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## Perceptions of classroom technology use among adult English learners

Mandy Chien

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Pepperdine University  
Graduate School of Education and Psychology

PERCEPTIONS OF CLASSROOM TECHNOLOGY USE AMONG ADULT ENGLISH  
LEARNERS

A dissertation submitted in partial satisfaction  
of the requirements for the degree of  
Doctor of Education in Learning Technologies

By

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May, 2024

Paula Thompson, Ed.D. - Dissertation Chairperson

This dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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## DEDICATION

What an incredible journey it has been! I am thrilled to have finally achieved this significant milestone. Throughout this adventure, I have relocated for jobs, moving from Florida to Hawaii, then California, and finally to Georgia. I experienced a life-altering divorce, transitioning from a place I called home to being without one. Despite the losses, this journey has been a testament to gaining resilience and wisdom.

The driving force behind my perseverance was my late mother, who imparted the valuable wisdom that "knowledge and a degree are possessions none can take from you." I owe immense gratitude to my colleagues, friends, and family; their unwavering support sustained me through the highs and lows.

To my Pepperdine family, you know about whom I am talking! Our shared journey has been remarkable, and your constant presence and support have meant the world to me. I am very proud of each one of us.

A special thank you to my dissertation committee, particularly my Chair, Dr. Paula Thompson, and committee members: Dr. Paul Sparks and Dr. Alex Brice. Beyond your expertise in guiding me through the dissertation process, what truly impacted me was your unwavering encouragement and belief in my abilities. Your genuine faith in me, unwavering support, and motivating words will forever hold a special place in my heart and mind. Thank you sincerely, from the depths of my heart.

I would like to express my gratitude to my friends and family who were there for me. Special thanks to Eddie, Kathy, Kelly, Mom (Bonnie), Roy Kurowski, S.B., Sophia. Friends from St. Pete FL, Hawaii, Augusta GA, as well as family from Taiwan. Your support has been amazing, and I appreciate each one of you.

Finally, I want to thank God with this prayer:

*Thank you, Lord, for the blessings you have bestowed on my life. You have provided me with more than I could ever have imagined. You have surrounded me with people who always look out for me. You have given me*

*family and friends who bless me every day with kind words and actions.*

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## ABSTRACT

The purpose of this study was to assess adult English Learners' perceptions of using Microsoft Teams in classes. Specifically, the study aims to explore the strength and direction of the correlation between the elements of the technology acceptance model (TAM) and using Microsoft Teams in English language courses. This study addressed the following research question: What are the strengths and directions of the correlations between the elements of the technology acceptance model and the use of Microsoft Teams among adult ELs?

The researcher utilized a quantitative methods approach to investigate the relationship between TAM variables and the use of Microsoft Teams in an adult English course. An anonymous online survey questionnaire based on Alfadda and Mahdi's (2021) research was used in the study through a secure online platform Survey Monkey and also the researcher sent out the link to colleagues to collect data from their adult EL. SPSS will be used to analyze the data using descriptive statistical techniques. The research participants were 195 adult English learners who utilized Microsoft Teams for their English learning during the COVID-19 pandemic from 2019 to 2022. The researcher developed descriptive statistics for the Likert-scale survey items and used SPSS to run Person's correlation coefficient to obtain more information on the relationships between the variables. The study's descriptive statistics findings reveal a strong positive correlation between the effective use of Microsoft Teams and the attitudes and intentions of students regarding its usage.

As the results showed, the positive correlation can be used by educators as well as institutions to get more individuals to use Microsoft Teams as a useful tool for teaching English to adults.

## Chapter 1: Introduction

### Background

According to a report published in April 2018 by the National Center for Education Statistics and data from the Department of Education, the number of English learners (ELs) in schools across the United States is expected to grow significantly in the future due to the increasing population of immigrants and refugees entering the country (Mossaad et al., 2020). Many immigrants come from countries where English is not the primary language, so they need to learn English when they come to the United States. Often families relocate to the United States, seeking better educational opportunities for their children (Khong & Saito, 2014). The rise in ELs has led to new challenges in education, such as coming up with new ways to help them learn and do well in school. These challenges include language barriers, cultural differences, and school policies about with students from different language backgrounds (Jusufbasic & Kenan, 2022).

According to a report from United States Census Bureau (2023), since 2010, there has been a significant increase in the educational level of immigrants. The number of immigrants entering the United States with a college degree has increased with 45.2% of these immigrants having an undergraduate degree or higher. This is an increase of 12.4% compared to the immigrants who arrived in the 1990s. The level of English proficiency among these immigrants can affect the chance of obtaining fair and equitable jobs (Batalova et al., 2014). As the population of immigrants in the United States grows, it is essential to be ready for the cultural and linguistic diversity they bring, especially in the educational sector. To facilitate these increases, scholars are interested in how technology might be utilized to improve language learning (Dehghanzadeh et al., 2021; Parmaxi, 2023; Shadiev & Yang, 2020) and how English language courses can help immigrants meet the language requirements for getting into college or obtaining a job (Kisiara, 2021).

Because the number of ELs in the U.S. education system is growing, new strategies and policies are needed to help them succeed. It is also vital to improve the English language skills of immigrants and refugees for their academic and professional growth. When adult ELs return to school, they frequently confront some problems that younger ELs do not in K–12 schools (Ullman, 2010). According to Lee & Rice (2007), ELs have substantial challenges moving from K–12 to university-level education because they need help such as understanding the more complex and technical academic language (Dutro et al., 2011). According to Lee and Rice, these students may struggle with academic reading, writing, and participating in classroom discussions. One possible explanation for these issues is that many ELs come from different educational systems and may need to familiarize themselves with the academic expectations and practices at American universities (Cordeur & Tshuma, 2019).

Alharthi (2021) talked about the problems EL adults face when they return to school, especially when it comes to academic writing. His research pointed out that academic writers need a good grasp of vocabulary and grammar and an understanding of the structure of academic language, as well as the social expectations associated with it. To cope with these issues, therefore, it was suggested some teaching methods, such as teaching students directly about the grammatical structure of academic writing, showing students how to use academic language, and providing feedback so that students can apply these skills in the classroom.

It is critical to provide academic and social support to adult ELs who return to the classroom to improve their English language skills (Janis, 2013). These students often need help to develop their English language proficiency and may need more confidence in their language capabilities. As a result, educators must design interventions that provide enough support for ELs while simultaneously addressing their unique academic demands (Torff & Murphy, 2020). To resolve these issues, educators must provide appropriate academic, social, and technological assistance to ELs for them to thrive in the classroom.

## Technology for Language Learning

Many scholars are interested in how technology might be utilized to improve language learning. Several studies have investigated how technology can enhance and transform language learning (Dagdeler et al., 2020; Lai et al., 2016; Zhang & Zou, 2020). Since the COVID-19 pandemic's outbreak, educational institutions have incorporated technological tools to ensure the continual delivery of teaching and learning. These tools include online learning platforms, synchronous and asynchronous instruction, video conferencing, and hybrid approaches (Lederer et al., 2021). As a result, the educational technology industry and higher education institutions have been actively searching for effective ways to incorporate technology into teaching to help students learn. The use of technology as instructional and learning tools has increased as educators become more cognizant of the benefits of using technology in the classroom (T.-T. Wu & Huang, 2017; Zielinski, 2017). The educational technology industry is rapidly developing educational apps and software due to the growing need for technology in education (Hirsh-Pasek et al., 2015). Overall, the use of technology to learn a language is likely to increase as teachers seek new ways to teach that will help students learn more effectively.

Technology can provide a wide range of resources for language development (Su & Zou, 2022) that can help ELs improve their English language skills. For instance, online courses and language-learning applications can provide self-paced language-learning (Ceron et al., 2021) possibilities that allow learners to learn at their own pace and in a way that works best for their learning style. These digital resources can also provide ELs with interactive exercises, quizzes, and exams to practice their language skills.

Digital tools can also help ELs, their teachers, and their peers to communicate. Technology such as video conferencing can enable ELs to communicate with teachers remotely so that they can get answers to their questions, give and receive feedback, and engage in class discussions (Hazaymeh, 2020). Additionally, even if a student is not physically present in the classroom, professors can still offer them individualized comments and support. Another big



benefit of using technology in curriculum for ELs is that it can help people who don't know how to use technology get past that barrier (Rahiem, 2020). Many ELs may not have the same resources as their peers, such as laptops, internet access, and digital devices. Schools and educational institutions could provide all students with equal access to technological resources.

When it comes to employing technology to learning English for ELs, there are several proven strategies. *Gamification*, for example, could make learning a language more fun and interesting, inspiring students to keep learning and enhancing their language skills (Azar & Tan, 2020). Advanced technology can give feedback and support that is tailored individually. For example, speech recognition software can evaluate a student's pronunciation and suggest ways to improve it (Evers & Chen, 2022). By making immersive language-learning environments, virtual and augmented reality can help ELs practice their skills in a more active and hands-on way.

According to Lei (2010), two important components in using technology in the classroom are the quality of the applications the instructor chooses, and how the instructor models the technology with students. Although some applications may have been designed for certain purposes, teachers should try to see beyond the primary intent of the applications and to discover different ways of using it. When teachers are trying to apply applications and technology tools in their instruction, they should acknowledge that using the right tools to help students to acquire knowledge is more important than just learning how to use the tools (C. Zhang, 2020). The technology could help ELs by giving them access to a variety of tools for language learning and bridging the digital divide. Integrating technology into education and using it for English learning can improve the learning experience and assist ELs in acquiring the language skills necessary for academic success and achieve their goals. By investing in technology and giving students access to digital resources, schools and teachers can ensure that all students have the help and tools they need to reach their full academic potential.

## **COVID-19**

The COVID-19 pandemic has had a significant impact on the education system worldwide. To keep education going, most U.S. higher education institutions had to close their campuses and switch to virtual learning in 2020 (Bao, 2020). Schools and educational institutions adopting virtual learning options, such as Zoom, Microsoft Teams, or other video conference applications to continue teaching (Beltekin & Kuyullu, 2020; Pokhrel & Chhetri, 2021).

Virtual video-conferencing apps such as Microsoft Teams have created a collaborative and interactive learning environment that improves students' learning experiences. This environment is similar to face-to-face instruction. Microsoft Teams integrates seamlessly with other Microsoft products, negating the need for additional applications or third-party software (Al-Qahtani & Higgins, 2020).

Asynchronous online instruction cannot offer immediate feedback or better communication between students and teachers, but virtual synchronous technologies may help improve learning (Cheung & Doug, 2013). Schools and other educational institutions must continue to offer a secure learning environment for students while adjusting to virtual learning alternatives and ensuring that students and instructors know how to effectively use the software and technology (Rachelinda et al., 2021).

## **Problem Statement**

The literature extensively documents the challenges faced by ELs in academic pursuits, including adults in the higher education setting (Andrade, 2006; Lee & Rice, 2007). Among these obstacles are cultural differences, linguistic barriers, and educational gaps. Even for those with prior higher education experience, the majority of adult ELs require academic English language support, regardless of their education level and available resources.

Yet, the COVID-19 pandemic disrupted traditional face-to-face learning and compelled schools and teachers to develop alternate instructional approaches. To ensure the continuity of

education, teachers were required to utilize applications such as Microsoft Teams, Skype, and Zoom to extend their teaching beyond the classroom through online learning (T. Chen et al., 2020).

The use of technology in teaching English as a second language has become increasingly popular. One area that has been investigated is the effectiveness of technology in English language teaching. According to Al-Mekhlafi and Al-Mashhadani (2018), technology can effectively improve English language proficiency in such settings.

As smartphones and tablets continue to gain popularity, more people use these mobile devices to learn. Mobile device use for language learning is also known as mobile-assisted language learning (MALL). Engaging in educational gaming on mobile devices is a method employed to utilize mobile devices for MALL. Wu (2018) discovered that playing the mobile games helped ELs increase their vocabulary and listening comprehension. Facebook, Twitter, and Instagram are just a few examples of social media sites that can be used for facilitating language learning. According to Yadav (2020) utilizing Instagram for language learning tasks such as posting photographs and creating captions helped learners' writing and speaking abilities in a new language. MALL also includes apps for language learning such as Duolingo and Babbel. Using the mobile app Quizlet helped learners enhance their vocabulary acquisition and reading comprehension in English as a foreign language (J. J. Lin & Lin, 2019). According to Irana et al., (2021), watching YouTube videos with English subtitles helped students' vocabulary and listening comprehension of English. MALL has improved the language skills of ELs (Z. Chen et al., 2020).

Finally, online discussion forums have been demonstrated to improve ELs' writing achievement, perception, and satisfaction (Cao et al., 2022). These studies suggest that technology can be helpful in the EL classroom, improving learners' language skills and engagement. With the shift to virtual learning due to the COVID-19 pandemic, the use of online platforms has become essential in the delivery of English as a second language (ESL)

instruction. Microsoft Teams is one such platform that has gained popularity in adult EL classes. However, the effectiveness of Microsoft Teams in adult EL classes has not been thoroughly studied, particularly in terms of students' perceptions of its use.

Hence, the purpose of this study was to assess adult English learners' perceptions of using Microsoft Teams in classes. Specifically, the study aims to explore the strength and direction of the correlation between the elements of the technology acceptance model (TAM) and using Microsoft Teams in English language courses. This study will address the following research question:

RQ: What are the strengths and directions of the correlations between the elements of the technology acceptance model and the use of Microsoft Teams among adult ELs?

### **Technology Tool: Microsoft Teams**

Microsoft Teams will be the technological tool in this research project. Microsoft Teams, as part of the Microsoft 365 Suite, is a powerful platform for fostering collaboration and communication. Since the outbreak of COVID-19, Teams' popularity has increased because of the rise of remote work and online learning (Alfadda & Mahdi, 2021; Ly et al., 2021; Rababah, 2020; Rachelinda et al., 2021).

Microsoft Teams offers a variety of services that promote communication, collaboration, and group work for students. Chat and videoconferencing tools, file storage, and application integration are among these features. Teams provides a collaborative hub for students to work together on group projects, exchange ideas, and maintain communications with their classmates and teachers. Teams also provides various customization options, enabling students to personalize the platform to their requirements. For instance, they can build channels for specific projects or study groups, set up alerts for critical updates, and integrate third-party programs such as OneNote or Flipgrid to enhance their learning experience. Teams' capacity to offer remote learning is an additional helpful feature (Alfadda & Mahdi, 2021). Students can use Teams to attend virtual classes and lectures, take part in online conversations and group

activities, and get access to course materials such as readings, assignments, and grades. This can help to ensure learning continuity, even during disturbances such as school closures or mandates for remote learning.

Microsoft Teams is a versatile and user-friendly application that allows students to experience positive learning outcomes (Rababah, 2020). It can serve to increase communication and collaboration, facilitate distant learning, and enhance the learning experience overall. It is a good choice for this study and will give helpful information about the subject of the study.

Learning is a complicated process that happens when a person takes in new information or knowledge and combines it with their memories, experiences, and responses to many different things (Papert & Harel, 1991). Microsoft Teams gives students a virtual place to work together with their classmates, making it easier for students to stay in touch and learn collaboratively. Microsoft also has Word, Excel, PowerPoint, SharePoint, and OneNote Class Notebook, which make it easy to connect to Teams (Anette Dieck-Assad & de Monterrey, 2018). Using the app as Class Notebooks, students can compare their notes at the start and end of each study unit. Additionally, students can utilize Teams and Class Notebooks to communicate and evaluate their own and classmates' progress (Everly, 2019). The Teams application can facilitate more meaningful learning processes when use to promote critical thinking (Miarsyah et al., 2020) found that technology applications give students the tools to create their own learning. Previous research has demonstrated that the use of Teams in education fosters critical thinking, encourages students to take ownership of their learning, and enhance students' learning progress (Ivanova, 2017). Through the Teams platform, teachers can also give quick feedback to students, which helps them learn more effectively.

While using Teams for assignments or activities, students may first work separately. Nevertheless, once they have completed and posted their projects, the collaborative and social interactive aspects of the site come into play as they comment on the work of their peers. Even

if students aren't in the same room as their classmates, Teams makes it easy for them to talk to each other and complete group assignments. (Behfar et al., 2010) found that students who worked on projects together with Teams felt more ownership and responsibility. Also, since the COVID-19 pandemic, the use of Teams in education has grown substantially because it makes it possible to learn and work together from far away (Bashir et al., 2021). Hence, Teams can enable both solo and collaborative learning regardless of their location.

### **Theoretical Framework**

This study will investigate the students' perceptions of using Microsoft Teams in adult ESL classes through an existing questionnaire. The analysis will identify the strength and direction of the correlation between the elements of TAM and using Microsoft Teams among adults in an English language course. TAM is the theoretical frame to examine adult ELs in terms of the elements: perceived usefulness (PU), perceived ease of use (PEU), attitude toward use (ATU), behavioral intention to use (BIU) Teams and actual use (AU).

Davis (1989) introduced TAM to investigate user acceptance of technology. TAM was developed from Ajzen and Fishbein's (1980) theory of rational action (TRA; M.H. Lee et al., 2019). According to TRA, it is possible to determine a user's actual behavior by analyzing their prior intentions and beliefs regarding the behavior. Behavioral intention is a significant predictor of attitude, and the effect of perspective on behavior is affected by behavioral intention (Marangunić & Granić, 2015).

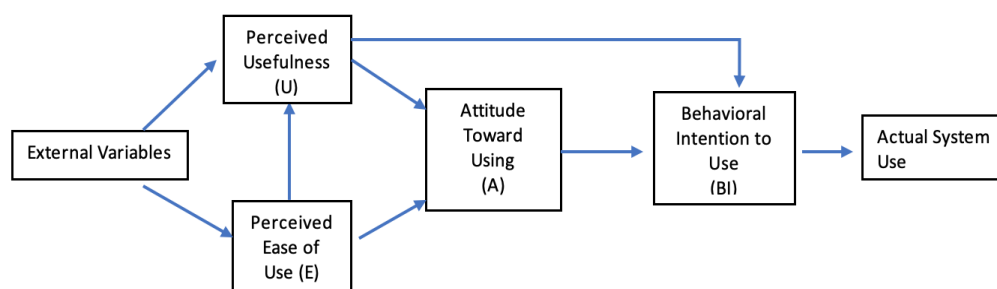
Considering a person's intention when predicting their behavior is essential because their attitudes and beliefs also impact it. If students think that new technology, like Microsoft Teams, can help them finish their work faster or make learning more interesting, they are more likely to use it. TAM predicts how people will use technology based on two main factors: how useful they think it is and how easy it is to use (Alfadda & Mahdi, 2021). Researchers have found that people who know how to use technology are more likely to keep using it. Svendsen

et al. (2013) found that once users find the technology helpful and easy to use, they plan to keep using it.

TAM has become one of the most widely used models for evaluating technology use since its inception (King & He, 2006). Figure 1 shows the TAM. The model contends that to predict a user's attitude toward utilizing technologies such as Microsoft Teams, two personal beliefs—PE and PEU—are influenced by external and system-specific factors. How someone perceives technology affects how they plan to use it, which can be used to predict the actual system. Subjective norms, computer self-efficacy, technical support, ease of use (Chang et al., 2012; Hsu & Ching, 2013), enjoyment, and computer anxiety are some external factors that affect users' experiences. Salloum et al. (2019) said these external factors often explain why people use technology.

**Figure 1**

*Technology Acceptance Model*



*Note.* Adapted from “Does the technology acceptance model predict actual use? A systematic literature review,” by M. turner, B. Kitchenham, P. Bereton. et al., 2010, *Information and Software Technology*, 52(3), p. 472

Therefore, this study will incorporate Davis' TAM model (Davis, 1989) to examine the relationships between these variables: PU, PEU, ATU, and BIU, and actual use among adult ELs' use of Microsoft Teams.

## **Purpose of Study**

Over the past few decades, technology has transformed the way people communicate and learn. It changed how ELs learn and interact with the English language. Researchers have conducted numerous studies to explore the relationship between technology, second language proficiency, and students' technology skills. For example, Barrot's (2016) study showed that technology in the classroom helped ELs learn the language, especially their listening and speaking skills. Cheng & Chau (2013) also found that using technology, especially multimedia materials, helped ELs learn new vocabulary and comprehend what they read. Shin et al. (2021) found that ELs' writing skills improved when students used online tools and resources in language classes.

Technology may assist ELs learn a language better, but it also boosts their confidence and motivation. Tanaka et al. (2015) found that ELs who took part in an online exchange program with native English speakers were more motivated to learn English and more confident in their ability to communicate in English. Similarly, Ahmed et al., (2022) found that ELs were more interested and excited about learning English when ELs used educational games and apps.

Existing research has shown that technology could make a big difference in how ELs learn (Harper et al., 2021). By using the power of technology, teachers can give ELs a more dynamic and interactive way to learn. This helps them improve their language skills, build their confidence, and become more motivated to learn. However, previous research has focused primarily on K–12 ELs and English as a Foreign Language (EFL) students (Crompton et al., 2021; Hao et al., 2021; Huzairin et al., 2020; S. Lee et al., 2022; Zafari et al., 2022). EFL learners are ELs who reside in non-English-speaking countries and do not use English daily. They must take English as a foreign language as a required language course at school.

The purpose of this study is to assess adult English Learners' perceptions of using Microsoft Teams in English language classes. Specifically, the study aims to explore the



strength and direction of the correlation between the elements of TAM and using Microsoft Teams in an English language course.

### **Research Question**

The research question for this study is: what is the strength and direction of the correlation between the elements of the technology acceptance model and using Microsoft Teams among adults in a virtual English as a Second Language course? The variables are the usage of Microsoft Teams and the elements of TAM, including perceived usefulness, perceived ease of use, attitude toward use, behavioral intention to use, and actual use. The following is a list of hypotheses:

- H1: Perceived usefulness will positively correlate with the use of Microsoft Teams.
- H2: Perceived ease of use will positively correlate with the use of Microsoft Teams.
- H3: Attitude toward use will positively correlate with the use of Microsoft Teams.
- H4: Behavioral intention to use will positively correlate with the use of Microsoft Teams.

### **Significance of the Study**

This research is essential for educators, instructional designers, and instructional plan directors who wish to support adult ELs and utilize Teams for their education. This study may yield new insights about adult ELs and their experiences with the Teams application, which can inform the design and implementation of technology-based language learning programs. This study may contribute to the existing literature on the effectiveness of technology applications in language learning, particularly for adult learners, by examining the correlation between the elements of TAM and the actual use of Teams by adult ELs. Ultimately, this research may

enhance the quality of language-learning programs and the English learning experience for adults.

### **Limitations**

This research has several limitations that must be considered when interpreting the results. Adult ELs in the United States who are taking English language classes at a college or university and use Microsoft Teams to learn their course will make up the study population. Therefore, it is possible that the findings do not apply to adult ELs in other countries or to those who use a different technology for learning. In addition, elementary, middle, and high school ELs were not examined in this study.

Second, while several technology models are available, the scope of this study is limited to the TAM model. Thirdly, the study will employ a quantitative research design and use online surveys with closed-ended questions to collect data. This methodology might get more people to take and finish the survey, but it might only give a partial picture of what people think.

### **Definition of Terms**

There are certain terms and expressions used in this study that are defined for clarification.

- **Actual Use (AU):** The degree to which users use Teams after adopting it is influenced by their perceived usefulness and perceived ease of use
- **Attitude:** The general attitudes people have toward a given technology, including their thoughts and beliefs about it.
- **Behavioral intention to use (BIU):** This term refers to how strongly an individual's plan to use a certain system or technology meet with how they actually use it when doing what they need to do (Venkatesh et al., 2003). In this study, it refers a person aims to use Teams as their primary technology tool for collaboration and communication in a work setting.

- English as a second language (ESL): ESL is sometimes interchangeable with a more accurate term of English to Speakers of Other Languages (ESOL) (Yaghjian, 2018). Learners' mother tongue is not English, and they are learning English where English is used as an official language.
- English as foreign language (EFL): EFL refers to learners who are learning English in a non-English speaking country and the purpose of learning is for traveling and communicating with English speakers (Hibatullah, 2019).
- English for academic purpose (EAP): EAP is learning English to write, speak, and communicate in higher education (Flowerdew, 2016).
- English learner (EL): widely used to describe "students who are not yet fluent in English and are still learning the language" (Robertson, 2000).
- Online education: Online education is instruction provided through the Internet to facilitate teaching and learning. It involves students engaging in virtual learning, no matter where they are. Teachers create teaching modules that are meant to improve learning and interaction in a synchronous or asynchronous setting, and the course materials are posted online.
- Perceived ease of use (PEU): Perceived ease of use is how comfortably and effortlessly a user feels when they are using a particular technology (Cheung & Doug, 2013). In this study, it means how comfortable and effortless user feel when they are using a particular technology
- Perceived usefulness (PU): People tend to use or not use an application to the extent that they believe it will help them perform their job better.
- Technology acceptance model (TAM): TAM is used to explain individual users' acceptance of information systems or information technology. According to Davis's

model, it assumes that an individual's acceptance of a system is depended by two major factors: PE and PEU (Davis, 1989).

### **Organization of the Study**

This study is divided into five chapters, each with its purpose and emphasis. Chapter 1 gives background information on the subject being studied and explains why it is important to study. The problem statement identified the problem or issue under investigation. The purpose statement covered the overall goal of the research and outlined the specific research question addressed. The theoretical framework and methodological strategy outline the procedures used to address the research questions and the hypotheses under them. The theoretical framework will have a short introduction. This chapter also defined key terms that are used in the study.

Chapter 2 reviews the literature. This chapter provides historical context and background for the issue explored. The section then thoroughly reviews the literature on the study's theoretical framework, arranged according to theoretical concepts. This chapter demonstrates a comprehensive awareness of the current state of research on the topic and highlights the gaps this study sought to address.

Chapter 3 details the research method that will be used to address the research question, as well as the data sources. Detailed descriptions of the population and sample procedures are provided. The instruments and tools for data collection, including validity and reliability, are discussed. Procedures for collecting data and ethical considerations for human subject's research are explained. There is also a description of the suggested data analysis techniques and ways to ensure the study's internal validity.

Chapter 4 presents the findings. The results will be interpreted to produce key findings to answer the research questions. Chapter 5 summarizes the study, including the research problem, the theoretical framework, the method used, and the most important findings. This chapter also discusses the study's practical and scholarly implications and its limitations. It

concludes with practice implications, recommendations for future research, and closing remarks.

## **Chapter 2: Literature Review**

This chapter examines several significant areas to lay a theoretical groundwork for the study. First, TAM, a theory explaining how users adopt and use new technologies, is discussed (Davis, 1989). The issues ELs face, including their language skills, identity adjustment, sociocultural adjustment, and emotional adjustment, are covered next. In this chapter will also discusses how to use technology for ELs, focusing on Microsoft Teams, online learning, blended learning, and learning a language on a mobile device. The research on the COVID-19 pandemic's effects on language learning are also covered, along with the challenges and benefits the pandemic has brought.

Numerous scholarly resources were used to generate this literature review, including Google Scholar, JSTOR, ProQuest, and other scholarly databases. Most of the research is from peer-reviewed articles and other scholarly sources that present empirical evidence and theoretical frameworks about adult ELs, technology, and language learning. The purpose is to gain a thorough and current understanding of the issues faced by adult ELs in an online context, the role of technology in supporting language learning, and viable solutions to overcome barriers to effective language acquisition.

### **Technology Acceptance Model**

In today's digital era, the transformative effect of technology on our lives cannot be understated. With widespread use extending from social media platforms to shopping websites, it has substantially altered individuals' communication methods. Adopting new software or hardware products can help individuals and teams considerably improve productivity. However, such decisions require thorough research because various factors influence them.

TAM, created by Davis in 1989, suggests that PU and PEU are the two critical criteria that influence a person's intention to adopt technology. The degree to which a person believes that adopting a technology would improve their performance is known as PU, and the degree to which they believe that using technology will be simple and easy is known as PEU. The two

main mediating factors in TAM that eventually affect actual system use are ATU and BTU (Vivek Venkatesh et al., 2014). Because this model was designed to predict individual attitudes towards technology and their actual use of the new adapted technology (Y. Lee et al., 2003) subsequent researchers have used this model for their studies, and it often showed with significant results on using TAM to investigate individuals' attitudes and behaviors towards technology adoption and use of new adapted technology (Ishfaq & Mengxing, 2022; Kemp et al., 2019). Davis (1989) said these two components are the most critical factors affecting how people feel about using information technology. ATU is the extent to which an individual holds a favorable view about using a particular technology. BTU is the degree to which an individual intends to use a particular technology. Actual use refers to the extent to which an individual has used a particular technology in practice.

TAM has been widely adopted in education to understand and predict the adoption and use of technology. TAM has been used in a variety of educational technologies, such as learning management systems, online courses, educational apps, and mobile devices. Z. Zhang et al. (2022) used TAM to examine the factors that influence adult learners' adoption of English language learning using a blended learning approach, including using Microsoft Teams. The study found that PU and PEU significantly influenced ATU and BIU, which, in turn, had a positive effect on actual use. (H. Lee et al., 2019) utilized TAM to evaluate the factors that influence students' intentions to use mobile learning apps. According Lee et al., PU and PEU substantially influenced students' desire to use the apps. Similarly, Fearnley & Amora (2020) used TAM to investigate the factors that influence instructors' acceptance of learning management systems. The study discovered that PU, PEU, and attitude to using the system all substantially impacted teachers' desire to utilize the system.

Other researchers have used TAM to assess the effectiveness of technology-based interventions in education. TAM, for example, was used to examine the adoption and use of an online learning platform in a higher education context (Pal & Vanijja, 2020). According to Pal

and Vanijja, PE, PEU, and attitude to use the platform all substantially impacted students' intentions to use the platform, which, in turn, had a good effect on their learning results. TAM was utilized by Linh and Vu (2021) to assess the adoption and use of a mobile learning app for teaching English as a foreign language. According to Lihn and Vu, PE and PEU increased students' inclination to use the app, which had a positive impact on their English language skills.

Overall, the literature demonstrates that TAM is a valuable theoretical framework for understanding and predicting technological acceptance and use in education (Perienen, 2020). TAM can assist educators and researchers in identifying the characteristics that influence students' and instructors' acceptance of technology and developing ways to encourage its uptake and practical use. Specifically, the model's focus on PU, PEU, ATU, BIU, and actual use can provide valuable insights into how ELs perceive and use Microsoft Teams. This study used TAM to guide the development of effective strategies to enhance adult ELs' engagement and success with Microsoft Teams for language learning purposes.

### **Challenges for ELs**

The two main populations of ELs in higher education are international and immigrant students. Both groups have distinctive identities and traits that distinguish them from one another. According to Andrade (2006), international students are people who enter the country temporarily to attend higher education institutions. They must submit proof of their financial situation when applying to U.S. schools because students often arrive with limited financial support, without family and they cannot work with a student visa. Some international students return to their country after finishing their studies. On the other hand, many immigrant students come to the United States with their families permanently. (Ten Have et al., 2023) reported that there are more than 19 million documented migrants residing in America's borders with Hispanic or Latino migrants making up more than 45% among them. It is common for Mexican and Central Americans to secure paid employment in fields like construction, farming where strong English language competencies are not required (Peri & Rutledge, 2022; Ismiyani, 2021)



Due to restrictions on their student visas that prohibit them from working off-campus, the majority of international students become full-time students, whereas immigrant students must frequently divide their time between coursework and a paid job. Due to their belief in the transformative power of education, their different socioeconomic statuses do not discourage either group from seeking English proficiency.

Regardless of immigration status, students are in the United States to start a new life as ELs. Boafo-Arthur (2014) pointed out that although they originate from various places and cultures, their problems are somewhat similar. The issues with linguistic abilities, identity adjustment, sociocultural adjustment, and emotional adjustment are only a few of these challenges.

### ***Language Skills***

When ELs come to the United States to study, in addition to comprehending and being able to converse in English, reading and writing skills in academic English are also challenging (Janis, 2013). The lack of English language skills leads ELs to experience other challenges, such as limited access to college or university. For example, ELs are required to take courses such as English as Second Language or English for Academic Purpose classes to improve their language skills before they can enroll in college courses. These classes often do not count as credits toward college or university courses (Flink, 2018). It adds a financial burden and extends the length of time to graduate. Younger English learners may be able to provide some language assistance to adult ELs. However, their level of language proficiency may not be adequate to assist with academic language comprehension. The assistance offered by younger English learners to adult ELLs will be limited. Adult learners need to build better language skills to succeed in their academic, professional, and social endeavors.

### ***Identity Adjustment***

Several studies have identified characteristics of adult ELs. Adult immigrant students may find that their identity in the family has changed due to their insufficient command of the

English language. For example, adult immigrants were once decision makers and financial supporters of the family; these adult ELs might need to depend on the younger generation in the family to communicate (Ciriza-Lope et al., 2016; Kanno & Varghese, 2010). Their role as parents, caretakers, and/or authority figures is dependent on the younger generation translating for them (Ciriza-Lope et al., 2016). Adult ELs often turn to the younger members in the family for help with the language and culture because these younger family members have better proficiency in both. Adults who used to have certain control but who feel powerless because of the shift in dynamics experience a change in their identity from independent to dependent (Cerezo & McWhirter, 2012). In addition to their academic challenges, immigrant students also need to adjust to a different academic culture and the consequent limited social interactions in higher education (Brown, 2012; Ciriza-Lope et al., 2016). The lack of English skills magnifies the social challenges of ELs. They hesitate to join the social circle because of the frustration of not being understood and losing their confidence (Arbona & Jimenez, 2014).

### ***Sociocultural Adjustment***

ELs bring their culture into the class and create a small international environment for all the students. These classes are basically multicultural and multilingual. These students encounter students from different countries, and they need to adjust their attitudes and increase their cultural competency toward their classmates. Students need to learn how to work with their peers and participate in a social life that includes different cultures (Canagarajah, 2002). Not only do ELs need to assimilate into the new society but also into their own classes. They need to learn how to adjust their attitudes and values towards their peers' cultures. Ciriza-Lope et al. (2016) pointed out that one of the challenges of adult ELs is to break the language barrier and socialize with target language speakers. Adjusting to life in a new country necessitates remarkable flexibility as individual navigates the various social and cultural changes, and familiarizing oneself with the language spoken in the host country will facilitate effective communication leading to a more positive experience for migrants (Bierwiazzonek & Waldzus

2016). To live sustainably with native peoples, it is important to understand their cultural norms so that any misconceptions are avoided and there is an objective view on what practices might be necessary. This understanding aids in effective adaptation. Dealing with dynamic changes during adjustment can be made easier for immigrations by having a strong support system from family and friends or other influential organizations that provide both psychological as well as material resources. Sociocultural adjustment for immigrants is a complex process that involves adapting to a host country's social and cultural norms. Factors influencing the adjustment process include language proficiency, understanding cultural differences, social support, and discrimination (Bierwiazzonek & Waldzus, 2016). Immigrants fluent in their host country's language and aware of its culture and values are more likely to adapt to their new country successfully. Furthermore, people with support from family, friends, and local community groups find themselves better coping with the unique challenges of sociocultural changes. As a result of discrimination, immigrants encounter significant obstacles to acceptance and integration into their new communities, negatively affecting sociocultural adaptation. As a result, policymakers must ensure they act accordingly by providing assistance and support to immigrant groups as they resettle in their newly adopted homeland. (Hayes et al., 2016)

### ***Emotional Adjustment***

When adult ELs return to school, they not only need to adjust to the new culture in daily life, but also to the culture and expectations of the academic setting. With their insufficient language skills, ELs perceive that they are not connected to their peers, especially native speaking peers, and their voice or needs are often neglected or misinterpreted (Bertram et al., 2014). Some international students may also face discrimination and bias because of where they come from or their racial backgrounds. Other students will judge international students by their religion, culture, and ethnicity (Boafo-Arthur, 2014). Adult learners are also very self-conscious of their mistakes, a critical reason that makes adult ELs feel challenged to acquire English language skills (Cozma, 2015).

There are other challenges when either young or adult ELs attend higher education institutions in the United States, especially when they are attending classes that are designed to improve ELs language skills. Kanno and Varghese (2010) confirmed that there are barriers that prevent ELs from continuing in ESOL or EAP programs or advancing to the next level in either the program or a university. One obstacle is that many ELs are uncomfortable speaking to native English speakers, which causes them to avoid school gatherings. They may be self-conscious about their English language skills and be concerned about being understood with a foreign accent, mocked for using incorrect terms, or that they lack the vocabulary and background knowledge required to engage with English-speaking peers (Kanno & Varghese, 2010). ELs need social context language abilities and linguistic knowledge to communicate with native speakers and to complete academic requirements.

### **Adult ELs and Standardized Testing**

When adult ELs want to pursue a higher education in the United States, they can either take a standardized English language proficiency test such as the TOEFL or IELTS or they can complete EAP or ESOL courses as prerequisites to start taking college or university classes (Douglas & Rosvold, 2018). EAP courses are one of the gateways to higher education for ELs (Douglas & Kim, 2015). To understand and help ELs and instructors in an EAP or ESOL program, researchers have conducted studies (Wallwork, 2016) to provide insights and suggestions because a successful EAP or ESOL program can be a key to ensure the academic success to ELs.

Basically, the primary goal of EAP courses is to help adult students whose first language is not English to have better academic communication skills in academic environment (Todd, 2003; Wallwork, 2016). EAP courses not only develop different methodologies and pedagogical approaches from general English to serve EAP students based on their academic needs (Namaziandost et al., 2020), but also help ELs to transition into college- or university-level courses (Karmelita, 2018). Most colleges and universities offer EAP programs for ESL students

as noncredit, preadmission courses. These courses provide support to international students to gain the language skills they need to take college-level courses (Hong-Nam & Leavell, 2006).

Generally, ELs need scaffolding to improve their language skills in reading, listening, writing, and speaking. According to Jordan (2020), helping ELs to learn and exercise study skills is crucial to EAP course. In addition, all the work should prepare students to acquire competence for social and work situations. As an EL in higher education, there is nothing more important than understanding the words in the textbooks. Since education is also preparing students for their future and one of the essential skills in the workforce is critical thinking skill, EAP courses should incorporate training students to be critical thinkers (Wilson, 2016). This is a skill that is difficult even for native English-speaking students to achieve, so students from countries where critical thinking is not permitted due to political or religious beliefs can be even more challenging. Instructors can provide students opportunities to practice reading and thinking critically. Modeling is also an effective way to help English learning students to master their skills (Spector-Cohen et al., 2001).

In addition to helping students to gain study skills, students in the EAP classes also need to know how to conduct and understand academic research in English (Douglas & Rosvold, 2018) as part of their academic competency. After all, students' final goal is to finish their degree, so they need academic research skills to complete their coursework.

To increase the effectiveness of EAP instruction, researchers should also focus on finding suitable instructional approaches including inductive learning, autonomous learning, authentic material and tasks, and incorporating technology in teaching (Lawrence et al., 2020). Instructors should consider combining these approaches to their teaching according to what the learning objectives are and encourage students to combine different approaches for their learning.

Researchers emphasize the importance of learners' autonomy in the EAP courses. Students can work independently and decide what they want to learn and how to learn it based

on their interests and personal preferences. Lai et al. (2016) claimed that with the help of technology, students are more willing to take control of their own learning outside of the classroom. Students can use technology to search for study materials and to watch authentic videos online to improve their language skills, but teachers need to provide some guidance and support due to students' limited language proficiency (Lai et al., 2016).

When it comes to taking English language classes, ELs also want their language skills to be efficient enough for life outside the classroom. Authentic materials can help students connect what they learn in the classroom to the real world (Al\_Awidi & Ismil, 2014) and provide students practical usage of the language. Because of the abundance of resources online, students can look for authentic materials to personalize their learning and make the learning meaningful to them, further motivating them to learn (Peacock, 1997).

According to Arasaratnam (2016), intercultural competency is a combination of abilities that enable a person to think and behave appropriately with people from different cultures; therefore, people can understand different cultural norms and values, communicate effectively, and show respect for cultural differences. Students in EAP courses come from all over the world and bring their unique cultural backgrounds into classes. Therefore, it is essential that teachers help students expand their horizons on other cultures and learn the values and beliefs of their classmates' cultures (Galante, 2015). Practicing intercultural competency in a culturally diverse classroom can reduce bias and misunderstandings; students will be more likely to respect and be open to their peers from different cultures.

Another important strategy for adult ELs is the ability to transfer knowledge. EAP courses help ELs to get ready for college-level courses in all subjects (Spector-Cohen et al., 2001). Several researchers have studied college-level course preparation (Chostelidou et al., 2015; Hong-Nam & Leavell, 2006; Hyland & Hamp-Lyons, 2002). Students are not aware of that the readings, writings, and other skills they learned from EAP courses are applicable to the subjects in other disciplines (James, 2016). James (2016) pointed out that learners either do not

think that they have acquired the knowledge to transfer what they learned from EAP classes to other subject classes, or they believe what they learned in EAP classes does not help in other subjects. For example, the participants in James' research believed that writing assignments for an EAP class were not applicable to writing a history report. In EAP classes, EL students often learn literacy skills, such as using graphics to help their comprehension of the text passages (Tang, 1992), and it is a skill that ELs can apply to other subjects (Carrier, 2005).

### **Adult English Learners and Higher Education**

When having a higher education degree offers the potential promise of getting a better job, it can lead to people getting a higher paying job (Merrill, 2014). Thus, it might be one of the reasons that attracts adults to return to school to get a higher degree or improve their professional knowledge. Adult learners have their unique characteristics. Because of the growing adult English learner population (Bengo, 2020) and the unique characteristics of adult learners, institutes and instructors need to have a well-designed program and instruction for adult learners to continue their education (Dahman & Dağ, 2019). Dahman and Dağ's (2019) stated that motivation, attitude, and anxiety have a significant influence on whether the adult ELs will keep going back to their course or not. Even when adult learners are more motivated than younger learners, it is imperative for educators and school personnel to provide proper emotional support and assistance to adult learners (Cox, 2012).

Adult learners often face obstacles that prevent them from going back to school. For example, adult learners have pre-existing commitments to work and family, and they also have financial issues that they must consider. Adult students are not only responsible for their schoolwork but also for their family. Single parents may need to pay extra money for a sitter so they can attend night school. Some students need to take care of their elderly parents because they are the only family from whom they can get help. When students encounter these life problems, they need strong support and understanding from their instructors to help them complete their courses. Dahman and Dağ (2019) also pointed out the students with a positive

attitude stay in school and complete their courses, but students with a negative attitude have higher dropout or withdraw rate. Therefore, some classes or instructors are more accommodating to adult learners' schedules and try to support them with flexibility and encouragement.

The decision of adult English learners (ELs) to continue their education is significantly influenced by their financial need (Păun & Sava, 2019). Many adult students' daytime jobs prevent them from attending classes during the day, which means they must attend night classes or complete prerequisite courses before enrolling in their desired program. However, these options often require more time and money, which can burden adult ELs with financial obligations such as rent and bills. Consequently, the cost and time commitment may lead adult learners to drop out or quit school. In addition, many adult students have limited financial resources and cannot afford the high cost of tuition, textbooks, and transportation. Additionally, they may have less access to financial aid, scholarships, and grants than traditional college students. Stress and anxiety can result from a lack of financial resources, affecting an adult learner's motivation and determination to remain in school.

Therefore, financial aid programs, such as low-interest loans, grants, scholarships, and work-study programs, are crucial for adult students pursuing education, as they can provide funding for tuition, books, and other education-related expenses. Employers can also support their employees' educational pursuits by offering tuition reimbursement programs and flexible work schedules. Providing financial assistance to adult ELs is critical for their academic success, as returning to school often poses significant financial obstacles. With the help of institutions and employers, adult learners can overcome these barriers and achieve their educational and career goals.

Merrill's (2014) research emphasizes the importance of support staff and instructors in assisting adult learners in persisting in their studies. The study reported that the support students received from staff and instructors play a significant part in their decision to continue



attending the same school or program. This assistance may include navigating financial aid applications or connecting students with external funding sources.

Adult students frequently return to school to advance economically and socially after gaining work and life experience (Carter, 2000). These students, however, may be able to balance their financial obligations with the demands of school if they receive the necessary financial assistance. Adult learners can better concentrate on their studies without having to worry about money if institutions and employers provide financial assistance.

Overall, financial support for adult ELs is critical to their academic success (Saboor Hussain et al., 2020). This assistance can help students overcome financial barriers, stay in school, and achieve their educational and career goals.

Adult learners differ from younger learners in their maturity and motivation levels. Their interactions with younger traditional learners often bring a different perspective and create opportunities for knowledge sharing. Adult students typically participate in classes for a specific reason, such as to gain knowledge or skills linked to their jobs that would provide them a competitive edge and raise their chances of getting promoted. According to academics (J. C. Chen, 2014; McDonough, 2014; Merriam, 2001) adult learners are more self-directed and in charge of their education than younger students. They favor individual study and possess a special aptitude for using past experiences as learning tools.

Furthermore, according to (Roe, 2022), learning for adult learners is more effective when it involves practical exercises that are related to their employment or call for the use of problem-solving techniques that are applicable in the real world. As a result, teachers must create classroom activities that are in line with the students' skill requirements. Due to their distinct learning needs, teaching adult learners involves different techniques and strategies (Mahan & Stein, 2014). The ultimate objective of adult education is to address the needs of adult learners by encouraging personal autonomy and self-direction through an effective curriculum, in addition to having a successful program (Merriam, 2001).

To teach adults effectively, teachers must provide a collaborative curriculum that is learner-centered, self-directed, and task-oriented and that supports an environment where students may use their real-world experiences to relate their learning (Auerbach, 1993). Instructors can fulfill the specific learning needs of adult learners and support them in achieving their objectives by creating courses that incorporate practical exercises and real-life problem-solving abilities. In conclusion, instructors must modify their teaching techniques to properly address the demands of adult learners since they bring distinct views and motives to the learning environment.

### **Technology and Language Learning**

As educational technology is fast growing, it changes both the teachers' and learners' experiences. Government, industries, and universities invest considerable funds in the development of educational technology to create better applications for educators and enhanced learning opportunities for students (Ankrah & Al-Tabbaa, 2015). There are many educational technology applications, including but not limited to games, online discussions, video/audio interaction, augmented/virtual reality.

A number of scholars have carried out empirical studies regarding implementing technology in classroom instruction (Henderson et al., 2017; Khanlari et al., 2017; Papademetriou et al., 2022; Sert & Boynuegri, 2017). These studies not only stressed the importance of technology, but also the benefits of using technology in the classroom. Henderson et al. (2017) stated the benefits of using technology in learning in their research. They found that students believed that technology made their work efficient because some technology tools do not restrict students to a specific location. They also had unlimited access to their learning materials for studying, especially when technology can provide a digital recording of the learning materials, instructions, and lectures. They also pointed out how technology tools can support students to complete their assignments with functions such as typing, editing, spelling, and grammar.

With the fast-paced growth of educational technology, some researchers are interested in how technology and its applications can motivate students' learning and interaction. Technology applications raise students' interest in options of tools. In addition, technology provides learners a place to build a learning community where they feel safe to share their stories and feelings and grow their confidence by accomplishing the class projects. Using technology to motivate students' learning is not new to language instructors. Researchers have identified that technology tools and applications, such as iPads, blogs, Blackboard, and Wikipedia, increase students' motivation (Papademetriou et al., 2022).

The use of technology can also promote independent learning. Learner autonomy involves individuals being aware of their educational needs, preferences, and learning styles. With the help of technology, students can reflect on their actions, progress, areas for improvement, and personal development. Teachers can support and guide students in taking control of their educational journeys by gradually reducing their direct involvement. By assisting students in developing their ability to learn independently, teachers are instilling students with valuable skills. These students are likely to demonstrate innovative thinking and higher levels of engagement. Autonomous learning empowers students to customize their educational experiences based on their unique academic interests and learning styles while monitoring their progress. Prioritizing learning over teaching and placing students at the core of the educational process, autonomous learning is a crucial skill for adult learners. Qi (2019) and Kember (1997) suggest that students can acquire the knowledge and skills necessary for lifelong learning and continuous growth when instruction shifts from teaching to learning.

Lai et al. (2016) found that technology can also promote autonomous language learning when students' learning was not in the classroom. For immigrants, it is unavoidable for them to become lifelong language learners. They must keep learning English for the rest of their lives when they live in an English-speaking country. Being autonomous learners means the students make the decision on what they want to learn and how they learn. They take responsibility for

their own learning. Today, new technologies offer unique abilities to accomplish this task with greater success.

Instead of dull memorization of vocabulary, language instructors can utilize applications to help students to increase their vocabulary by using some applications such as playing games with their electronic devices (Wu & Huang, 2017). For example, Wu and Huang (2017) pointed out that students' reactions were positive, and their learning was motivated when games were incorporated into their learning. In their research, they also found the applications provided diverse learning platforms, which increased the engagement and interaction; hence, the boring and repetitive memorization of vocabulary became an exciting, self-monitoring, and self-satisfying activity.

Even with positive results from playing games in language learning, McNeil (2018) pointed out it is essential to teachers and students to be ready for this new way of instruction. Some instructors and students don't believe that digital games can enhance learning. Teachers need knowledge to design students' activities to accomplish the pedagogical goals and also to boost their expertise on gaming experiences.

Technology developments have changed how languages are taught and learned. One of the essential teaching principles for learning a language is that teachers and students should be able to create and access authentic materials. According to Chinnery (2006), Kessler (2018), Richards (2015), and Shadiev et al., (2015), technology has made it possible for students to practice their language abilities in settings where they can interact with real-world speakers of the language. Ozverir et al., (2016) found that using technology to learn a language can encourage using authentic resources, which is beneficial for learning a language.

The application of augmented and virtual reality is one of the most exciting developments in educational technology. Liu & Tsai (2013), Ruiz-Ariza et al.(2018), and Singh Sidhu et al.(2017) all demonstrated the effectiveness of augmented and virtual reality in language learning. With the aid of these technologies, students can fully immerse themselves in

virtual settings that replicate real-world linguistic situations, making for a more engaging and participatory learning environment. Language learners can practice their language abilities in simulated real-world circumstances utilizing augmented and virtual reality, which improves their language competency and increases their confidence in using the language.

Technology has transformed language learning by giving students access to authentic resources and engaging tools that improve their language learning process. Henderson et al. (2017) focused on how students use technologies to help with their schoolwork and communication. Students explore and find the best applications according to their preferences and utilize the applications to finish tasks. Students tend to use technology as a means of handling their work instead of using it for increasing their knowledge. For example, students may use Google Docs for collaborating with peers. They may also use YouTube to review course content. Some students may use Facebook and Twitter to brainstorm subjects and ideas with their friends.

### **Mobile Technology**

With the increasing use of mobile devices, learners can access language learning resources and communicate with their peers and instructors anytime and anywhere. This ease of use and flexibility promote greater involvement and participation in language acquisition, resulting in better learning outcomes. Mobile technologies have become integral to language learning, offering many benefits beyond completing tasks and social interaction. According to (Gangaiamaran & Pasupathi (2017), mobile technologies can boost students' listening skills, whereas Saidouni & Bahloul (2015) discovered that they could improve speaking skills. Mobile technology can help with writing and reading skills, according to Ravichandran et al. (2017) and Al\_Awidi & Ismil (2014). Mobile technologies have also helped language learners with their pronunciation (Fouz-González, 2017; Saran et al., 2009; Segaran et al., 2014). Several mobile apps have dictionaries to help language learners learn new words (Rahimi & Miri 2014; Segaran

et al., 2014; Q. Wu, 2014). Some short message service technology (Abadikhah & Rastegar, 2016) has been shown to help language learners learn new words and phrases.

Technology can help students' language proficiency while also advancing their cultural knowledge. Technology can give students access to real materials and tools that foster cross-cultural understanding, according to Angelova and Zhao (2016). For instance, cultural simulations and virtual exchange programs can assist students with experiencing various cultures and developing a greater understanding of them. Applications for augmented and virtual reality, online learning, and mobile learning are some of the most popular technologies utilized in language instruction. Thanks to these technologies, students now have access to many tools and materials that can improve their language learning process.

According to Al-Adwani and Al-Fadley (2022), mobile technology-supported language learning via Microsoft Teams improves students' language proficiency and motivation. They discovered that learners who utilized mobile devices to access language learning resources and participate in online discussions via Microsoft Teams improved their language skills significantly and were more motivated to learn.

### **Mobile Assisted Language Learning**

In Xin et al. (2022) research, it says the number of smartphone users worldwide is projected to reach 7.7 billion by 2027. Smartphone technology companies see the growing user market and are fast developing smartphone applications to keep up with the trend. Therefore, with the advanced development of smartphone technology, the capabilities of a smartphone are beyond just a communication device. They now function as a computer—for example, browsing websites, streaming videos, and gaming. Besides that, a smartphone also can be used as a portal for multimedia resources Sandberg et al., (2011), as well as take pictures, and create videos (Rahimi & Miri, 2014).

Due to the rapid development of mobile technology, the ways students gain knowledge and teachers deliver their instruction have changed (Rahimi & Miri, 2014). Researchers have

studied a variety of mobile applications to aid English language learning (Chinnery, 2006). They suggested that using technology is very important to second language learners, especially using mobile devices. When a mobile device is used for acquiring knowledge, students are applying mobile learning in the study (Sandberg et al., 2011) with mobile devices such as smartphones and tablets (Ho, 2018). Flexibility in time and location is one benefit of using mobile technology (Foomani & Hedayati, 2016). Students and instructors can be involved in both formal and informal learning experiences (Kacetl & Klímová, 2019). Mobile learning removes the constraint of learning in a physical location and can enable learning at a student's time and convenience. With a mobile device, students can access the instructional materials any time they want, and collaboration between students can also happen at any time.

Several studies pointed out the impact of mobile-device technologies on students and teachers (Andrei, 2019; Godwin-Jones, 2016; Golonka et al., 2014; Li et al., 2016; Nalliveetil & Alenazi, 2016). Mobile technologies can make learning more personal and flexible than face-to-face learning. Mobile learning is when learners are obtaining and sharing their learning materials and instructions through electronic portable devices (Alsaadat, 2017). As devices become more affordable and sophisticated, educators are seeing the benefits of using mobile technology to assist with learning (Rahimi & Miri, 2014), and developers are seeing the need for better mobile technology applications in the education field.

The idea of mobile learning is to take advantage of its convenience and accessibility. If learners have Wi-Fi/network connection on their mobile devices, they can learn whenever and wherever they want. Due to the affordability of mobile devices, there is an increasing number of educators and students who are using smartphones for educational purposes in K–12 schools, higher education (Samuel Finch et al., 2021) and different disciplines.

More studies are focusing on the impact of mobile learning on language education. In research on mobile learning in higher education, Saidouni & Bahloul (2017) found that both students and teachers have a positive attitude toward using mobile devices to enhance

language learning experiences. Moreover, some studies showed how educators utilize mobile technological applications to augment students' learning especially in language learning (Alsaadat, 2017; Bozdoğan, 2015; Brody & Peña, 2015; Cho et al., 2018; Hwang & Fu, 2019; Patten et al., 2006; Segaran et al., 2014). These technologies assist students' listening, writing, reading, and speaking skills, as well as vocabulary retention, and extend students' learning outside of the classroom. As mobile devices become more sophisticated and advanced, handheld devices such as mobile phones and tablets allow learners more options for how and what they want to learn.

Wong et al. (2013) pointed out that the cultural backgrounds of participants impacted their perceptions of MALL. Hsu also mentioned that affordability was a very important element that affected the perception of MALL. Despite the various culture backgrounds of participants, the result of Hsu's study was positive. Learners were pleased that MALL could provide them with authentic materials, which motivated them learn.

The commonality and accessibility of mobile devices have pushed some teachers to accept mobile learning in their classroom. Some teachers are not comfortable changing the way they have been teaching for most of their educational career to learn something that is so foreign to them. However, to improve students' learning experiences, instructors need to acquire basic knowledge of technology tools so the technology applications can work effectively with students and both teacher and students can gain confidence using the tools. It takes additional learning and preparation work on the teachers' part (Pascual et al., 2018). Additionally, their role as a teacher might occasionally change to a learner in the classroom because students are more skilled in operating the devices than the instructors, and the role changing might cause the instructor to feel uneasy. Instructors can also feel helpless when there are technical issues during instruction (Hughes et al., 2010). Despite the extra work and discomfort that teachers may face while implementing MALL into their instruction, researchers conclude that instructors generally have a positive attitude towards MALL (Dağdeler & Demiröz, 2022; Mulyawan &



Resmayani, 2022;Tra, 2020). Instructors like mobile applications' open access for them share their materials with their colleagues and students (P.L. Liu & Chen, 2015), as well as to keep learning from being restricted to the classroom (Oz, 2015).

Students enjoy the fun and interaction that mobile applications offer (Lin & Yu, 2017). Chen et al., (2019) found that students who use mobile applications to learn vocabulary had a higher retention rate than students who only use definitions and images. Students noticed that when they used the mobile application to learn new words, the images, sound, and animation made their learning more interesting and effective (Berns et al., 2015). Students also enjoy the variety of tools from the mobile applications for being creative (Dadakoğlu et al., 2022) in their schoolwork. Instructors can create assignments with audio and video recordings instead of text only, and students can make a film or multimedia presentation in a real-life situation (Tayan, 2017). With mobile internet connectivity, students can also actively collaborate with their peers with no limitation on time and place (Lai & Zheng, 2018).

Not only do mobile technologies extend students' learning to the outside of the classroom, they also build a student-centered learning environment. The advanced mobile technologies give students control over what and how they want to learn and share (Shadiev et al., 2017) and motivate students' autonomous learning (Oz, 2015). Overall, students offered positive feedback on using mobile devices for learning. Mobile devices are great tools that can provide learners access to unlimited resources, and students can explore knowledge based on their own interests to become active learners (Oz, 2015).

Some researchers are exploring what needs to be addressed as more instructors and students are using mobile applications for learning (Oral & Gök, 2021). For example, creating or using applications with which are easier for students to navigate and interact, or exploring how to design the contents that can be more engaging and interactive to enhance students' learning experience through mobile applications. Dashtestani (2018) pointed out some of the cautions regarding mobile learning. In the research, it stated various advantages from mobile learning,

such as collaboration among students and instructors. Mobile applications also give students a place to express themselves, be creative, and be the master of their learning. The researchers also bring attention to what needs to be addressed in mobile learning. For instance, learners find some applications do not have interesting content, and their learning objective cannot be matched by working with the application (Starbird et al., 2022). Mobile devices have smaller screens and a slower internet connection than computers, and that can cause learners to have trouble working with it for a long time (Lai & Zheng, 2018). Since students can find their answers on the website through their mobile device, they do not believe they need help from their peers or instructors (Lai & Zheng, 2018).

Shah & Shah (2018) pointed out that it is easy for students to lose interest in using applications to gain knowledge when they no longer believe the application is new and exciting, especially when students can't track their learning due to poor design. Lai (2015) found that it is imperative that teachers understand that even with a user-friendly mobile application, students still need their instructors to demonstrate how to use it. Teachers must not forget to demonstrate how to effectively use applications, help students understand the purpose of using the apps, and foster meaningful learning (Bai, 2019).

### **Online Learning**

To make it easier to access education, educational institutions offer virtual courses for individuals who cannot attend physical establishments due to various factors such as time constraints, geographical limitations, familial responsibilities, health concerns, or disabilities. The advancement of technology and the implementation of well-designed programs have captured students' interest, encouraging their active involvement in online classes. Furthermore, there has been a noticeable rise in young adults (aged 17 to 25) opting for nonresidential, nondaytime, and occasionally intermittent learning experiences while simultaneously juggling work and parenting duties (Kasworm, 2018). Given the popularity of online learning, educational institutions recognize that technology can speed up information sharing. Online learning

requires learners to develop their learning experience by using online tools. Because learners see the unlimited learning resources that the internet can provide, almost 7 million students were taking at least one online class in postsecondary education by 2014 Allen et al. (2016). Online learning has shifted from traditional, on-site, face-to-face instruction to virtual, collaborative, synchronized or asynchronized learning. Wen et al. (2020) Kim et al. focused on online learning technologies and found that an online learning platform has positive effects on students' social connection and motivation. Other research indicates online learning can increase students' autonomous learning (Deymi-Gheriani, 2016; Ho, 2018; Zanca, 2019). Online learning requires learners to be self-directed and self-regulated. Even with positive results on the satisfaction of online learning from students, this presents a challenge for students when they are in an online learning environment (Sun, 2014). To have a successful online learning experience, learners' behaviors are essential. For example, students need to reflect on their learning through discussion forums, plan their life around their courses, commit to a schedule, and keep track of their own work and progress. Online learning platforms often include an asynchronous discussion section for students to participate in their peers' work (Thomas & Thorpe, 2019). Ideally, it should open the opportunity for students to interact with their peers, but the reality is that students actually respond only to certain peers. Collaboration and collective experiences may not happen between peers as expected (Sun, 2014). Students knowing that their instructors are there to assist their learning is critical to online learning. This requires instructors to invest more time and energy into their instruction and does not eliminate the challenge of online learning (Thomas & Thorpe, 2019).

Mandernach et al. (2012) found that online learning is not good for every subject, and not all the instructors can teach online courses effectively. Despite the numerous benefits of remote learning, it is imperative to be aware of the challenges and difficulties. Due to the recent growth of educational technology, online education encountered limitations during early research. Significant disadvantages included the lack of face-to-face interaction between

instructors and students (Sun, 2014), which led to student frustration and discouragement when they encountered delays in timely assistance (Huang et al., 2016). According to Zhang and Lin (2020), students do not perform as well as they are expected to in online courses. Students also believe that online courses are easier than in-person courses, so they don't study as hard to pass the course. Schoenfeld et al. (2020) indicated that student grades in an online course are poor compared to grades in face-to-face courses. Chirumamilla et al. (2020) pointed out that instructors have concerns about whether their students complete their online assignments by themselves and take their tests without cheating.

### **Blended Learning**

With the increasing availability and affordability of technology, more educators are combining online and offline features in their instruction. Blended learning, also called hybrid learning, appears to be the favored approach by a lot of instructors (Huang, 2019). In a blended learning environment, students get instruction through online synchronous or asynchronous learning sessions as well as face-to-face learning (Wang et al., 2019). For adult ELs, not only do they want to gain academic language through English language courses, they also want to learn social aspects of the language so they can communicate with their English-speaking co-workers effectively.

Blended learning, which provides English learners with an online learning environment, complements the limitations of online learning by incorporating crucial elements that it cannot completely include. Its ability to facilitate direct interactions with instructors and peers, enrich the learning experience, and nurture a deeper comprehension of course material is an excellent example. Blended learning can help students transition to totally online classes (Alhamami, 2019). Like other instructional approaches, blended learning has some pros and cons that affect language learning. There are more instructor-student interactions in blended learning than solely online learning because of the face-to-face instructional time. Moreover, students can benefit from the instant feedback they get in an in-person class.

Being online opens the door for collecting and researching authentic materials (Schulze & Scholz, 2018) and extends students' learning out of the classroom with real-life context on the internet. In a blended learning environment, instructors can have students gather background knowledge through online resources, for example, websites, or online libraries on their own time. Students read through learning materials and finish the assignments at home. This is also called a flipped classroom. With this flipped approach, instructors can use face-to-face classroom time to provide scaffolding and to stimulate more in-depth discussions in the classroom. The flipped classrooms can help students acquire critical thinking skills via their assignments, which students do before come to class (Capone et al., 2017). This kind of blended learning provides flexibility and gives students more time to process the materials at home so they can be more prepared for the content and ready for higher thinking tasks in class (Wichadee, 2017).

Moving partial instructional delivery online presents challenges for instructors who may believe they need more control over the delivery of course content. In traditional teaching, it is up to the teacher to decide how much information to teach and what topics to cover in a certain amount of time. They can also keep an eye on how students are doing and make sure they are comprehending the content. However, when teaching online, teachers must rely on students to do their work on their own, which can make students feel uncertain (Johnson & Marsh, 2014) to mitigate the challenges come along with online instruction, instructors can consider such as provide clear communication, regular check-ins, encourage collaboration between students and their peers.

In addition to privacy and integrity risks, blended learning also faces logistical difficulties. Some students might not have access to the required technology, such as a computer with a webcam and headphones or high-speed internet service (Chen & Yao 2016). Because of this, students may experience substantial challenges while implementing blended learning activities, which may cause them to feel frustrated or even give up on what they want to learn.

Moreover, some assignments may be challenging for students at home, depending on how well they know the language.

Despite these challenges, many instructors and students consider blended learning very beneficial. It offers flexibility and convenience for students who may have other commitments, and it allows instructors to incorporate a variety of instructional strategies and resources to engage students in their learning. The impact of this teaching strategy may be improved by carefully planning online courses and understanding the benefits and drawbacks of blended learning.

### **Microsoft Teams**

MALL is a popular approach to facilitating language learning using mobile devices such as smartphones and tablets. As a collaborative communication platform, Microsoft Teams provides a mobile app that allows learners to access learning materials and communicate with their classmates and instructors anytime and anywhere. Integrating MALL with Microsoft Teams can give language learners a more flexible and straightforward approach to engaging in language learning activities, leading to higher language proficiency (Al-Abidi et al., 2023).

When discussing learning with technology, one frequently envisions specific tools that make it easier and faster for students and teachers to complete tasks or that can eliminate geographical, time, and other barriers. Virtual learning can be done on various video conferencing platforms, including Zoom, Microsoft Teams, Google Meet, and others (Oliveira et al., 2021).

Vu et al. (2021) showed that Microsoft Teams presents excellent functions for an online learning platform. Users of Microsoft Teams can chat, hold audio and video conversations, and exchange files and documents on the platform for communication and collaboration. Users can more easily collaborate on tasks and projects because of its integration with other Microsoft Office 365 programs, including Outlook, Word, and Excel. Teams also offer a variety of tools,

such as screen sharing, live captions, and virtual backgrounds, which can improve EL virtual learning experiences.

Microsoft Teams has tools for working together and talking to each other, but it also offers a lot for online learning. It provides students with a central place for course materials, conversations, and assignments, which can help them stay organized and on track. Teams also allows instructors to share multimedia resources, have virtual office hours, and give online lectures and presentations. Even when students and teachers are not physically present in the same place, Teams may aid in creating a more engaging and interactive learning environment with these capabilities.

Microsoft Teams was introduced in 2017 as a part of the Microsoft 365 suite of products. Teams is a platform that allows for secure cooperation. For communication and collaboration, Microsoft Teams users may use the platform to chat, have audio and video discussions, and share files and documents. As a result of its connection with other Microsoft Office 365 apps like Outlook, Word, and Excel, users may more quickly collaborate on tasks and projects.

### **Impact of COVID-19 Pandemic on Language Learning**

The COVID-19 pandemic drastically altered daily routines and forced public health officials to implement emergency restrictions and policies, such as stay-at-home orders and social distancing measures. As a result, schools and professionals had to develop innovative ways to ensure that education could continue as usual. The emergency restrictions and policies led to a significant shift towards virtual learning platforms, with most face-to-face classes transitioning to online instruction.

However, adapting to online education has been particularly challenging for courses that need in-person instruction, such as lab work, music classes, and language courses. For example, learning and teaching a language relies on meaningful conversation and collaboration between students, which can be challenging to achieve in a virtual environment. Instructors have had to rethink their teaching tactics, modify their pedagogy to correspond with online

instruction, and implement activities that inspire students when learning online. Additionally, teachers have had to master new technologies to provide technical assistance to students who may experience difficulties with virtual learning.

Maican & Cocoradă (2021) recommended that instructors take a student-centered approach to online instruction to overcome these obstacles. This strategy involves developing lessons and activities centered on students' needs and interests, increasing student engagement, and establishing a collaborative learning environment. Teachers can use various tools and resources to engage students, such as interactive games, group discussions, and virtual field excursions. Furthermore, teachers can also use assessments and feedback to monitor students' progress and offer help as necessary. The COVID-19 epidemic has presented significant challenges to the education sector. However, it has also provided an opportunity to rethink and adapt teaching and learning approaches to better fit the changing needs of students. By taking a student-centered approach to online instruction, teachers can ensure that students continue to receive a high-quality education despite the challenges posed by the pandemic.

As the government declared the COVID-19 pandemic is over, schools still face the challenge of returning to a traditional in-person model. Many schools employ a hybrid strategy that offers in-person and online learning opportunities (Meltzer et al., 2021). For some institutes, if students who desire or require to take classes online such as those with medical concerns, will receive virtual learning choices. This applies to the faculty, too. In some cases, schools use online resources or let students access materials and tasks virtually to enhance in-person education (V. Lee, 2021). The hybrid strategy keeps online learning available to students while still giving them chances for interaction and socialization in person. In addition, schools are striving to close learning gaps by reengaging students who may have fallen behind during the pandemic. Overall, schools are adjusting to the evolving nature of education and building a more robust and adaptable educational system using the lessons acquired from the pandemic.



**Summary**

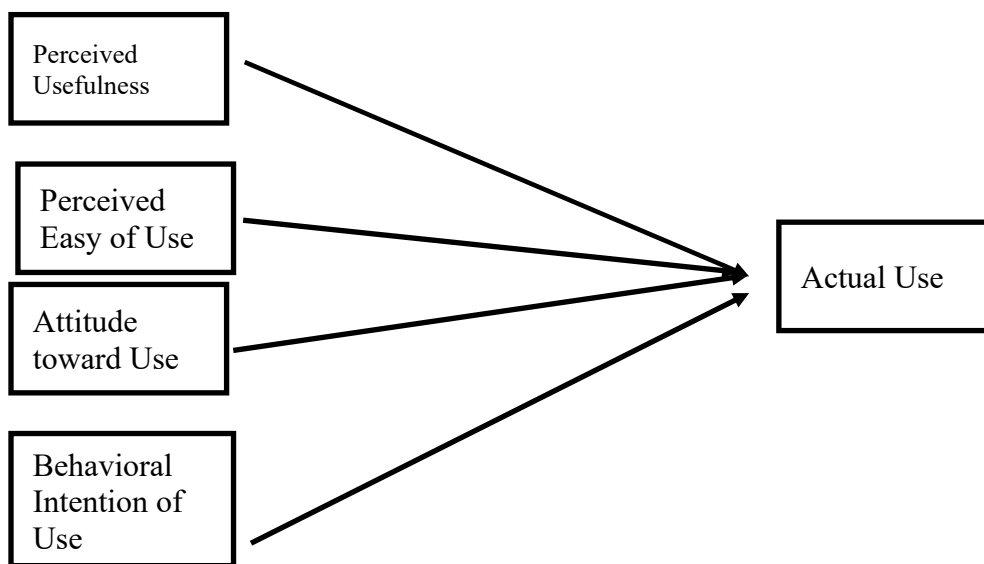
This chapter discussed TAM, which explains how individuals adopt and perceive new technologies. It then discussed the difficulties adult ELs experience in adapting to academic, social, and cultural norms in the United States, notably in language proficiency. This chapter also looked at how educational technology, such as mobile technology, mobile-assisted language learning (MALL), online learning, blended learning, and Microsoft Teams, has assisted in language learning and how the COVID-19 epidemic pushed the implementation of technology in education. Finally, the last section highlighted the issues that schools are encountering in returning to traditional in-person teaching following the pandemic and how schools utilize lessons learned during the pandemic to develop more robust and adaptive instruction.

### Chapter 3: Methods

This chapter discusses the research methodology and design, data collection, and the data analysis procedure that will be used in this study. The purpose of this study was to assess adult ELs' perceptions of using Microsoft Teams in adult classes. Specifically, the study aims to explore the strength and direction of the correlation between the elements of TAM and using Microsoft Teams in an English language course. The dependent variable is the usage of Microsoft Teams, and the independent variables are the elements of TAM, including PU, PEU, ATU, and BIU (see Figure 2).

**Figure 2**

*Analytical Approach for the Research Model*



TAM is a widely recognized theoretical framework used to explain users' acceptance and use of technology (Kurdi et al., 2020). Through applying the TAM model in this research, the relationships between variables—the use of Microsoft Teams and perceptions of its usefulness and ease of use, as well as attitudes and intentions towards using it—will be analyzed. This study will help educators develop effective strategies to enhance engagement and success among adult ELs who use Microsoft Teams for language learning purposes.

This study sought to answer the research question: what is the strength and direction of the correlation between the variables of the TAM and using Microsoft Teams among adults in a virtual ESL course? The answer to this question will offer insights to how language learners' perceptions of technology relate to their utilization of Teams and can inform educational institutions on how to effectively incorporate technology into language learning programs. This research examined the correlations between variables, such as PU, PEU, ATU, BIU, and students' acceptance of using Teams in language learning with the following hypotheses:

- H1: Perceived usefulness will positively correlate with the use of Microsoft Teams.
- H2: Perceived ease of use will positively correlate with the use of Microsoft Teams.
- H3: Attitude toward use will positively correlate with the use of Microsoft Teams.
- H4: Behavioral intention to use will positively correlate with the use of Microsoft Teams.

These hypotheses aim to test the strength and direction of the relationships between these variables, thereby shedding light on the factors that affect the adoption and utilization of Microsoft Teams. A Pearson's correlations coefficient ( $r$ ) was used to determine whether relationships exist between the variables of the study.

### **Research Methodological Approach and Study Design**

Quantitative research is a systematic and objective approach to investigate phenomena using numerical data. In the context of adult ELs using Microsoft Teams, quantitative research can provide valuable insights into the patterns and relationships between variables. Ahmad et al. (2019) pointed out that quantitative research is a systematic approach for researchers to examine the data. Researchers use statistical models or mathematically derived results to record the information. Its main goal is to determine how one variable affects another directly

and make valuable predictions in more comprehensive settings. This type of research is often used to find out how one variable affects another, then to make predictions, and to apply the results to larger populations. This design often uses surveys, questionnaires, or other instruments to collect data from a population sample. The collected data are then analyzed using statistical methods to discover patterns, correlations, and behaviors. In this study, the statistical analysis was using the Pearson's correlations coefficients.

Alternatively, qualitative research is an approach that prioritizes the collection and analysis of nonnumerical data to get a comprehensive understanding of social phenomena (Köhler et al., 2019). This definition shows how different qualitative research methods are from quantitative because qualitative focuses on using interpretive and critical lenses to understand the social world. Qualitative research is beneficial for studying complex human experiences, attitudes, and behaviors that change depending on the situation. On that account, it is less appropriate to the research questions in this study. Therefore, the researcher will use quantitative research with questionnaires for two critical reasons. The first is that the participants are ELs who would possibly need help understanding open-ended interview questionnaires or questions during an interview. This challenge makes using a quantitative research method with questionnaires a better choice. Second, the study's research questions coincide with the quantitative research objectives. This research examined the correlations between various factors, such as PU, PEU, and experience, and their impact on students' acceptance of Teams in language learning. The hypotheses were formulated to test the strength and direction of the relationships between these variables, indicating a quantitative correlation research approach is the most suitable approach for this study.

### **Data Source and Sample**

In this quantitative research study, the population consists of adult ELs who use Microsoft Teams for virtual learning. The purpose of this research is to investigate the correlation between the elements of the Technology Acceptance Model (TAM) and the use of

Microsoft Teams by adult learners in a virtual English as a second language course. By limiting the study to adult English language learners, researcher was able to offer more thorough and focused insights into adult English learners' requirements, difficulties, and experiences with classroom technology. Incorporating minors could make the results unclear and make it difficult to draw solid inferences about adult learners. Therefore, minors were excluded from this research.

The sampling process utilized for this study was convenience sampling, where participants were selected based on their availability and willingness to participate. Convenience sampling is a common nonprobability method used in educational research to choose participants. With this method, participants were chosen based on how easily they can be reached and recruited. The primary advantage of convenience sampling is that it is economical and expedient for data collection (Mweshi & Sakyi, 2020). However, this strategy might only partially represent the population, which could cause bias and make it hard to use the research results in other situations (Alwin & Hauser, 2021). For this study, Survey Monkey was used as an online survey platform in this study to distribute the survey to participants. Researcher sent the Survey Monkey link to colleagues who teach adult ELs using Teams so they can distribute the survey to potential participants. The researcher also used Survey Monkey to identify and recruit participants to achieve the desired sample size.

A quantitative study must have enough participants to conduct the analysis. Alfaddaf and Mahdi (2021) noted that the sample size of 75 of their research was small, which might limit the generalizability of the findings. Therefore, they suggested that increasing the sample size in future studies could lead to better results. Also, Bentler and Chou's (1987) suggestion of maintaining a minimum ratio of five participants per questionnaire item in quantitative research can help determine an optimal sample size. There are 23 items in the questionnaire for this study, so the sample size could be a minimum of 115 participants to ensure reliability. As a novice researcher, the researcher aimed for a sample size of 75–115.

## Instruments and Tools

The existing questionnaire created by Alfadda and Mahdi (2021) was served as a tool for collecting data on this topic. The survey is to gather quantitative data on various aspects of adult ELs using Teams for learning English. The survey had two sections: one asking for demographic information about the participants and the other concentrating on the study items to measure the correlation of the constructs in TAM and actual use of Teams. The demographic section asked about the participants' age and gender. The questionnaires were created as shown in Table1.

**Table 1**

*Variables Measure the Correlation of the Constructs in TAM and Actual Use of Teams*

Variable	Name	Definition	Number of Items
Variable 1	Perceived Usefulness	People tend to use or not use an application to extent to believe it will help them perform their job better	7
Variable 2	Perceived Ease of Use	how comfortable and effortless user feel when they are using a particular technology	4
Variable 3	Attitude	The general attitudes people have toward a given technology, including their thoughts and beliefs about it	4
Variable 4	Behavioral Intention of using Teams	A person aims to use Teams as their primary technology tool for collaboration and communication in a work setting.	5

Variable	Name	Definition	Number of Items
Variable 5	Actual Use of Teams	The degree to which users use Teams after adopting it is influenced by their perceived usefulness and perceived ease of use	3

Please see the full questionnaire in Appendix A.

### Validity and Reliability

Validity and reliability are two essential criteria that determine the quality of instruments and tools used in quantitative research. Validity is how well an instrument measures what it is meant to measure (Surucu & Maslakci, 2020). Reliability is how stable and consistent an instrument's results are over time and in different situations (Bolarinwa, 2015). It is important to ensure that the tools are valid and reliable so that the results can be trusted (Nurfatihah et al., 2021).

Researchers need to use appropriate methods to assess the validity and reliability of their instruments and tools to draw valid and reliable conclusions. Alfadda and Mahdi (2021) and (Yang & Wang, 2019) used Cronbach's alpha to check the reliability of their questionnaires; a Cronbach's alpha of 0.70 or higher is sufficient, and a value of 0.80 or higher is acceptable for research purposes (Olaniy, 2019). Therefore, the researcher is confident that the questionnaires adapted from previous research established the validity and reliability for this study.

### Procedures

When collecting data for this quantitative study, several processes was used to ensure the validity of the research design. The first step was to make sure the study complies with ethical standards and protects the rights of the participants is to obtain Institutional Review

Board (IRB) approval (Godwin-Jones, 2016). The participants are adult ELs who have used Microsoft Teams for academic purposes.

A survey questionnaire was utilized based on the validated questionnaire by (Alfadda & Mahdi, 2021), which was modified from the Yang and Wang questionnaire (2019), to collect data. In the survey, there are seven questions on PU, three questions about actual use of Microsoft Teams, four questions on PEU, four questions on ATU, and five questions about BIU. Participants will record their answers on a 5-point Likert scale to show how much they agree or disagree with each question.

According to Boysen (2016) online survey platforms can successfully distribute surveys to participants when administered through teachers. As a result, Survey Monkey was used as an online survey platform in this study to distribute the survey to participants. Researcher sent the Survey Monkey link to colleagues who teach adult ELs using Teams so they can distribute the survey to potential participants. The researcher also used Survey Monkey to identify and recruit participants to achieve the desired sample size. Before giving their consent, participants will receive a recruitment letter about the purpose of the study, their role, their privacy, and the potential use of their data (See Appendix B). It will also inform participants that they have the right to decline participation in or withdraw from the study at any time without consequence.

Survey participants are frequently asked to share their beliefs, habits, or experiences (Cohen et al., 1990). However, some of these questions may be sensitive, causing participants to feel uncomfortable answering honestly if they believe their answers are related to their identities. To address this, the researcher collected anonymous responses to encourage honest responses (Burnett & Illingworth, 2007), alleviating participants' concerns about privacy and identity (Kaufman et al., 2009). To protect participants' anonymity, the researcher did not collect any personally identifiable information from participants, thus protecting their privacy and anonymity. Only the research has access to the research data, and data was securely stored to prevent unauthorized access. The researcher safely disposed of the data by shredding paper



and/or erasing the data from digital storage devices if there are any. These measures helped protect participants from potential harm and ensured that their responses are kept confidential throughout the research process. And the recruitment and data collection took 3 months, data analysis was complete with 4 weeks and completion of Chapters 4 and 5 for publication took 4 months.

Overall, with a clear and focused survey instrument, appropriate informed consent procedures, and anonymity measures in place, this study was able to provide valuable insights into the experiences of adult ELs using Teams for their English language development classes. By following these procedures, this study aimed to gather accurate and reliable data that contributed to the literature on the effectiveness of Microsoft Teams in enhancing English language learning among adult ELs.

### **Human Subjects Considerations**

Prior to conducting the study, the researcher had the proposed research plan reviewed by the IRB at Pepperdine University to address potential risks, confidentiality, and other issues related to voluntary participation. According to Pepperdine University's policy, a research proposal needs reviewed by the IRB to assist researchers in conducting ethical research. The purpose of the IRB is to ensure that the researcher is respecting the rights of individuals, amplifying benefits for the study, reducing risks to the research subjects, and making sure that research procedures are implemented properly (Barnes et al., 2017).

Education researchers must also safeguard their participants' safety and privacy. For this study, participants signed informed consent, which explained how their privacy and anonymity will be maintained, thus lowering the risks. Before beginning their questionnaire, participants were asked to consent. The researcher securely collected the research data. The research only collected data that was required for the study, the researcher also restricted data access only to approved personnel and ensured that only authorized people can see the data. Furthermore, the researcher ensured that the participants were not forced or influenced

incorrectly. When the research was done, the researcher safely disposed of the data by shredding paper or erasing digital storage devices if there were any. By following these procedures, the researcher will ensure the research was conducted ethically and that the rights and wellbeing of the subjects were protected.

To consider that risks will be associated with conducting an online survey is important. For this research, the risks were very minimal. Although online surveys are usually considered low risk, there are still risks that must be addressed. The risk of eye strain or headaches from protracted screen time is a potential minimal physical risk associated with online surveys. To reduce this risk, the researcher ensured that the survey had appropriate font sizes, spacing, breaks, and the ability to save and return to the survey later. A potential psychological risk of participating in an online survey is the possibility that respondents will feel uneasy or distressed when responding to sensitive or personal questions. To lower this risk, the researcher provided explicit information on the survey's purpose and nature, the option to skip questions or withdraw at any time, and contact information for support resources. A possible social risk of taking an online survey for adult ELs is feeling embarrassed or self-conscious about their language proficiency level. To lower this risk, the researcher made sure that the language used in the survey was acceptable and simple enough for the participants to comprehend. Jargon or complicated wording was avoided. Clear instructions on how to complete the survey was also provided by the research.

### **Proposed Data Analysis Processes**

The researcher examined the data for errors before entering the data into SPSS for analysis. Then, the researcher ran descriptive statistics to get an overview of the data, such as mean, standard deviation, and range. After that, the researcher used SPSS to conduct a Pearson's correlation analysis between the variable—usage of Microsoft Teams—and the other variables—the elements of TAM, including PU, PEU, ATU, and BIU. Finally, the researcher analyzed and reported the findings based on the collected data.

Pearson's correlation coefficient is a statistical method for determining how strong and in which direction two variables are linked. Person's correlation coefficient  $r$  has a value between -1 and 1, and 1 representing positive correlation, 0 indicating no correlation, and -1 indicating negative correlation. According to Al-Fudail and Mellar (2016), a positive correlation exists between students' ATU e-learning platforms and their perceptions of the platforms' usefulness and ease of use. As a result, the findings of this investigation were considering similar to the results from the previous study. When the variables, for example, have a positive relationship, a rise in one follows a rise in the other. According to the hypotheses of this study, a positive correlation between students' attitudes towards Teams and their PU or PEU indicated that as students perceive Teams to be useful or easier to use, their ATU also becomes more positive.

### **Means to Ensure Internal Study Validity**

Internal study validity is a term that describes how much the research design and methodology ensure that the results are accurate and trustworthy. In other words, it refers to how well the study captures the goals of its measurement. Ensuring internal study validity is crucial to the credibility of research findings (Hayashi et al., 2019). To ensure internal study validity, the researcher used various techniques to minimize sources of error or bias that can affect the validity of results. And the researcher planned the steps carefully to ensure the collected data is correct and representative of the population. Statistical analysis was used to identify the extent to which the results obtained were statistically significant and whether they can be attributed to adult ELs using Teams in a virtual ESL class.

### **Summary**

In this study, the researcher utilized a quantitative methods approach to investigate the relationship between TAM variables and the use of Microsoft Teams in an adult English course. An anonymous online survey questionnaire based on Alfadda and Mahdi's (2021) research was used in the study through a secure online platform. SPSS was used to analyze the data using descriptive statistical techniques. Ethical considerations were addressed through informed

consent, and the research took steps to ensure participant privacy and hoped this study's findings might help achieve the research objectives by providing a comprehensive understanding of the research problem and the methods used to address it.

## Chapter 4: Findings

### Introduction

The purpose of this study was to assess adult ELs' perceptions of using Microsoft Teams in classes. Specifically, the study aimed to explore the strength and direction of the correlation between the elements of the Technology Acceptance Model (TAM) and using Microsoft Teams in English language courses. This study addressed the following research question: What are the strengths and directions of the correlations between the elements of the technology acceptance model and the use of Microsoft Teams among adult ELs?

This chapter provides a thorough explanation of the analytical methods used in this study and the data that was obtained, according strictly to the quantitative research method and supporting the research processes described in Chapter 3.

To answer the study's research questions, the researcher used an online survey service to collect data. The research question was: What are the strengths and directions of the correlations between the elements of the technology acceptance model and the use of Microsoft Teams among adult ELs? This research examined the correlations between variables, such as PU, PEU, Attitude, BIU, and students' acceptance of using Teams in language learning with the following hypotheses:

- H1: Perceived usefulness will positively correlate with the use of Microsoft Teams.
- H2: Perceived ease of use will positively correlate with the use of Microsoft Teams.
- H3: Attitude toward use will positively correlate with the use of Microsoft Teams.
- H4: Behavioral intention to use will positively correlate with the use of Microsoft Teams.

This chapter is organized into the following sections: results of the data obtained, descriptive statistical analysis, hypothesis testing, findings and implementations, and conclusions of the study. The researcher collected a total of 167 responses from two sources using the Survey Monkey online survey service. One source was from Survey Monkey recruiting service and the other source as from the researcher's colleagues' students. For the collection procedures, the researcher only considered participants who provided consent and completed the entire survey for our analysis. Out of these 167 responses, the researcher noted that two participants were under 19 years old, and 6 participants did not finish the survey. Hence, 159 fully completed responses, which translates to an adjusted completion rate of 96%. In line with the recommendation by Bentler and Chou (1987) to maintain a minimum ratio of five participants per questionnaire item in quantitative research, this study needs 115 sample size; this study exceeds the threshold with total 159 samples. With 23 items in the questionnaire, this study has more than enough participants, ensuring the reliability of our sample size requirement.

### **Data Collection and Analysis Procedures**

The researcher has inclusion questions in the survey to ensure the qualification of the participants and the consent from the participants before they participated the study. The data collected during a 3-week window in 2023. The instrument measured adult English learners' perceptions of using technology in the classroom. The first question is experience in using Microsoft Teams. Then, 23 items categorized under TAM four main constructs: Perceived usefulness, actual use of Teams, perceive ease of use and behavioral intention of English through using Teams.

The researcher used SPSS to perform quantitative data analysis after uploading the data from Survey Monkey. Before the quantitative analysis, the initial dataset ( $N=159$ ) was screened for missing data and outlier data. The age requirement for this study is 19 years old or older. Two participants did not meet the age requirement and 6 participants did not complete the

survey. The researcher ran statistical analysis with two sets of data: one with missing data and the other one without missing data. There is no statistical difference between each dataset, therefore, the researcher used the dataset without missing data to run the analysis for this study.

- SPSS is a useful tool for breaking down complex datasets. The researcher uploaded the data from Monkey Survey into SPSS. Then the researcher cleaned the data and checked if there is any missing data. After that, the researcher categorized the variables which were the questions according to the constructs of the TAM. The research first categorized the whole dataset into experience in using Microsoft Teams, PU, AU, PEU, Attitude, and BIU 6 sub categories. Then the researcher ran Person's correlation coefficient to test the hypothesis. And the result is reported in the following section. Then, with the statistical capabilities of SPSS, the researcher created extensive tables and figures that clearly summarizes the combined data. According to the results, the upcoming discussion included the results of every hypothesis and provided a detailed comprehension of the research. This research examined the correlations between variables, such as PU, PEU, Attitude, BIU, and students' acceptance of using Teams in language learning with the following hypotheses.

- H1: Perceived usefulness will positively correlate with the use of Microsoft Teams.
- H2: Perceived ease of use will positively correlate with the use of Microsoft Teams.
- H3: Attitude toward use will positively correlate with the use of Microsoft Teams.
- H4: Behavioral intention to use will positively correlate with the use of Microsoft Teams.

Pearson's correlation coefficients ( $r$ ) were used to determine whether there is a correlation between the study variables reflecting the factors influencing the adoption and usage

of Microsoft groups because the purpose of this measure is to assess the strength and direction of the relationships between these variables.

According to Cohen (1988) when  $0.1 < |r| < 0.3$ , weak linear relationship between the variables; When  $0.3 < |r| < 0.5$ , the relationship is moderate; When  $|r| > 0.5$ , the relationship is strong ( $|r|$  means absolute value of  $r$ ).

### **Descriptive Statistics**

The researcher used descriptive statistics for analyzing the survey items. The survey was on a Likert scale to provide the respondents' attitudes and opinions towards the survey questions. Table 2 reflected users' experience on a scale from 1 (*poor*) to 5 (*excellent*). Notably, from Table 2, it shows that 3 is the most frequent number in the dataset and it corresponds to "Good," indicates that "Good" is the most common rating for the participants.

Question "Experience in using Microsoft Teams," received a mean score of 3.5, a standard deviation of 1.0, a mode of 3 suggest that most of participants rate their experience with Microsoft Teams a little better than "Good," indicating participants' overall experience is more toward positive. Figure1 provides the visualization on the distribution of the dataset. Therefore, the survey results provide insights into respondents' attitudes and perceptions regarding their use of Microsoft Teams. Statistical analysis of the Likert-scale responses revealed several key findings:

Finding 1: In general, users rated their experiences with Microsoft Teams as "good" to "very good" based on Likert-scale surveys. Statistical analysis revealed a positive correlation, indicating a positive relationship between participants' experiences with the platform.

Finding 2: There is a significant positive correlation between users' perceptions of Microsoft Teams' usefulness and their actual adoption and usage of the platform. Users who see Microsoft Teams is effective, they are more likely to use it.



Finding 3: Ease of use has a clear positive influence on engagement, as shown by the strong link between users' perceptions of Microsoft Teams' usability and their active usage. When users find the platform easy to use, they are more likely to use it regularly.

Finding 4: Users' positive attitudes play significantly to the effectiveness of using Microsoft Groups, as supported by correlational analysis.

Finding 5: Users' intentions or willingness to use Microsoft Teams in the future strongly correlate with their actual usage of the platform, emphasizing a positive relationship between behavioral goals and the use of the application.

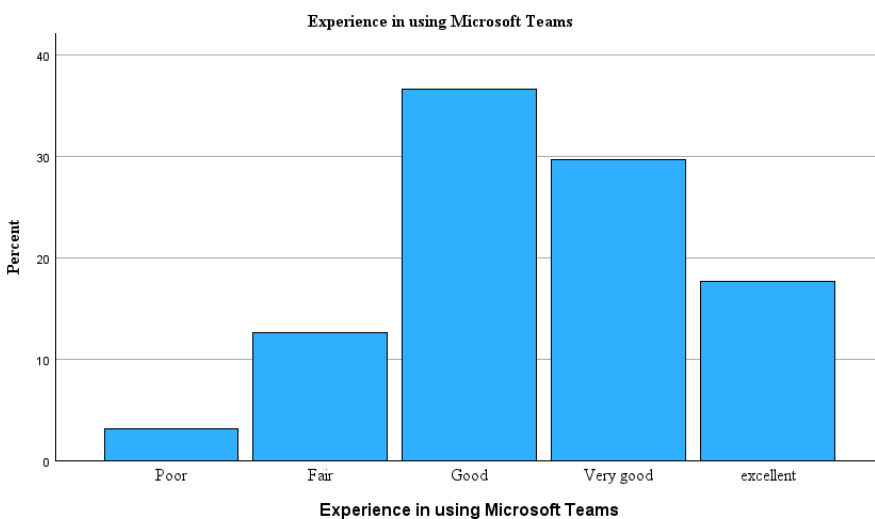
**Table 2**

*Experience in Using tools Like  
Microsoft Teams*

	N	%
poor	5	3.1%
fair	20	12.6%
good	58	36.5%
very good	48	30.2%
excellent	28	17.6%

**Figure 3**

*Bar Chart of the Experiences in Using Tools like Microsoft Teams*



As shown in Figures 4 to 8 most of the users selected agree and neutral for perceived usefulness, Actual use of Teams, perceived ease of use and behavioral intention. Perceived usefulness has mean 2.24 and Standard Deviation 0.74. Actual use has mean 2.21 and Standard Deviation 0.72. Perceived ease of use has mean 2.09 and Standard Deviation 0.76. Attitude has mean 2.22 and Standard Deviation 0.80. Behavior intention has mean 2.3 and Standard deviation 0.81.

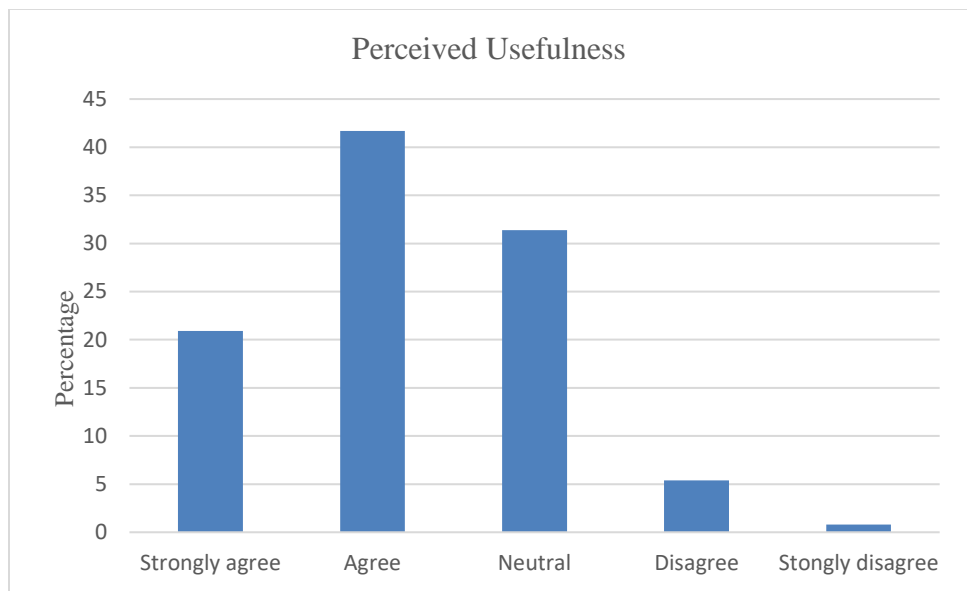
**Table 3**

*Descriptive Statistics for PU*

<b>Descriptive Statistics</b>			
	N	Mean	Std. Deviation
PU	158	2.2369	.74445
Valid N (listwise)	158		

**Figure 4**

*Histogram of Users' Perceived Usefulness*



**Table 4**

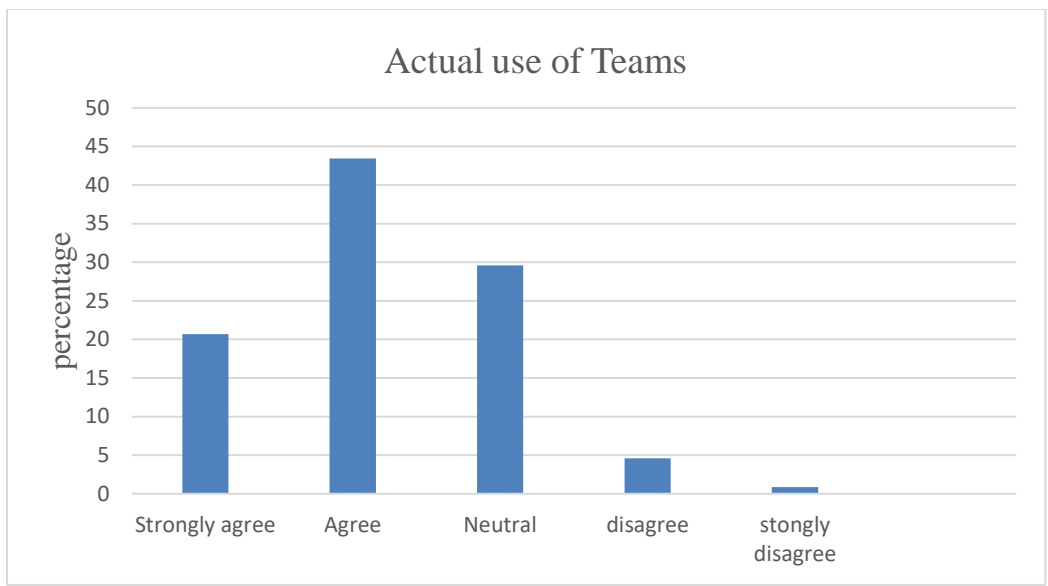
*Descriptive Statistics for AU*

**Descriptive Statistics**

	N	Mean	Std. Deviation
AU	158	2.2110	.72207
Valid N (listwise)	158		

**Figure 5**

*Histogram of Users' Actual Use of Teams*



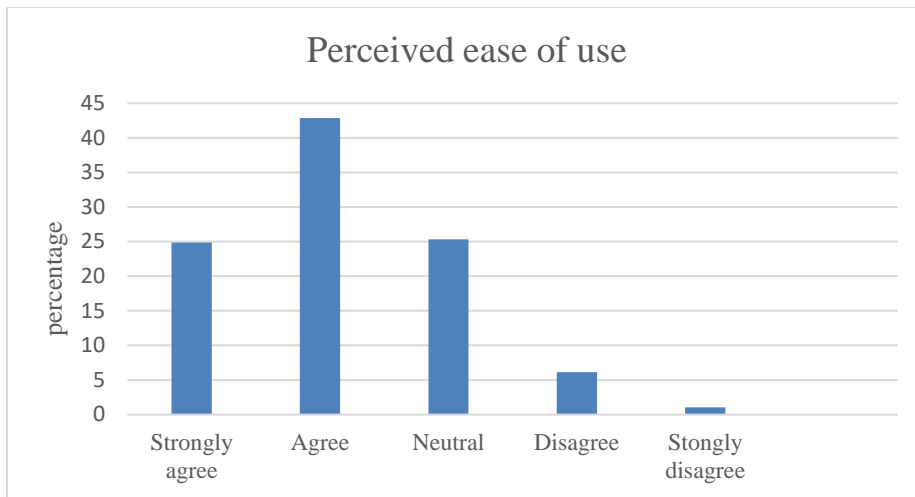
**Table 5**

*Descriptive Statistics Table for PEU*

Descriptive Statistics			
	N	Mean	Std. Deviation
PEU	158	2.0886	.75770
Valid N (listwise)	158		

**Figure 6**

*Histogram of Users' Perception of Perceived Ease of Use*

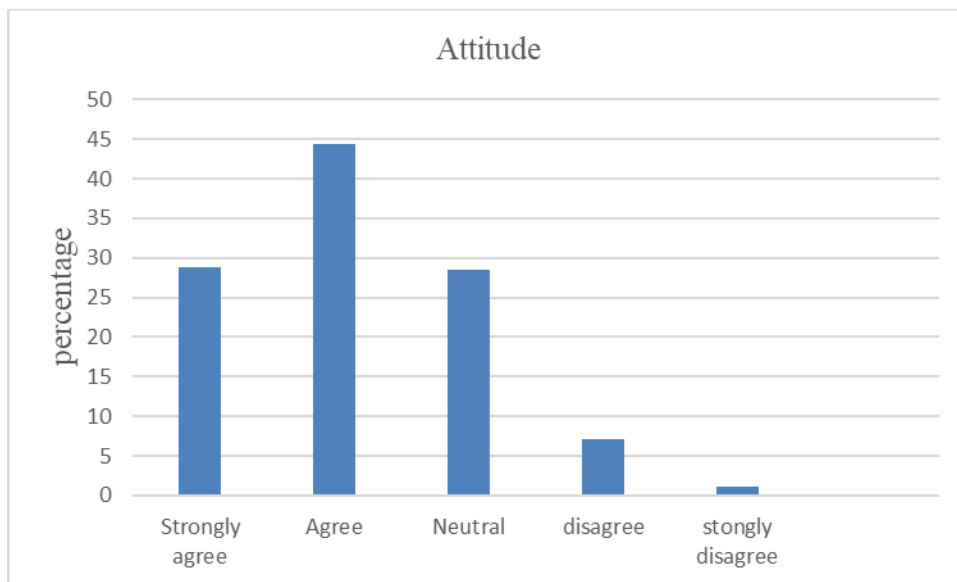
**Table 6**

*Descriptive Statistics Table for Actual use of Teams*

<b>Descriptive Statistics</b>			
	N	Mean	Std. Deviation
Atti	158	2.2231	.80384
Valid N (listwise)	158		

**Figure 7**

*Histogram of Attitude*



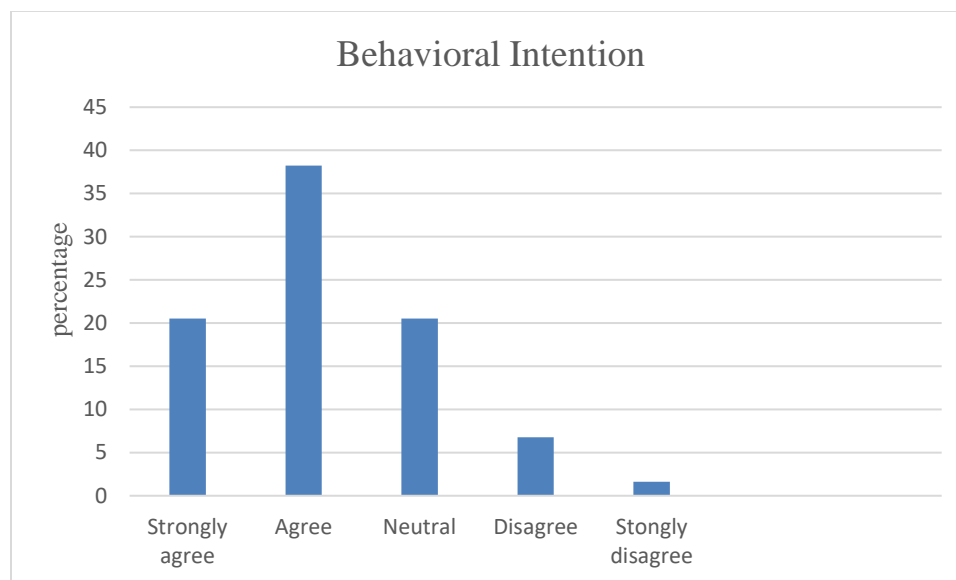
**Table 7**

*Descriptive Statistics Table for Behavior Intention*

Descriptive Statistics			
	N	Mean	Std. Deviation
BI	158	2.3000	.80721
Valid N (listwise)	158		

**Figure 8**

*Histogram of Users' Perception of Behavioral Intention*



### ***Reliability Assessment***

In Table 8, the set of items are perceived usefulness, actual use of Teams, perceived ease of use, and Behavioral intention. With Cronbach's Alpha 0.96 which means that internal consistency or reliability of questionnaire is high. The items are measuring the same underlying construct consistently. When a questionnaire is highly reliable, it is easier for researcher to compare data across different groups, time periods, or settings. Researchers can confidently assess changes or differences in the construct being measured (MacKenzie et al., 2011). Also, reliable data requires less effort to clean and preprocess. When responses are consistent and reliable, researchers can have greater confidence in the accuracy of the data they are collecting. In summary, a high reliability questionnaire is essential to data collecting. With a highly reliable data set, researchers can confidently use the data to draw meaningful conclusions and make informed decisions (Downing, 2004; see Table 8).

**Table 8**

*Cronbach's Alpha*

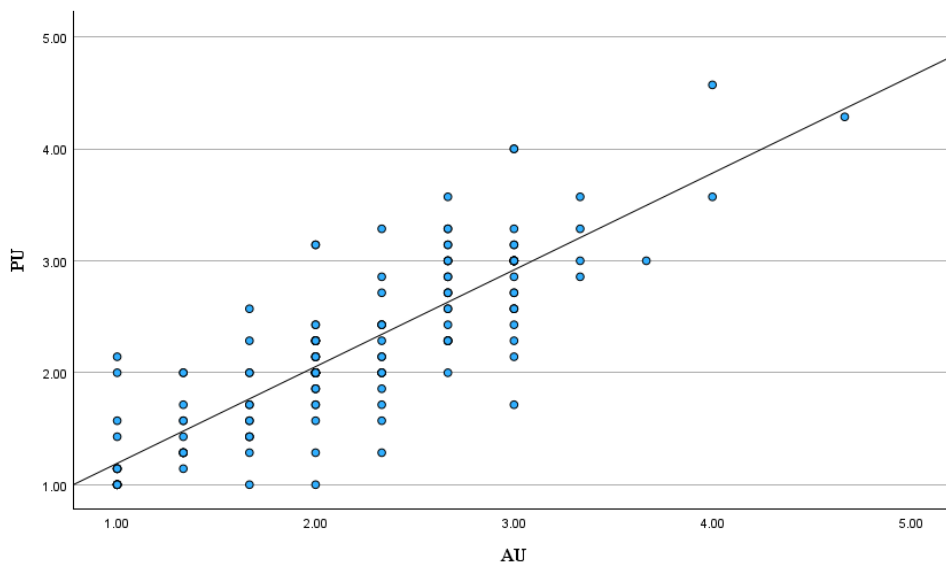
<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.961	24

**G Graph**

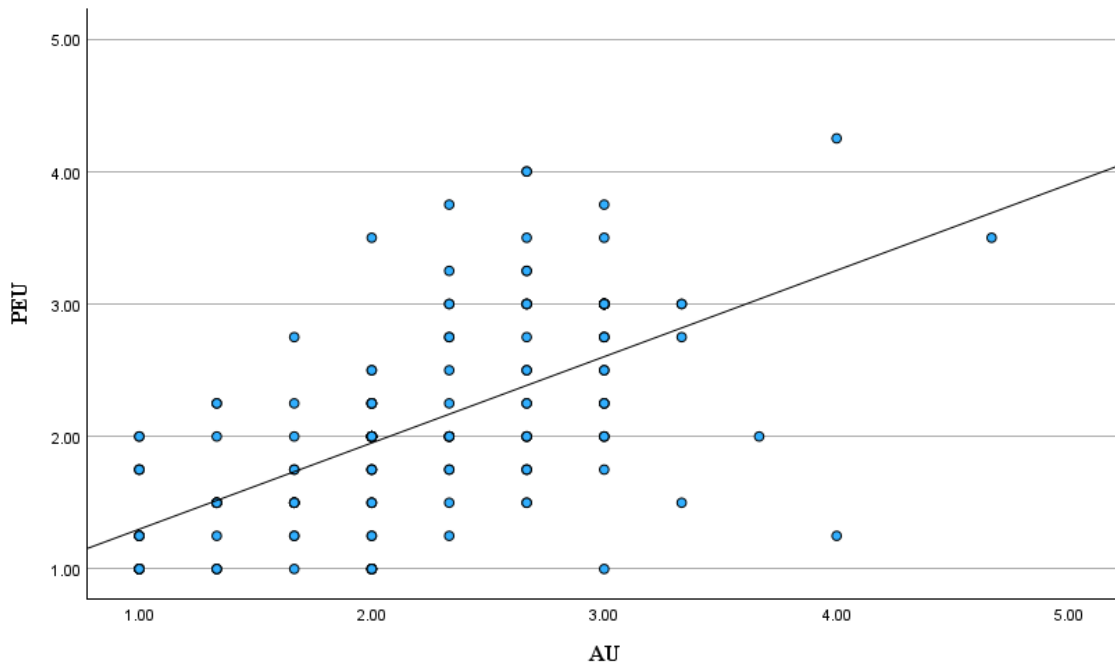
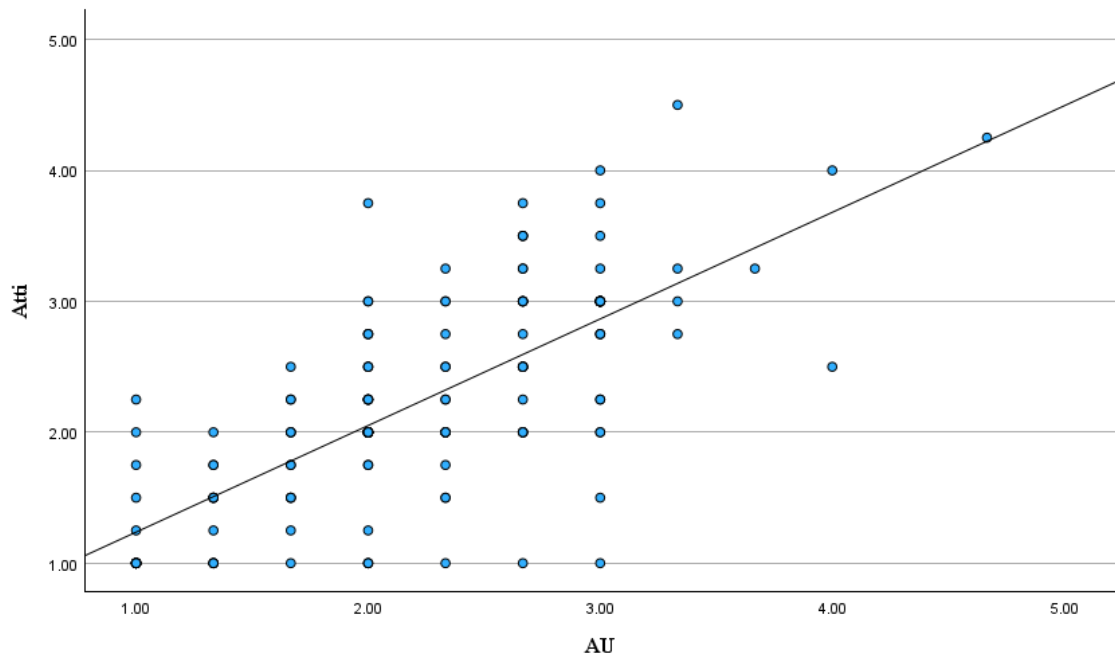
The researcher used scatter plot to identify if there is a relationship showed between actual use and the other variables. From Figure 9 to 12 Each point on the scatter plot represents a data. The x-axis and y-axis of the table correspond to the constructs being compared. All the data points form a line, which means there is linear relationship between the variables. And the trend of the data points is going up from the left to the right which means that it is a positive correlation.

**Figure 9**

*Scatter Plot AU versus PU*

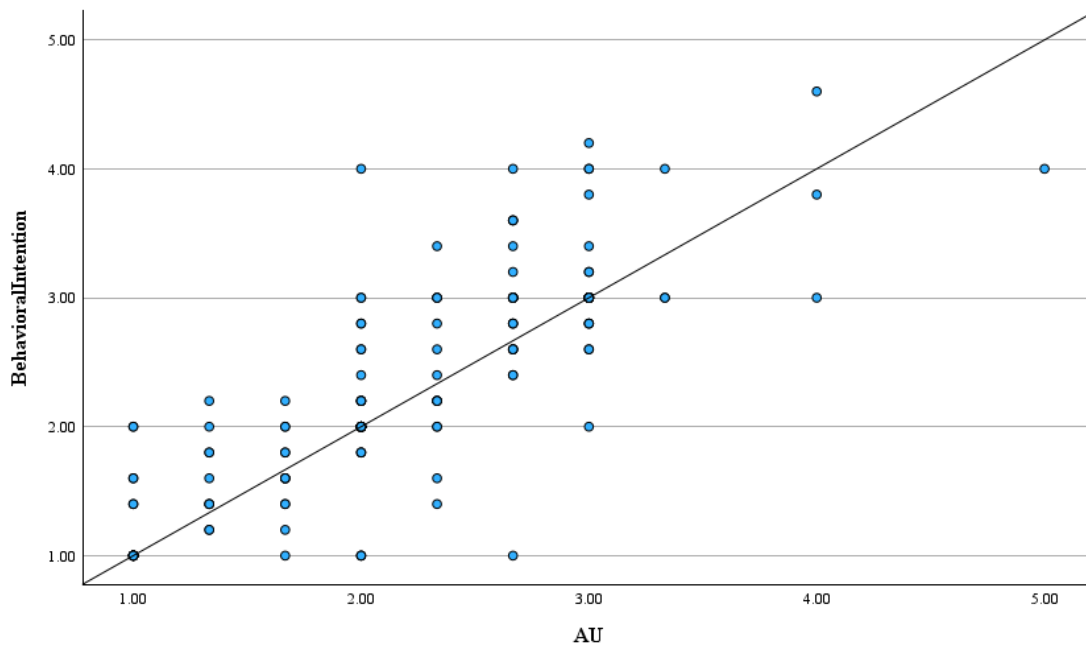




**Figure 10***Scatter Plot AU versus PEU***Figure 11***Scatter Plot AU versus Atti*

**Figure 12**

*Scatter Plot AU versus Behavior Intention*



## Correlations

The researcher used SPSS to run Person's correlation coefficient to obtain more information on the relationships between the variables.

The correlation matrix (See Table 9) shows that all of the variables are positively correlated with each other. This means that users who find Groups useful and accessible are more likely to use them and have higher behavioral intentions to use them and they are all significant at the 0.01 level.

Correlation coefficients are measures of the strength and direction of the relationship between two variables. A correlation coefficient of 1 indicates a perfectly positive relationship,

**Table 9***Correlations*

		Experience in using Microsoft Teams					
		PU	AU	PEU	Atti	BI	
Experience in using Microsoft Teams	Pearson Correlation	1	-.410**	-.333**	-.461**	-.384**	-.342**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	158	158	158	158	158	158
PU	Pearson Correlation	-.410**	1	.838**	.672**	.843**	.862**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001
	N	158	158	158	158	158	158
AU	Pearson Correlation	-.333**	.838**	1	.620**	.731**	.828**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001
	N	158	158	158	158	158	158
PEU	Pearson Correlation	-.461**	.672**	.620**	1	.685**	.706**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
	N	158	158	158	158	158	158
Atti	Pearson Correlation	-.384**	.843**	.731**	.685**	1	.787**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001

		Experience in using Microsoft Teams					
		PU	AU	PEU	Atti	BI	
BI	Pearson	-.342**	.862**	.828**	.706**	.787**	1
Correlation							
Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001	
N		158	158	158	158	158	158

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

indicating that the two variables are equivalent. A correlation coefficient of -1 indicates a perfectly negative relationship, indicating that the two variables are exactly inversely equivalent. A correlation coefficient of 0 indicates no relationship between two variables (Taylor, 1990).

The strongest correlation with a coefficient of 0.862 is between perceived usefulness (PU) and groups' intention to use behavior. This means that users who find Teams more useful are more likely to use them. The second strongest correlation, with a coefficient of 0.843, is between perceived ease of use (PEU) and attitude. Generally, this means that as perceived ease of use increases, so does attitude. Consequently, when users find Teams easier to use (high PEU), they generally exhibit a more positive attitude toward it.

The correlation of 0.838 between PU and AU use indicates a strong positive relationship. With a correlation coefficient close to 1, this suggests a robust positive correlation between PU and the AU of Teams. Essentially, users who perceive Teams as more useful and valuable are more likely to actively use it.

Furthermore, there is a strong moderate correlation of 0.672 between perceived usefulness and perceived ease of use. This suggests a positive relationship between perceived

usefulness and the ease with which groups are perceived as useful. More precisely, as categories of perceived ease of use increase, perceived usefulness also increases, and vice versa. This suggests that users who find Teams easy to use (high perceived ease of use) are more likely to find them useful (perceived usefulness).

Table 10 summarized the outcomes of a series of hypothesis tests conducted to investigate the factors influencing students' adoption of Microsoft Teams. The first hypothesis (H1), which posited that PU has a significant and positive effect on students' attitudes towards using Teams, was accepted. Similarly, the second hypothesis (H2) indicating a positive relationship between PEU and students' PU for Microsoft Teams was supported. The fourth hypothesis (H4) was supported, indicating a positive relationship between intention and PEU. Together these findings provide insight into the factors that contribute to students' positive attitudes and attitudes toward using Microsoft teams in educational settings.

**Table 10**

*Test of Hypothesis*

Hypotheses	Accepted or Rejected
H1: Perceived usefulness will significantly and positively influence students' attitude towards Teams use.	Accepted
H2: Perceived ease of use will positively correlate with students' perceived usefulness towards the use of Microsoft Teams.	Accepted
H3: Attitude toward use will positively correlate with behavioral intention use of Microsoft Teams.	Accepted
H4: Behavioral intention to use will positively correlate with Perceived ease of use.	Accepted

The results also revealed that there is a positive relationship between experience in using Microsoft Teams and PU ( $r = 0.41$ ). In addition, there is a considerable positive relationship between experience in using Teams and AU ( $r = 0.333$ ), and PEU ( $r = 0.461$ ). The results also show that there is positive relationship between experience in using Teams and attitude ( $r = 0.384$ ) and experience in using Teams and Behavioral Intention ( $r = 0.342$ ). Overall, the relationships found between experience in using Teams and the other constructs are all positive.

### **Summary**

The primary focus of this research study is to explore how adult English learners perceive and utilize Microsoft Teams in their language classes. This investigation centers on the integration of Microsoft Teams and its relationship with the TAM. Data was collected through an online survey, and the study examined correlations among the variables as actual use, perceived usefulness, ease of use, attitude, and behavioral intention in the context of Microsoft Teams usage.

The research received an impressive response rate, with 159 participants out of 167 providing complete data, exceeding the minimum required sample size. The reliability of the questionnaire was assessed using Cronbach's alpha, resulting in a commendable value of 0.972.

The analysis of participants' experiences revealed a generally positive perception of Microsoft Teams, with most respondents indicating "Good" or higher ratings for their experience. The study's hypotheses were strongly supported, with significant positive correlations found between the TAM constructs and the use of Microsoft Teams.

In summary, this research offers valuable insights into the factors influencing the adoption and usage of Microsoft Teams among adult English learners. The robust positive correlations between key variables and technology acceptance have important implications for the improvement of language education through technology.

## Chapter 5 Discussion

### Introduction

The number of English Language Learners (ELs) in the United States is expected to increase due to the increasing number of immigrants and refugees entering the country (Carlson & Knowles, 2016). The growing number of ELs has created new educational challenges, including language barriers and cultural differences. The level of English proficiency among immigrants can affect their chances of obtaining fair and equitable jobs. Scholars are interested in how technology can be used to improve language learning and help immigrants meet language requirements for college and employment (Diari et al., 2023; Ibrahimi et al., 2023; Meniado, 2022). Strategies and policies are needed to help ELs succeed in the education system, and support is necessary for adult ELs who return to school. Technology can provide resources for language development and facilitate communication between ELs, teachers, and peers. The COVID-19 pandemic has further emphasized the need for virtual learning options and technology integration in education (Almuharraqi & Toworfe, 2021).

The COVID-19 pandemic has unprecedentedly impacted the world, affecting every aspect of society, including education. When COVID-19 hit the whole world with no warning and drastically changed everything, including people's lives, societies, and economies, education was inevitably disrupted (Mohialdin, 2021). Traditional forms of classroom learning were no longer possible, and educators had to quickly adapt to remote teaching methods using platforms such as Teams. As we have navigated through the pandemic and returned to a sense of normalcy, it is crucial to examine and understand the long-term implications of these changes on education (Thembanne, 2022).

The TAM informed the design, conduct, and analysis of this study. The purpose of this study is to assess adult English learners' perceptions of using Microsoft Teams in English language classes. Specifically, the study aims to explore the strength and direction of the

correlation between the elements of TAM and using Microsoft Teams in an English language course.

The research question sought to determine the correlation between these variables and the use of Microsoft Teams. The study employed quantitative research methods, specifically convenience sampling and an online questionnaire. The population consisted of adult ELs using Microsoft Teams for virtual learning, and the data was collected from 159 participants. The questionnaire included information and items to measure the constructs in TAM and the actual use of Teams. The following hypothesis were used to guide this study:

- H1: Perceived usefulness will positively correlate with the use of Microsoft Teams.
- H2: Perceived ease of use will positively correlate with the use of Microsoft Teams.
- H3: Attitude toward use will positively correlate with using Microsoft Teams.
- H4: Behavioral intention to use will positively correlate with using Microsoft Teams.

This chapter provides a detailed summary of the findings. It explores the findings and implications of this study on the application of the TAM in the context of using Microsoft Teams for language learning among adult ELs with a particular focus on using Microsoft Teams in educational contexts. Examining the methodology has provided valuable insights into important aspects of the use of technology. Furthermore, the chapter also discusses study limitations, its implications for practice and scholarship are carefully discussed, and it offers action recommendations for future research.



## Summary of Findings and Conclusion

The results strongly supported the study's hypotheses. They showed a clear and statistically significant positive relationship between using Microsoft Teams and the TAM variables PU, PEU, attitude, and BIU. This considerable correlation validates the TAM model in addressing the complex characteristics associated with adult English language learners' acceptance and utilization of Microsoft Teams. Building on these overall findings regarding the TAM model, the study also uncovered specific insights into users' experiences with Microsoft Teams.

Finding 1: Users generally rated their experiences with Microsoft Teams as "good" to "very good" based on a Likert-scale survey. Statistical analysis revealed a positive correlation, indicating a favorable relationship among participants' experiences with the platform.

Finding 2: The study clarified the relationship between Microsoft Teams adoption and perceived usefulness. Results showed a significant positive correlation between users' perceptions of the platform's effectiveness and its usage.

Finding 3: There exists a notable link between users' perceptions of Microsoft Teams' ease of use and their active engagement with the platform, indicating that ease of use positively influences actual use.

Finding 4: Users' positive attitudes significantly contribute to the effectiveness of using Microsoft Teams, as supported by the correlational analysis.

Finding 5: Users' intentions or willingness to use Microsoft Teams in the future strongly correlate with their actual usage of the platform, indicating a positive relationship between behavioral goals and the use of the application.

## Conclusions

The study's conclusions support earlier research that examined technology-assisted language acquisition using TAM. As per the findings of Wang et al. (2019) and Spencer & Temple (2021) research suggests that, when properly integrated, technologies like Microsoft

Teams can serve as effective educational tools for language learning. The majority of survey respondents expressed satisfaction with Teams for English classes, which is consistent with earlier research showing the effectiveness of technology-mediated learning environments (see Wang et al., 2019).

Furthermore, in line with earlier research, the study's significant correlations confirm that TAM can be used to assess technology integration in language classrooms (Spencer & Temple, 2021). Platforms like Teams help students become proficient in both language and technology, preparing them for careers that demand both skill sets. The results of this study support previous research that highlights the educational value of carefully chosen educational technology tools for language learners. The effectiveness of Microsoft Teams as shown here is consistent with other TAM related studies of technology-assisted language instruction.

### **Implications for Practice**

Numerous studies have examined the use of technology in English language instruction and have shown how versatile it is for improving student performance and collaboration (Evans, 2022; Pal & Vanijja, 2020; Pertiwi et al., 2022). This method, which blends traditional instruction with technology, produces a dynamic learning environment that is especially helpful for adult English language learners (ELs) (Casanova et al., 2020; Yiting et al., 2022).

Finding 1, which shows favorable evaluations on user experiences with Microsoft Teams, corresponds with previous research highlighting the significance of user contentment in educational technology. This finding supports earlier research that emphasizes the importance of user experience and happiness as crucial factors in the adoption of technology in educational environments (Evans, 2022; Pal & Vanijja, 2020). This study's findings demonstrate a clear positive association, reinforcing the implication that a great user experience is essential for successful integration of technology.

Finding 2 further supports the relationship between perceived usefulness and Microsoft Teams adoption, confirming previous research that highlighted the significance of users'

perceptions regarding the effectiveness of a technological tool (Pertiwi et al., 2022). This implies that the perceived usefulness of a platform such as Microsoft Teams greatly affects its usage among individuals learning the English language.

Finding 3 emphasizes the significance of ease of use in boosting user engagement with the Microsoft Teams. This finding aligns with prior research that emphasizes the crucial impact of user interface and usability in fostering effective learning experiences (Casanova et al., 2020). This implies the necessity of user-friendly interfaces in technology-based learning environments.

Finding 4 indicated further supports the influence of users' positive attitudes on the effectiveness of using Microsoft Teams, supporting previous research Yiting et al. (2022), that highlighted the importance of a positive attitude in the adoption of technology and the achievement of successful learning outcomes. This implicates that fostering positive attitudes among users may lead to more effective use of Microsoft Teams and improved learning outcomes.

Examining the association between users' intentions and actual usage, specifically in respect to Finding 5, is consistent with previous studies that have shown a strong influence of behavioral intentions on the adoption and utilization of technology in educational settings (Almutairi & Aljumah, 2023). This implicates the need of ensuring that learners' objectives are in sync with their active involvement on the platform.

The study's results together support the advantages of integrating Microsoft Teams into English language learning, emphasizing its ability to establish an engaging and inclusive learning environment for adult English learners. Utilizing technology, specifically, a flexible platform such as Microsoft Teams enhances traditional teaching approaches by catering to the varied learning preferences and ability levels of adult learners (Abidin et al., 2023). This implies that instructional designers, professors, and higher education institutions may want to consider incorporating platforms like Microsoft Teams into language learning curriculum and course

design to provide an engaging and inclusive environment for diverse adult learners. Instruction designers should explore ways to leverage the features of Teams to create interactive and effective learning content that aligns with the needs of adult English learners. Professors can incorporate collaborative activities, multimedia resources, and interactive discussions within the Teams platform to make the learning experience more dynamic and tailored to individual student needs. Institutions should consider providing training and support for instructors to effectively use Microsoft Teams in language learning classes. Additionally, the Technology Acceptance Model provides guidance on how universities can foster platforms like Microsoft Teams among students, with a focus on improving perceived usefulness, ease of use, and promoting positive attitudes.

The survey analysis indicated that users' perceptions of Microsoft Teams' usability, usefulness, and ease of use have significant positive relationships with users' experiences, attitudes, intentions, and users' behaviors related to the application. This suggests that improving these factors could increase users' acceptance and participation.

### **Research Recommendations**

Despite these study limitations, many measures were taken to guarantee the reliability of the results. The study used rigorous techniques to gather and analyze data, such as validated instruments and standardized processes. The researchers tried to reduce potential sources of bias and error through thorough study design, measurement, and quality control processes, even though no study is perfect. There is cause for confidence in the results' reliability, especially with larger datasets.

### ***Promoting Technological Research***

As previously stated in the conclusions section, Microsoft Teams is a noticeable initiator in improving the educational achievement of adult English language learners. It is recommended that to explore a broader range of technological resources beyond Teams alone;

for example, investigating and comparing various collaboration tools, such as Slack, Zoom etc. and analyze their features, strengths, weaknesses, and user experiences.

Identify the specific use cases where each tool excels and where it may fall short. The findings of Lyu & Wang (2018) recommended the importance of setting up a beneficial platform that encourages instructors to be creative and innovative which matches the finding of this study. Such a platform should also motivate students to actively use technology and explore various digital resources to enhance their language skills. Microsoft Teams has been identified as a captivating and pleasurable platform for learning, and its features can be leveraged to create engaging learning experiences.

One finding from this research on the promoting technology aspect is to recognize the crucial requirement for instructional approaches to adjust and accommodate the diverse needs and preferences of adult English language learners (Severinsen et al., 2018).

Exploring the impact of various factors on adult English learners' acceptance of technology in language learning is a compelling direction for future research. A mixed method can be applied for investigating socioeconomic position, access to resources, and instructor support as critical factors may help us better understand the dynamics that determine technology adoption in this demographic. Understanding how socioeconomic characteristics interact with technological access and utilization among adult learners can provide important insights into the differences and barriers that different socioeconomic groups encounter (Porter & Donthu, 2006). Therefore, combining methodologies is recommended to provide comprehensive insights into technology use by adult English learners across socioeconomic segments. Furthermore, evaluating the critical function of instructional support for facilitating or blocking technology adoption provides a multifaceted viewpoint needed for designing effective educational interventions. The researcher can use a qualitative phenomenological study to evaluating the role of instructional support in technology adoption. Future research findings can provide actionable recommendations to promote inclusive and supportive environments that

foster technological adoption among adult English learners, which enhances the effectiveness of language learning programs by investigating these external factors.

### ***Longitudinal Studies***

Longitudinal studies offer a unique perspective for observing the persistent impacts and ongoing challenges related to technology acceptance (Tao et al., 2022). They comprehensively understand the factors influencing technology adoption, revealing its transformative potential in language acquisition. Additionally, they shed light on the evolving limitations and changes in education over extended periods. Such studies are invaluable in exploring the complex dynamics inherent in adopting and sustaining technologies like Microsoft Teams among adult English language learners (Audette et al., 2019).

It is recommended to use this approach to facilitate in-depth and extensive investigations over extended periods, allowing for a comprehensive understanding of how this demographic gradually integrates and utilizes various technological tools. Through this method, researchers gain insights beyond surface-level observations. They can better comprehend the ongoing nature of adoption and engagement and the subtle yet crucial shifts in attitudes toward using technology for language learning among adult English learners.

These studies significantly enhance education discussions (Wiest et al., 2019) and hold practical implications for educators, instructional designers, and policymakers. The insights gained aid in developing more nuanced, successful, and tailored technology-based language learning programs. Consequently, these programs can better accommodate the evolving needs and preferences of adult English learners, thereby improving their language acquisition efforts over time

### **Practice Recommendations**

Virtual learning environments should continue to emphasize enhancing the user experience as a critical goal. To potentially experience increased engagement and motivation among adult English learners, consider implementing customized designs and interactive

features on these platforms, which can positively impact learning outcomes. Teachers are encouraged to adopt creative teaching methods and account for individualized learning paths for each student. Microsoft Teams plays a crucial role in this regard by providing flexibility and empowering learners to shape their own educational journeys (Evans, 2022), representing notable progress. Microsoft Teams' versatility to craft customized learning experiences for every student. This involves utilizing personalized assignments, incorporating exciting and varied media content, and facilitating conversational exchanges on the platform. Teachers can optimize learning by employing tailored techniques on platforms such as Microsoft Teams (Anisimova et al., 2022). This enables students to thrive and advance based on their personal strengths and preferences. The significance of ongoing scholarly research in educational technology cannot be overstated. This study extends understanding by examining how adult English learners' use of technology affects their language learning. To establish a landscape for knowledge sharing, researchers should actively share their work through conferences, academic journal articles, and workshops.

This study has shown that academic achievement is enhanced by strategies that reflect skills and learning preferences in adult English (Razkane et al., 2021). Since Teams can provide personalized learning tailored to each learner's needs, it promotes a more focused educational experience (Ali et al., 2021). Additionally, rich media resources like audio recordings, interactive presentations, and videos on Teams can increase understanding and engagement while accommodating different learning styles. Furthermore, the platform's interactive features make it easier for students to communicate in real time, enabling them to engage in active and collaborative exchanges of ideas. The study also showed that this flexible use of technology helps teachers create vibrant, inclusive learning environments to meet the needs of adult English learners.

## **Education Professional Development**

It is recommended that educators engage in ongoing professional development to stay updated on technological and pedagogical innovations. Participating in the collaborative projects, seminars, and workshops centered on incorporating technology such as Microsoft Teams into language instruction can help teachers to create engaging lessons that adult English language learners will find appealing.

Promoting cooperative research projects between academics, instructors, and business partners can spur innovation and make it easier to create innovative teaching tools. Collaborations between academic institutions and business sectors can help facilitate the integration of theoretical knowledge with real-world applications, guaranteeing the applicability and effectiveness of technological solutions in learning environments.

## **Study Limitations**

The purpose of this study was to assess adult ELs' perceptions of using Microsoft Teams in classes. Specifically, the study aimed to explore the strength and direction of the correlation between the elements of TAM and using Microsoft Teams in English language courses. Even though helpful information was gathered, it is essential to be aware of and deal with some the limitations and how future research can continue to develop our understanding of this topic.

Acknowledging that due to the online recruitment and technology, the participants may have been more comfortable with technology than the general population. The primary limitation is the relatively small sample size used in this study. The outcomes derived may need to be more applicable or generalizable in scope due to the potential consequences of the small sample size. In recognition, conducting future studies with a substantially larger sample size would be highly beneficial. Increasing the number of participants could strengthen the statistical reliability of the results, thereby enhancing the overall validity and efficacy of the model.

Furthermore, since the survey did not collect the demographic details such, the participants' primary language, duration of stay in the in the United States, their educational



background, prior knowledge of technology, comfort level with technology and their perceptions of the quality of their instructor, these limitations could guide future research by fellow researcher.

Another limitation is that this study only collected quantitative data, which allowed for correlation of variables but not for understanding the reasons behind those correlations. This calls for a more in-depth qualitative exploration of students' Teams experiences. For example, in-depth interviews, focus groups, or open-ended surveys can provide detailed knowledge about the factors that influence student behavior (Usman et al., 2020). Qualitative methods allow researchers to dive deeper into the experiences of participants, providing unique insights that cannot be captured by quantitative data alone. These methodologies may reveal the underlying causes of specific impressions, provide insights into unique user experiences, and provide a broader overview of the platform's impact on students' learning and engagement.

This study might have overlooked the long-term effects of applying Teams on students' academic achievement, learning outcomes, or long-term involvement. A more thorough knowledge of the platform's effectiveness might come from knowing how consistent use affects students' overall educational experiences, skill retention, or academic performance. Studies with a longitudinal design that monitor students' development over time may clarify the long-term impacts and changing perspectives on using Teams as an instructional tool.

An additional constraint is the dependence on self-reported data. Future studies may consider incorporating observational data to address this potential drawback, creating a triangulation of viewpoints. Incorporating observational insights into self-reports would strengthen the validity of the results and overcome the potential drawbacks associated with exclusively depending on self-reported data.

### **Concluding Thoughts**

The study's conclusions support earlier research that examined technology-assisted language acquisition using TAM. As per the findings of Wang et al. (2019) and Spencer and

Temple (2021), research suggests that, when properly integrated, technologies like Microsoft Teams can serve as effective educational tools for language learning. The majority of survey respondents expressed satisfaction with Teams for English classes, which is consistent with earlier research showing the effectiveness of technology-mediated learning environments (see Wang et al., 2019).

Furthermore, in line with earlier research, the study's significant correlations confirm that TAM can be used to assess technology integration in language classrooms (Spencer & Temple, 2021). Platforms like Teams help students become proficient in both language and technology, preparing them for careers that demand both skill sets. The results of this study support previous research that highlights the educational value of carefully chosen educational technology tools for language learners. The effectiveness of Microsoft Teams as shown here is consistent with other TAM related studies of technology-assisted language instruction.

The results emphasize incorporating technology in adult English learners' learning and the need for additional research. Future research must prioritize comprehending user experiences, ensuring that teaching techniques align with the capabilities of technology. Finally, continued study in these fields is essential to producing beneficial outcomes in terms of maximizing the implementation of technology tools in the classroom, guaranteeing broad participation, and satisfying the various educational demands of students.

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## APPENDIX A

### Survey

Gender:

Age:

Experience in using Microsoft Teams: (Excellent–Very Good–Good–Fair–Poor, scale from 5-1)

**Perceived usefulness** (strongly agree–agree–neutral–disagree–strongly disagree, scale from 5-1)

- 1.Teams helps me to learn more efficiently.
- 2.Teams improves my academic performance.
3. Using Teams to learn English is helpful.
- 4.The audio sound and the camera in Teams add to the authenticity of learning.
- 5.Teams makes English easier to learn at the university.
- 6.Teams gives me more control over my learning.
- 7.Teams is advantageous for learning English.

**Actual use of Teams** (strongly agree–agree–neutral–disagree–strongly disagree, scale from 5-1)

- 1.I believe that Teams helps me cooperate with classmates.
- 2.I believe that assignments help me improve my English performance.
- 3.I believe that a discussion forum helps me improve my English performance.

**Perceived ease of use** (strongly agree–agree–neutral–disagree–strongly disagree, scale from 5-1)

- 1.Learning to use Teams is easy for me.
- 2.Log in and out of Teams is fast and clear.
- 3.It is easy to get materials from Teams.
- 4.Overall, I believe that Teams is easy to use.
- 5.Learning on Teams is fun.

6.Using Teams for learning is a good idea.

7.Teams is an attractive way to learn.

8.I like using Teams for learning.

**Behavioral Intention of English through using Teams** (strongly agree–agree–neutral–disagree–strongly disagree, scale from 5-1)

1.believe Teams is useful for me as a student.

2.Teams helps me improve my English skills.

3.I feel comfortable using Teams to improve my English.

4.Teams materials are useful to me for learning English.

5.I think Teams should be used in English classes in the future.

**APPENDIX B**  
**Informed Consent Letter**

IRB number:18-12-941

Study Title: Purposeful Technology Implementation for Adult English Learners

Dear Participant,

My name is Mandy Chien. I am conducting this study in partial fulfillment of my doctoral dissertation at Pepperdine University. The purpose of this research is to investigate the correlation between the elements of the Technology Acceptance Model (TAM) and the use of Microsoft Teams by adult learners in a virtual English as a Second Language course. If you are 19 years of age or older and are using or used Microsoft Teams for your English as a second language classes either for your GED or college courses, you may participate in this research.

This form is part of a process called "informed consent" to allow you to understand this study before deciding to take part. If you agree to participate in this study, you will receive an email with the survey link to a [surveymonkey.com](https://www.surveymonkey.com). Please complete that survey that contains questions regarding technology use. The survey is expected to take approximately 20-30 minutes. Please use a password protected computer to answer the survey online. For this survey, you will only need to rank the response from 1 to 5 based on questions.

Your participation is entirely voluntary. You do not need to answer every question in the survey and you may choose to stop the survey at any time. The survey is anonymous, which means we will not ask for your name so no one knows who did the survey. Your responses will be kept confidential and only for this study.

The risks of participation are minimal and may include time spent in responding to survey on the computer screen might cause eye strain or headaches. Some questions might make you feel uneasy or distressed when responding to sensitive or personal questions.

The benefit of participating in the study is your contribution might help educators to understand the relationship between technology and the actual use of technology from adult English learners.

There is no compensation for participation in this study.

If you have any questions concerning the research study, please email me at  
email

For questions concerning your rights or complaints about the research contact the Institutional Review Board (IRB):

- Phone: 1(310)568-2305
- Email: [gpsirb@pepperdine.edu](mailto:gpsirb@pepperdine.edu)

You are voluntarily making a decision whether or not to participate in this research study. By clicking on the I Agree button below, your consent to participate is implied. You should print a copy of this page for your records.

## APPENDIX C

### Recruitment letter

Dear participants,

My name is Mandy Chien, and I am a doctoral student in the Learning Technology EdD program at Pepperdine University. I am conducting a research study about English language learners who use Microsoft Teams and I need your help! I am seeking volunteer study participants to complete an online survey.

Your participation in the study is anonymous and is anticipated to take no more than 30 minutes to complete the online survey.

Participation in this study is voluntary, and your identity as a participant will be protected before, during, and after the time that study data is collected. The researcher will be the only person to see the data. When the research is done, the researcher will safely dispose of the data by shredding paper or erasing digital storage devices if there is any.

To participant in this study, click this link:

If you have any questions, please feel free to contact me at your earliest convenience.

Thank you for your participation,



Mandy Chien

Pepperdine University

Graduate School of Education and Psychology

Doctoral student of Learning Technology

Email: [email](#)

Phone: phone

**APPENDIX D****eProtocol****Address****Phone****NOTICE OF APPROVAL FOR HUMAN RESEARCH**

Date: August 15, 2023

Protocol Investigator Name: Mandy Fiola

Protocol #: 18-12-941

Project Title: Perceptions of Classroom Technology Use Among Adult English Learners

School: Graduate School of Education and Psychology

Dear Mandy Fiola:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by

the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in*

*Research: Policies and Procedures Manual* at [community.pepperdine.edu/irb](http://community.pepperdine.edu/irb).

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Mrs. Katy Carr, Assistant Provost for Research