classification of influence size index of Cohen (1988), called the impact coefficient f^2. The results shown in Table 8 presented the value of f^2 of the relationship between variables, accounting from 0.124 to 1.013. This result demonstrated the strength of the relationships in the model, with the impact size ranging from moderate to high.

Evaluation of the overall compatibility of a model: Moreover, the quality of the model was also tested through the evaluation of the overall compatibility. The results of the estimated model analysis indicated that the SRMR value is $0.074 < 0.08$, suggesting that this research structural model fits well, as presented in the following table:

Table 7.

Model Fit Summary

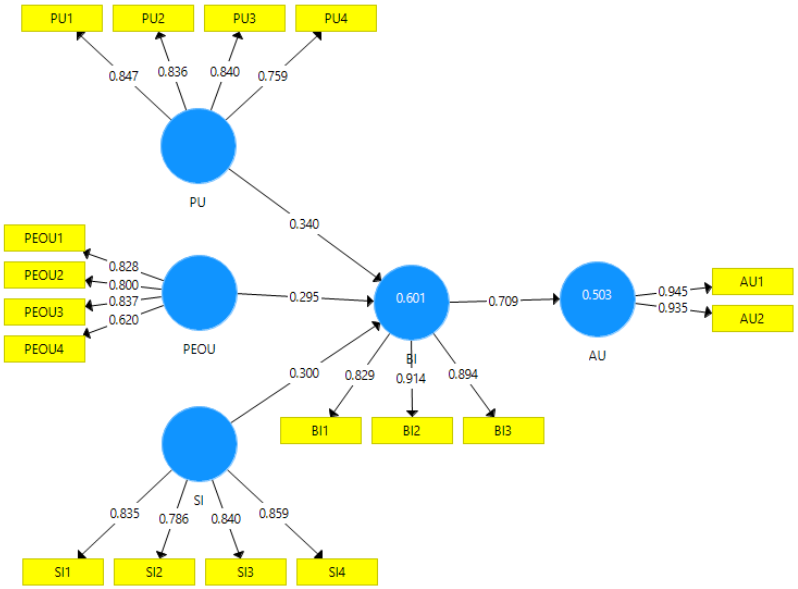
	Saturated Model	Estimated Model
SRMR	0.069	0.074
d_ULS	0.728	0.835
d_G	0.343	0.356
Chi-Square	409.335	418.849
NFI	0.796	0.792

From all the results above, this study has demonstrated that the PLS model confirms that the research model has good quality and fits well with the empirical data.

Results of the measurement model validation:

Figure 2.

PLS-SEM results for the measurement model



Results of evaluating the research hypothesis

Table 8.

Results of evaluating the research hypothesis

Hypothesis	Relationship	Path (β)	P Value	f^2	Results
H1	PU → BI	0.340	0,000	0.176	Accepted
H2	PEOU → BI	0.295	0,000	0.124	Accepted
H3	SI → BI	0.300	0,000	0.156	Accepted
H4	BI → AU	0.709	0,000	1.013	Accepted

Based on the results from PLS-SEM analysis, the results of all hypotheses and relationships between factors in the model are presented in Table 8 as follows:

For all hypotheses from H1 to H4, the results indicated that factors of perceived usefulness (PU) have positive impacts on behavioral intention to use (BI) ChatGPT in lesson planning. Like perceived usefulness, both perceived ease of use (PEOU) and social influence (SI) have positive impacts on the behavioral intention to use Chat GPT. Finally, the behavioral intention to use also positively impacts actual use of ChatGPT (AU) in lesson planning. Also from Table 8, it can be seen that from H1 to H4, the index of path coefficient (β) is 0.340, 0.295, 0.300, and 0.709 respectively; and P value of 0,000 for all hypotheses from H1 to H4, which is less than 0.05 (Hair et al. 2017). Therefore, these findings were consistent with the previous research findings. As a result, all hypotheses from H1 to H4 were supported statistically.

In addition, Table 8 reveals that the path coefficient (β) of three factors such as (1) perceived

usefulness, (2) perceived ease of use, and (3) social influence on the behavioral intention to use and actual use ChatGPT in lesson planning were arranged in order of impact, from highest to lowest: PU, SI, and PEOU.

Results of the interview: (qualitative method)

Complexity of Prompting

One of the main challenges that is prominent from the interview is the difficulty of designing correct prompts that would yield the desired results. It was found that all participants expressed their struggles when communicating their ideas to ChatGPT. Participant 1 emphasized that the effectiveness of ChatGPT largely depends on how well the user can structure their prompts. As they stated, "*You have to be very, very specific with your prompting. And if you're not, you're not going to get the results that you're looking for*." This skill seems to require prolonged practice and training. The participant said that despite having taken some training, they still felt a need for improvement, particularly when creating prompts tailored to specific lesson requirements. Participant 1 further elaborated that while ChatGPT provides helpful suggestions, it does not always fit perfectly with the teacher's expectations or students' needs. For instance, ChatGPT might overestimate what can be covered in a specific lesson duration or it may use language that is too advanced for students. The teacher shared, "*Sometimes the language it uses is a bit too high level. And I need to ask it to make it simpler*."

Participant 2 shared that they frequently encountered problems with ChatGPT misinterpreting their prompts, which led to irrelevant or inaccurate responses: "*When I ask a question, ChatGPT often fails to understand my intent and gives a completely unrelated answer*." Participant 3 stated "*It doesn't meet my expectations 50% of the time because my prompts aren't detailed enough for it to fully understand my needs*." This stems from the fact that the effectiveness of AI-generated content is highly dependent on how well the user craft the prompts. Prompts that are poorly made only results in additional time in double-checking or rephrasing.

Content Accuracy and Depth of Responses

Another key concern raised among all participants was the need to reassess the quality of information generated by ChatGPT. Participant 2 emphasized that relying too heavily on the tool without verifying the content could lead to mistakes passed on to students. They claimed:

> *[…] the issue with ChatGPT's references is a very, very concerning matter. […] when asking questions, for example, about the economic situation of the United States or the economic conditions of Canada and the United Kingdom, the information that ChatGPT provides is often quite biased. Additionally, it lacks specific back-up data such as statistics and percentages, and [even when it doesn't] the figures it provides do not match the facts of those countries.(P2)*

Even more worrying, Participant 2 warned about the fake references found in some of its responses:

> *When creating lessons, there's a reference section with citations. Some of these citations are accurate and can be found on Google, but there are others that are created by ChatGPT. As a result, we end up spending a lot of time verifying the reliability of such pieces of information. In comparison, using Google as a tool is more efficient. So, compared to using ChatGPT, it seems like, sometimes, creating lesson plans without it might actually be better.*

Participant 3 pointed out that while ChatGPT is helpful for creating very general information, it lacks depth in specific topics and struggles to provide reliable, in-depth content. They stated:

> "*For example, if I want to know the biography of a famous person, it will only provide general information that it has access to, meaning the information seems quite basic and doesn't have the insights I'm looking for. I almost always have to find additional details from other sources*."

This challenge is particularly relevant in academic settings, where educators are responsible for delivering reliable and accurate information. In an environment that students can quickly verify information, using unverified, vague, or meaningless information from ChatGPT will only cost the instructor much time and effort in reviewing and correcting it. In such cases, the convenience of ChatGPT offers cannot compensate for its shortcomings.

Technical Constraints and Access Limitations

In reference to ChatGPT 3.5, the Participant 2 noted that the information provided by the model is only updated until late 2022. To access more recent updates, specifically those available in version 4.0, a monthly subscription fee is required, which the participant claimed as something they need to consider. Additionally, the respondent highlighted performance issues, stating that ChatGPT sometimes experiences lags and, on occasion, fails to deliver immediate responses, leading to system shutdowns and inconvenient re-logins. Additionally, Participant 3 observed that after a certain number of chats, the application appears to downgrade to a more limited version of ChatGPT, which is "less intelligent" compared to version 4.0. When assessing their performance, they stated that if Google can be rated at 8 out of 10, then ChatGPT 3.5 would be slightly better, at around 8.5, whereas ChatGPT 4.0 performs at a much higher level, close to a 10. However, after a certain amount of usage, the system reverts to the lower version, leading to dissatisfaction with the quality of responses. As faculty members working in a highly academic context, there is an expectation to provide students with the most up-to-date information. The limitations on access to current information, combined with the cost involved, may render even the most dedicated educators disheartened, leading them to carefully reconsider the use of ChatGPT in their teaching practices.

Ethical Concerns and Resistance to AI

Ethical concerns also emerged as a significant theme. While Participant 1 was less worry about personal data being used by ChatGPT, they acknowledged that many educators fear that their prompts could be used to create lessons for others without permission. Participant 1 further added that there is difficulties in determining whether student work is original or AI-generated. The teacher explained, "we're not sure whether it's actually their work or whether they've had ChatGPT or a similar AI program do the work for them." This has led some educators to revert to paper-and-pencil assessments, as the sole reliable method of ensuring students are completing work themselves. The teacher mentioned that "students are not given access to a computer sometimes to take assessments. It's all done paper and pencil so we know it's theirs."

The rise of AI-generated work complicates the assessment process, and current AI detectors are not foolproof, making it difficult for educators to maintain academic integrity.

> […] but I can say I know at the colleges I work for that that is the case. And I'm hearing at the conferences I'm attending that people are not able to discern whether the students are doing the work. They can tell it's probably not their writing, but they don't have proof because it's so hard to, you know, find ... um … is it ChatGPT or not? The detectors aren't 100%. And then there's programs to cover up that it was written by A.I. So it's like a game of chess. Um, so it's causing a lot of disruption in academia right now.

The same participant 1 also mentioned that some educators refuse to use ChatGPT due to a fear of AI replacing their jobs, despite the potential benefits of AI in streamlining lesson creation. If

AI is viewed as capable of offering similar or even superior insights to those from educators, they might feel their role in guiding students through complex subjects is diminished. Resistance to A.I. may also come from older or more traditional educators who may feel overwhelmed by the need to adapt their teaching methods. The teacher noted that "*for teachers who are, um, maybe older, it might be more daunting for them to think about changing the way they've always done things*." This reliance on familiar methods has been fortified with a complexity in building effective prompts for AI tools like ChatGPT, which are highly prompt-dependent. This challenge highlights the need for professional development to help teachers become more comfortable with AI tools.

Discussion from the quantitative method

The purpose of this study project was to investigate the factors that influence EFL teachers' use of ChatGPT as a support tool in lesson planning. The SmartPLS 3.0 studies validated the significance of these three factors such as Perceived Usefulness (PU), Perceived Ease of use (PEOU), and Social Influence (SI) on teachers' Behavioral Intention (BI) to utilize ChatGPT in their teaching. The findings indicated that all three factors had a positive impact on BI and on actual use (AU) of ChatGPT in lesson development. These findings are consistent with the theoretical framework of TAM with an extension of the last factor of SI, based on UTAUT. These findings are also aligned with previous research on technology adoption, which indicates that teachers will accept the use of ChatGPT if it is useful, simple to use in a user-friendly format, and if they are motivated and supported to use it in their teaching (Davis, 1989 & Venkatesh et al., 2003).

The results also highlighted that PU had the strongest impact on BI, accounting for β, 0.340 and Pvalue less than 0.001. It appeared that EFL teachers perceived ChatGPT as a valuable tool for improving lesson quality and efficiency, particularly in generating creative activities, suggested tasks and exercises for tailored lesson plans. These results are in substantial agreement with those of Chou et al. (2022), who noted that time-saving tools like ChatGPT are attractive to teachers because they allow more space for learner-centered interactions. It was the positive impact of PU on BI that emphasized the practical benefits of ChatGPT in teachers' professional development programs.

Furthermore, PEOU had a positive influence on BI, with a path coefficient of 0.295 and a P-value of less than 0.001. This suggested that teachers who find ChatGPT easy to use are more likely to integrate it into lesson planning. In fact, Zheng and Mahmud (2023) agreed that the simpler and more user-friendly the ChatGPT interface was, the more teachers wanted to test out its capabilities, lowering teachers' pressure. This result is in consistent with that of Venkatesh and Davis (2000), who emphasized the importance of simplicity of use in technology adoption.

In addition, it was anticipated that social influence (SI) also had a positive effect on behavioral intention (BI). The results led us to infer that peer pressure and support from institutions were key factors in EFL teachers' decision to adopt Chat GPT. Clearly, teachers would feel more confident in trying out new technology for lesson planning if they are engaged and supported by their colleagues or leaders (Edmett et al., 2023).

The close connection between behavioral intention (BI) and actual use (AU) indicated that teachers who are motivated to use ChatGPT are more inclined to incorporate it consistently into

their teaching. These findings lend support to the assumption that the four factors perceived usefulness, ease of use, and social support had great importance in adopting technology, especially within the EFL teaching environment (Venkatesh & Davis, 2000).

Discussion from the qualitative method

One of the key challenges emerged in the interview was the difficulties with the prompt creating. For all participants, the inability to communicate their goals to ChatGPT can become an obstacle. To obtaining useful responses from ChatGPT, it is crucial to enhance the specificity of their prompts. Teachers must articulate their needs with precision, specifying the learning context, lesson objectives, desired tone, target learners, and scope of the content. For example, a general prompt such as "Create a lesson plan for 10th-grade students on photosynthesis" may result in a generic output that fails to align with what the teacher wants. In contrast, a more specific prompt, such as "Design a 45-minute interactive lesson plan on photosynthesis for 10th-grade students, including a definition with examples, a group activity and two assessment questions," is far more likely to result in a relevant and feasible response. However, achieving a satisfactory level of specificity requires knowledge of how to translate learning outcomes and complex ideas into concise, AI-readable instructions. Teachers, especially those with little experience with AI tools, may find it hard to see how ChatGPT will interpret their words, leading to their prompt lacking sufficient data for ChatGPT to respond sufficiently. Moreover, to master the prompt-crafting skills, teachers need to invest significant time and effort into trial, error, and practice, which can be overwhelming for those already burdened with heavy workloads. Further, all participants claimed that they usually felt annoyed, to a certain extent, of rewriting their prompts multiple times before receiving a satisfactory output. Poorly constructed prompts only make the lesson planning even more time consuming. Participant 3 complained that, in some cases, it was more time efficient to do the work themselves rather than relying on ChatGPT to build a lesson plan. This reflects that the mismatch regarding outputs and time efficiency between expectations from the users and the reality may affect their decision to use ChatGPT in lesson planning.

Participants' response also points out issues with the output reliability. While ChatGPT can generate content quickly, its responses may include inaccuracies or bias, thus leading to the need for reassessment of information. The unrelated answer of ChatGPT in responding to Participant 2 may not only stem from the fact that the teacher was unable to use proper prompting, but also from the chatbot's misinterpretation of information. This issue resonates with the findings of Graefen and Fazal (2024), who emphasized the limitations of AI models in understanding subtle linguistic nuances. The fact that unnatural responses are more prominent with prompts that involve culture or idioms illustrates this point. Besides, in the process of using ChatGPT, some participants recognize that parts of the answers had been fabricated by the chatbot. ChatGPT is able to create citations and references that seem legitimate, but, when double-checked, are totally fake. Teachers often require credible sources to support their lesson plans, particularly in subjects that rely heavily on research and evidence, such as science and history. When ChatGPT provides fake information, educators may unknowingly insert these in their materials, potentially harming their credibility and reputation. Additionally, Participant 2 gave an example of how ChatGPT failed to provide a practical solution to a business problem found in their country. The response, in this case, had not taken into account the cultural aspects of the country. This created in the participant the feeling that ChatGPT input data had been bias towards certain economies or cultures, thus costing the teacher more time to verify or rectify the lesson. Such experience might agree with earlier research, which found that ChatGPT often struggles with idiomatic expressions and cultural references, leading to irrelevant or superficial

responses (Arif et al., 2023). What's more, although ChatGPT is good at suggesting broad overviews, it is often unable to offer the depth of knowledge and information, especially when it comes to complicated or specialized topics. For instance, a teacher designing content for a linguistic course would find that ChatGPT only scratches the surface when explaining complex notions in Semantics or Syntax. The AI does not seem to be able to tell the difference of a jargon used in a specific field from another. This shallowness only adds another layer of complication to the teacher's planning. In most cases, the teacher usually needs to rely on their own expertise or extra sources to compensate for this lack of depth. This is consistent with Khoshafaf (2023), who found that the tool tends to oversimplify complex content and struggles with domain-specific knowledge. In line with Clark and Van Kessel's (2023) observation, the model's reliance on outdated data limits its ability to provide up-to-date or deeply contextualized information. This limitation presents a significant challenge for educators seeking to create rich, engaging lessons, as they cannot rely solely on AI for insights or highly specialized materials. While ChatGPT is a helpful tool for generating general content, its deficiencies in accuracy and depth suggest that human oversight and expertise remain essential for content creation.

The resurgence of traditional assessment methods, such as in-class paper-and-pencil tests, represents an aching reaction to the challenge of AI-assisted cheating. As the instance presented by Participant 1 illustrates: the teacher shared how students, unable to explain words in their assignments, were penalized "Tell me what this word means. And they can't tell me because they didn't write it." This return to non-digital assessments, while effective in ensuring integrity, limits the use of digital tools and may be seen as a step backwards in educational innovation. This is particularly true when the educator needs to design homework assignments, where teacher's control would be limited, or in-class assessment while preparing their lessons.

The interview also revealed the technical issues, fear of the unknown, and a lack of skills in managing and controlling AI in the classroom, which align with the findings of Crompton et al. (2024). The reluctance of applying ChatGPT in lesson planning may also have its roots in the technical issues that teacher might face. These issues may include unstable internet connections, software bugs, or compatibility problems with tools. It is not too hard to see how disruption arising from these can lead to frustration on the side of the users, and in some cases, the abandonment of the tool altogether. Another problem is the fear of the unknown. Educators might worry that widespread reliance on AI could diminish their role as subject matter experts. If ChatGPT or similar technologies are seen as capable of producing better insights, such as more engaging lesson plans or quicker responses to student inquiries, it may lead to a loss of professional confidence. This fear can be seen in teachers who are less tech-savvy or those who are slower in applying new technologies. They may find it difficult to create accounts, log in, or troubleshoot issues when getting to AI platforms. Others may be unsure of how to explore and utilize the different features of AI tools effectively.

Interestingly, despite the many unresolved issues, all interviewees confirmed that they would continue using ChatGPT for lesson planning in the future. This underscores the necessity and usefulness of generative tools like ChatGPT in supporting educators in delivering engaging lessons for learners.

Discussion of the Integration of the mixed method and Data Triangulation

According to the proposed research model and the results of quantitative findings, the three factors perceived usefulness, perceived ease of use, and social influence had a significant and positive impact on the intention to use ChatGPT and the actual use ChatGPT in a long run. Therefore, to increase the decision in integrating ChatGPT as a supportive tool for lesson creation within the contexts of EFL teachers, the perceived value of the three factors perceived

usefulness, perceived ease of use, and social influence of EFL teachers must also be upgraded. In fact, findings from the qualitative method were used to contextualize and validate the quantitative results, ensuring a deeper understanding of the perceived value of the three variables, where EFL teachers described how ChatGPT improved their lesson quality, reduced their workload, and how they were introduced to try new tool like ChatGPT.

Participant 1 shared how helpful ChatGPT is in their lives:

> *Nothing is perfect. But when I felt stuck, and I don't know how I do with a lesson on … something with grammar, modals or things* like planning ahead for my lesson. *And I was just like, I'm out of ideas. So, I went to ChatGPT and tried a few prompts…I found it helpful, it gave me different ideas of activities I could do for my online and offline class. […] it gave me a good starting point; it really did give me some good ideas.*

Like the quantitative results, qualitative phase also showed how EFL teachers described Chat GPT in reducing their workload and improving lesson quality. when mentioning the key component of TAM, perceived usefulness (PU), Participant 1 confirm that:

> *It will save a lot of time because when I teach, sometimes I would prefer to have illustrations using videos, right? And some videos would not meet my expectations. So, and I used ChatGPT, … […] it would just basically change that to fit what I want. That's really fantastic.*

Participant 2 also emphasized that ChatGPT is beneficial especially for his ESP courses:

> *And as someone who teaches subjects related to Business English, ChatGPT provides highly accurate answers when I need templates or guidance for cover letters and CVs. One remarkable thing about ChatGPT is its ability to offer suitable, logical, and precise responses when presented with scenarios involving email communication or office situations.*

Participant 3 has had positive experience in integrating ChatGPT as a tool for lesson creation.

> *I mainly use it for preparing exercises, but I also utilize it for other activities. One particularly useful feature for me is designing frameworks for things like short courses.*

Moreover, social influence (SI) was further validated by interview responses highlighting the importance of peer recommendations and institutional support in driving adoption. Participant 3 said that "*A teacher mentioned that this application is useful, so I explored it myself, found it helpful, and started using it right away".*

Importantly, significant hypotheses (i.e., H1, H2, H3, and H4) were further explained through the results obtained from semi-structured interviews. When being asked about their intention to use ChatGPT and/or decision to use it for a long time as supportive tool for their teaching practices, Participant 1 claimed that "*if it's gonna make my life a little bit easier as a busy educator who's balancing a lot of things, why not*?"

Participant 2 added more useful information for dealing with emerging challenges such as the complexity of prompting, content accuracy, and depth of responses, exploring from the interview as followed:

> *Over the nearly one year I've been using it, I've felt that it's gradually starting to understand my intentions better, delivering answers that align closely with my expectations.*

Participant 3 also highlighted the decision of continuing to ChatGPT adoption and suggested possible solutions for obstacles while using it:

> *I will certainly keep using it. In terms of difficulties, such as writing prompts, the more I write, the more I learn and acquire expertise tailoring them to my specific requirements. I divide areas that are not visually appealing or time-consuming into parts. For example, I may just have it generate a warm-up section, and then I add my own details to it. I take the same technique with the other parts as well.*

Interestingly, the semi-interview results revealed that, despite some challenges, all three participants decided to use ChatGPT in their teaching contexts to speed up their lesson preparation. Consequently, the combination of quantitative and qualitative results ensures data triangulation and cross-validation (Venkatesh et al., 2016) in terms of the similarity in the findings between the two methods establishes a solid foundation for conclusions related to the adoption of ChatGPT for English teaching. (Nguyen, Nguyen, & Tran, 2024).

All in all, it is clear that the purpose of the research question two with the qualitative method does not aim at exploring challenges for users or EFL teachers to stop using ChatGPT but for contextualizing and strengthening the quantitative one while experiencing emerging obstacles from EFL teachers while using ChatGPT to explore possible solutions to minimize the challenges of ChatGPT using and increase teachers' perception of the factors influencing ChatGPT adoption, leading to the decision on continuing ChatGPT using for their teaching practices.

Conclusion, Limitations, and Recommendations

Conclusion

This study investigated the factors influencing EFL teachers in the adoption of ChatGPT as a supportive tool for lesson creation. The results confirmed that Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Social Influence (SI) are significant factors, which positively affect teachers' Behavioral Intention (BI) to use Chat GPT, and their Actual Use (AU) as well. Zeng and Mahmud (2023) noted that ChatGPT was considered a helpful tool for generating creative lesson ideas and providing teaching materials. Moreover, teachers who felt that ChatGPT was user-friendly were more willing to incorporate it into their lessons. SI also played a crucial role in encouragement and support from peers and institutions that motivated teachers to explore the tool. However, this study remains several challenges that need proper training to ensure effective adoption.

Limitations

Future research should address a few limitations of this study. Firstly, the paper was conducted over a rather short period of time, which hid some important details that fulfilled the value of the study. It was the lack of suggested practical lesson plans of some specific skills with ideas generated by ChatGPT and limited sample size of 198 participants and scope of specific geographical and institutional contexts that reduced the effectiveness of the study. Secondly, this study primarily focused on teachers' perceptions of the adoption of ChatGPT. Future research could incorporate students' perspectives to provide a broader view of how ChatGPT affects both teaching and learning.

Recommendations for Future Studies

The paper shows a considerable research gap in understanding the characteristics that influence EFL teachers' perceptions of using Chat GPT for lesson creation, specifically using the TAM and UTAUT frameworks. The report includes its own proposed research model that shows the relationship between factors influencing the intention to adopt ChatGPT and the actual decision

to use ChatGPT in lesson preparation. While previous studies broadly and widely address AI's integration in education or AI within the students' perception on differentiable learning, there is little exploration of how ChatGPT are adopted in EFL teaching, where challenges such as the complexity of prompting, content accuracy and depth of responses, and technical constraints and access limitations, ethical concerns and resistance to AI, and limited teacher training are addressing to minimize the obstacles when integrating AI into lesson planning, and increasing the usefulness and ease of use of ChatGPT's adoption. As a result, possible recommendations can be given to educators, policymakers, and for further research.

To begin, educators can enhance lesson planning efficiency by addressing these characteristics, allowing them to use ChatGPT to generate engaging lesson plans while saving time for more learner-centered activities. Appropriate training could assist teachers in creating sample lesson plans created by ChatGPT for certain skills such as reading, speaking, writing, grammar, etc. to assess the effectiveness of using ChatGPT on suggesting creative lesson plans. It is quite clear that educators should receive more training on how to develop correct prompts that give ChatGPT more relevant answers. Universities and teacher training programs can apply AI tools in their curriculum, give educators enough exposure to prompts that lead to more effective outcomes. With a specific prompt mentioning a specific skill, lesson topic, student level, class size, lesson plan format, and other additional information that matches our criteria and requirements, ChatGPT can recommend a very clear, inductive, informative, and interesting lesson plan to assist busy teachers when necessary. The following developed a suggested lesson plan generated by ChatGPT for a certain reading skill.

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