



REPUBLIC OF TÜRKİYE
ÇANAKKALE ONSEKİZ MART UNIVERSITY
SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF FOREIGN LANGUAGES EDUCATION
ENGLISH LANGUAGE TEACHING PROGRAM

EFL INSTRUCTORS' PERCEPTIONS ON TEACHING ENGLISH
TO ADULT LEARNERS AND A SUGGESTED SYLLABUS

MASTER'S THESIS

HİLAL ALTEN

Supervisor

ASST. PROF. MUSTAFA TEKİN

ÇANAKKALE – 2025



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Tez Danışmanı
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ÇANAKKALE, 2025



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In this thesis, which I have prepared in accordance with the Thesis Writing Rules of the Graduate Education Institute of Çanakkale Onsekiz Mart University, I declare that I have obtained the data, information, and documents presented within the thesis in accordance with academic and ethical principles. I confirm that all information, documents, evaluations, and conclusions have been presented in compliance with scientific ethics and moral standards. I have properly cited all the sources I have utilized and have not made any alterations to the data used. I affirm that the work presented in this thesis is original and pledge to accept any legal consequences that may arise against me in the event of a violation.

Hilal ALTEN

04.08.2025

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ÖZET

YETİŞKİN ÖĞRENCİLERE İNGİLİZCE ÖĞRETİMİ İLE İLGİLİ İNGİLİZ DİLİ EĞİTMENLERİNİN GÖRÜŞLERİ VE ÖĞRETİM İZLENESİ

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Bu çalışma, yetişkin öğrencilere İngilizce öğretimi konusunda İngiliz dili öğretmenlerinin algılarını araştırmak ve bu algılar ile güncel literatüre dayanan bir öğretim izlencesi geliştirmeyi amaçlamaktadır. Çalışmada, bu amaca uygun olarak, açıklayıcı sıralı karma yöntem deseni kullanılmıştır. Nicel veriler, görevde olan İngiliz dili öğretmenlerine uygulanan bir anket yoluyla toplanmış; ardından nitel veriler, bu öğretmenler arasından seçilen katılımcılardan, yarı yapılandırılmış görüşmeler aracılığıyla elde edilmiştir. Bulgular, öğretmenlerin yetişkin öğrencilerin bilişsel, duygusal ve motivasyonel özelliklerinin farkında olduklarını, ancak mesleki eğitimlerinin genellikle yetişkin eğitimi üzerine yoğunlaşmadığını göstermektedir. Nitel aşama, öğretimle ilgili zorluklar ve stratejiler hakkında daha derinlemesine bilgiler sunmuş; yetişkin eğitimi bağlamlarında öğrenci özerkliği, gerçek yaşam materyalleri ve duygusal güvenliğin önemini vurgulamıştır. Bu bulgulara dayanarak, yetişkin öğrencilerin ihtiyaçlarını karşılamak üzere, beyin temelli öğrenme ilkeleri ve öğretmen algı ve uygulamalarına dayalı yöntemleri içeren ve eğitim fakültelerinde seçmeli ders olarak verilmesi önerilen “Yetişkinlere İngilizce Öğretimi” dersi için 14 haftalık bir öğretim izlencesi tasarlanmıştır. Çalışma, İngilizce Öğretmenliği bölümleri için andragojik içeriklerin eklenmesi, yetişkinlerle sınıf deneyimi sağlanması ve öğretmen yetiştirme programlarına sinirbilim temelli yaklaşımların dâhil edilmesi gibi pratik öneriler sunmaktadır.

Anahtar Kelimeler: Andragoji, Beyin temelli öğrenme, İngiliz dili öğretmenlerinin algıları, Öğretmen eğitimi müfredatı, Yetişkinler için dil eğitimi

ABSTRACT

EFL INSTRUCTORS' PERCEPTIONS ON TEACHING ENGLISH TO ADULT LEARNERS AND A SUGGESTED SYLLABUS

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This study aims to explore EFL instructors' perceptions regarding teaching English to adult learners, investigate their suggestions, and develop an instructional syllabus that includes brain-based learning principles and aligns with these perceptions as well as existing literature. In line with this, an explanatory sequential mixed methods design was employed in the study. Quantitative data was collected by means of a questionnaire shared with in-service EFL instructors; subsequently, qualitative data was obtained via semi-structured interviews conducted with selected participants from among these instructors. The findings demonstrate that instructors recognize the cognitive, emotional, and motivational characteristics of adult learners, however, their professional training rarely focuses on adult education. The qualitative phase provided deeper insight into instructional challenges and strategies, highlighting the importance of learner autonomy, real-life materials, and emotional safety in adult education contexts. According to these findings, a 14-week teacher training syllabus was designed for an elective course titled “Teaching English to Adults,” intended to be offered in faculties of education. The syllabus includes brain-based learning principles and methods based on instructors’ perceptions and practices, aiming to address the specific needs of adult learners. The study recommends practical implications for ELT departments, highlighting the addition into teacher education programs of andragogical content, classroom experience with adults, and approaches guided by neuroscience.

Keywords: Adult language education, Andragogy, Brain-based learning, EFL instructors’ perceptions, Teacher training syllabus

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THE LIST OF ABBREVIATIONS

ELT	English Language Teaching
EFL	English as a Foreign Language
ESL	English as a Second Language
BBL	Brain-based Learning
AI	Artificial Intelligence
AR	Augmented Reality
L1	Native Language
L2	Target Language
CP	Critical Period
SLA	Second Language Acquisition
RT	Reflective Teaching
BA	Bachelor of Arts
MA	Master of Arts
PhD	Doctor of Philosophy

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THE FIRST CHAPTER

INTRODUCTION

1. Introduction

Teaching English to different age groups has always been both an essential and complex area of study in the field of English Language Teaching (ELT), since it requires lots of effort to conduct the most effective and appropriate activities in different classroom settings. Students of all ages may occasionally face challenges while learning a foreign language, influenced by factors such as cultural differences and unfamiliar situations (Setiyadi, 2020). However, even if they have difficulty in grasping the content knowledge, they are mostly aware of the fact that learning English is going to contribute to their lives in various areas. For these sorts of reasons, in recent years, an increasing number of adults from diverse national backgrounds have also started to learn English as well as children since they are motivated in pursuing better job opportunities, improving workplace communication, preparing for international travel, or simply enjoying various social interactions more effectively (Cozma, 2015). The needs of students in various levels and ages differ, therefore, teachers need to design their own ways of conducting lessons for different groups (Oroji & Ghane, 2013). For instance, adults are able to work on their own, however the kids are not (Satimbojevna et al., 2020). However, adults may feel more nervous than kids in a classroom environment.

Educators working with high school students and adult learners may face difficulties in encouraging motivation to learn a new language (Seven, 2020). This is especially true for older adult students, who may struggle with low motivation due to learned helplessness. In contrast, young and very young learners are often seen as easier to engage and instruct (Fenyvesi, 2020). Thus, the process of designing effective curricula for adult learners may also set unique challenges due to their diverse backgrounds, motivations, and cognitive abilities. Unlike children, adults bring varied life experiences, professional demands, and personal goals to the classroom; and all of these factors influence their language learning journey. Therefore, according to Ellis and Rogoff (1982), teachers need to enrich their ways of teaching by taking all of these into consideration while teaching to adult learners since it

may be difficult to find appropriate instructional materials especially for zero beginners. It results from the fact that materials are often designed for children, particularly at the beginner level, making it more challenging to find resources specifically prepared for adult learners.

There exists a variety of methods and techniques in language teaching and learning, each involving different approaches to be mastered (Ergashevna, 2022). Therefore, while choosing the most efficient one for each classroom setting, teachers take students' needs, their backgrounds, aims, age and language levels into consideration. All these factors have an impact on the method to be used as also stated by Khalil and Semono-Eke (2020). In recent years, there has been an extending interest in integrating a variety of teaching methods into syllabus design to be able to address the adult learners' specific needs in different contexts. Among these methods and techniques, brain-based learning has also appeared as a promising approach. Brain-based learning theory, founded on neuroscience, suggests that effective teaching can be improved by understanding how the brain naturally learns, according to Jumaah (2024). It enhances conventional ELT methods by promoting a more comprehensive, interactive, and stimulating learning environment (Winantaka, 2024). Besides, it may have a crucial influence on the process of teaching adult learners since their needs and motivation differ more than younger learners due to different factors (Rothes et al., 2014). For example, according to Uysal and Yavuz (2015), young learners tend to be more energetic than adults or teenagers. They actively engage in the learning process and acquire knowledge through interaction with their peers. In the light of this, the aim of this study is to address the problem of foreign language education for adult learners in addition to suggesting a syllabus taking brain-based discussions and instructors' perceptions into consideration.

1.1. Background of the Study

In the context of today's technological and evolving conditions, the number of people who learn at least one foreign language has increased dramatically (Tamimi, 2024). Among these learners, there are different age groups who would like to learn from the beginning or to improve their existing language knowledge. For instance, adult students who already have basic knowledge of English would like to improve themselves in order to be able to meet the necessities of today's world such as being accepted by the society and the environment they

live in. Additionally, they may pursue new job opportunities or promotions for their professional and personal development. In this process, they also need guidance to a certain degree, therefore, they apply to language courses or take private lessons. In these educational settings, they may encounter certain problems and challenges such as limited time for learning a foreign language. As stated by Gai Mali (2017), the fact that most people have other responsibilities such as working and running errands affect their learning progress. Apart from this, some of the adult learners get affected by their previous negative learning experiences. They also have a different perception about language learning and acquisition processes (Ethelb et al., 2020). According to Akpur and Fer (2021), language learning is affected by different conditions such as learnt helplessness, anxiety, lack of motivation and so on. Hence, their attitudes towards difficulties in learning a language can turn into negative thoughts.

Learning a foreign language requires lots of effort and practices that vary from age group to age group due to several reasons. When students have difficulty in accepting the importance of learning English and the necessities required from them, they bring these negative thoughts to the lesson as well, which also affects the teachers' perceptions about them. According to Brooks Lewis (2009), adult students already have general knowledge of the world, life, and potential requirements around them. Owing to this, EFL instructors, who are working in higher education preparatory schools, encounter certain challenges in the adult classroom settings or one-to-one lessons since the characteristics, responsibilities, burdens, and the expectations of adults differ a lot compared to the young learners. For instance, to Oroji and Ghane (2013), whereas young learners easily learn without being taught explicit rules, adults desire to see the rules at first. It might result from the fact that they are used to learning in this way, by memorizing and repeating over time. For these reasons, EFL instructors may find them challenging to motivate, to courage, to change the negative attitudes and to find suitable materials since the language materials are mostly created for young and very young learners. Therefore, they would like to apply different strategies, such as brain-based learning principles in order to fill this gap.

1.1.1. Statement of the Problem

The number of adult English learners is growing in today's world, as many adults need to learn the language to enhance their career prospects or to integrate into society as socio-cultural individuals (Orem, 2012). Therefore, they attend online or face-to-face language courses and take private lessons to improve their language skills or to learn from scratch. However, when they get into the classroom environment after a long time, they may feel negative about language or learning in general because of their past experiences in this. Also, they do not prefer to be seen as schoolchildren, and they tend to avoid certain teaching strategies such as gamification (Bugreeva, 2021). Teaching English to adult learners poses various challenges differing from teaching young and very young learners since adult students usually bring diverse experiences, necessities, attitudes and motivational factors into the classroom (Borg & Pace, 2022). These reasons influence their ability to learn a new language in various perspectives. Also, unlike children, adult learners may experience increased anxiety due to various reasons, such as feeling self-conscious because of their age (Tsai, 2018). They also tend to believe that they struggle to learn or apply the language effectively, often due to negative past learning experiences, low self-confidence, or the perception that language learning becomes more difficult as they get older (Ozfidan & Burlbaw, 2019). This feeling may have an impact on their learning process as well as the other parts of real life as stated by Suleimenova (2013).

Traditional language teaching methods may not be fully effective when it comes to the cognitive and emotional needs of adults. According to Russell (2006), the problem results from the fact that adults learn most effectively when they recognize the necessity of acquiring information. Also, they need to be aware that their brain can keep learning even if they get older. At this point, apart from the technical information or the language structures, they need to be taught about discovering how to learn best on their own. Additionally, adult EFL teachers should raise awareness about brain-based learning among students to promote more effective educational practices (Jing, 2019). This method includes teaching how the brain naturally learns, how the students get engaged in meaningful, and long-lasting learning experiences (Koşar & Bedir, 2020). As brain-based learning (BBL) theories suggest, the brain's plasticity and capacity for learning evolve with age, necessitating instructional strategies that align with the neurological and psychological characteristics of adult learners

(Rodgers & Hales, 2021). When they learn more about these facts, they may get more motivated in the process of acquiring a new language. Despite the growing interest in BBL in language education, there exists a gap in the development of curricula and syllabi that are specially designed for adult learners and adult EFL instructors since most of the existing curricula are designed for younger learners. EFL instructors, who mostly interact with adult students, have valuable insights into the practical challenges and effective strategies for adult language acquisition and teacher training programs.

Focusing on the issue of teaching English to adult learners demands a broad approach that will integrate the perceptions of EFL instructors with principles of brain-based learning (El-Henawy, 2020). By means of this combination, it is going to be possible to design a more engaging and effective syllabus that fosters learning progress of adult EFL learners. Since their needs and expectations differ from children, adult learners should be provided a different program and strategy specified (Foley, 2020). Apart from the curricula for students, brain-based learning and teaching methods can also be applied into teacher education programs. In the study conducted by Mohammed (2019), the findings revealed that the teacher training program which was prepared according to brain-based learning strategies significantly improved the teachers' instructional strategies. Additionally, in another study conducted by Rajeshkumar (2023), it was demonstrated that applications of brain-based strategies significantly improved teachers' performances in classroom settings. In accordance with these findings, the present study aims to explore EFL instructors' perceptions regarding teaching adult learners, as well as to analyze different brain-based strategies to promote an efficient learning environment for adults in a classroom setting. By incorporating the perceptions of experienced EFL instructors and principles of brain-based learning, the study seeks to offer a comprehensive framework for teaching English to adult learners. Based on the findings, a new course syllabus for teaching English to adult learners who are working with adult EFL learners is suggested for teacher education programs.

Research Questions

The aim of this study is to address the specific research questions given below;

1. What are the main perceptions of EFL instructors on the characteristics of adult learners?
2. Which instructional strategies are used the most and the least by the EFL instructors in adult classroom settings?
3. What are the challenges that EFL instructors encounter while teaching English to adult learners?
4. Do EFL instructors encounter problems in terms of the availability of appropriate materials and teaching strategies while working with adult learners?
 - 4.1. What strategies do EFL instructors use to deal with these challenges?
5. To what extent are English language educators knowledgeable about brain-based learning?
6. What specific brain-based teaching principles and techniques should be included in a teacher education syllabus for teaching English to adult learners?

1.2. The Aim of the Study

The aim of this study is to explore EFL instructors' perceptions on the characteristics of adult learners as well as to identify which strategies they use while giving their lessons in adult EFL classroom settings. While the research is being conducted, such issues as the challenges of teaching English to adult learners, instructors' perceptions on their adult students, and the problems commonly encountered by both instructors and the students will be considered. Besides, the question of how young and adult learners learn will be addressed by making a comparison of the characteristics of young and adult learners from the perspective of BBL. The characteristics of young and adult learners are seen as different in language learning as well, to Derakhshan, Tahery and Mirarab (2015). For instance, they may feel anxious in especially oral activities due to their age (Tsai, 2018), or they may tend to assume that they will not be able to learn after a certain age. However, as suggested by Joshua (2022), the brain's neuroplasticity is of importance in learning and memory. It is widely agreed that learning a new language as an adult can even reshape the brain (Witteman et al., 2018). It may be misleading to assume that individuals are not able to learn after a

certain age (Nilsson et al., 2021). Therefore, in the process of learning and teaching, the adult students should be informed about the ways they can and cannot learn effectively for the purpose of guiding them to discover their own ways of learning by taking neuroplasticity and sensitive period discussions into consideration. For these reasons, they need to be knowledgeable about brain-based insights with the help of their instructors. In the light of this, it is aimed to investigate what strategies are used by EFL instructors to deal with such problems that arise from time to time in the classroom, as well as the difficulty that experience while trying to find the most appropriate materials for adult learners.

1.2.1. Significance of the Study

The obstacles that adult English learners face, often hinder their learning progress. Furthermore, their lack of motivation and feelings of learned helplessness can impact teachers' motivation and instructional approaches as well (İpek & Kanatlar, 2018). Besides, compared to younger students, adult learners are more prone to learn sets of rules rather than chunks, according to Yu (2013), since they have been used to learning in this way since their childhood. For this reason, they may have difficulty in being open to modern instructional and communicative techniques presented to them. Without addressing these issues, students are likely to face failure in their learning journey. In order to achieve a successful learning process, students need to be motivated first since it is the key to completing a task (Wlodkowsky & Ginsberg, 2017). Some adult students might still perceive language learning as a boring and obligatory task, which may result in a lack of motivation and engagement much of the time. Apart from this, they tend to consider that they are very old to learn something new after a certain age. Additionally, their work and other responsibilities may leave them with insufficient time for language learning. As stated by Polson (1993), since adults have to deal with various responsibilities, attending classes may not always come first. Their rich life experiences can hinder their learning, especially if they are going through major life changes. To overcome these obstacles to a certain extent, it is significant to apply various types of materials when teaching adults. This ensures that they remain engaged in the learning process, so they can maintain their motivation and eagerness to continue learning. Educators can also benefit from technological tools to enhance the learning experience for adult students (Zhang, 2022).

Some of the adult learners may not prefer to be taught by means of digital tools though they are digital immigrants and are also used to traditional methods. Digital immigrants can be described as the ones who were not born into technology and were used it later on (Prensky, 2001). On the other hand, the ones who are digital natives are able to benefit from technology more than digital immigrants. Digital natives are the ones who already have sufficient digital competencies (Janschitz & Penker, 2022). Therefore, teachers need to balance the contents of the lessons according to the students' ages and language levels. In a study conducted by Chanseawrassamee (2012), it was clarified that adult learners need more authentic materials to be more successful in language learning since they tend to engage their life experiences into their new learning. For this reason, it is important for language teachers to adapt language materials into real life situations and activities accordingly. In addition to this, cultural figures can also be added to the teaching processes. In another study conducted by Brooks Lewis (2014), from the perspective of students themselves, it was stated that the majority of adult learners held positive views regarding the importance of culture in language learning. According to Byram and Fleming (1998), it is not possible to separate culture and language. Hence, it is of importance to introduce the culture of the target language as well in the classroom settings. In the light of these studies, it can be stated that adult learners are more likely to pursue real life materials and activities regarding their practices since they have more life expectations and experiences.

When it comes to the teachers' perspectives on adult EFL learners, it can be said that they encounter certain challenges in adult classroom settings that are similar to the younger learners' experience while learning a foreign language. For instance, some of the students may be too anxious to talk in the classroom because they may think that if they make a mistake, it is not going to be good for them. At this point, instructors should be careful about creating a safe environment in which students are going to feel comfortable while practicing speaking in the target language (McKnight & Martin, 2012). In the light of these studies conducted from the perspective of the students and the teachers consecutively, it can be concluded that adult learners also need a variety of materials, creative activities, and safe learning environments. In addition to this, they mostly need to be understood by their instructors since they have multiple tasks to handle in their daily lives as well (Zhang & Zheng, 2013). However, in language teaching, sufficient attention is given to developing various methods, methodologies, and materials for children, whereas adult learners,

particularly for those who are at the beginner level, are often neglected (Piccinin & Dal Maso, 2021). This creates an obvious gap in resources and strategies for teaching adults. In the Turkish context, teacher education programs mostly emphasize young learners. There are no mandatory courses specifically focusing on adult learners (Önal & Özdemir, 2024). For example, while ELT undergraduate programs include courses on teaching English to young learners, they do not include separate courses designed to teach adults. As a result of this, teachers may sometimes feel insufficient while working with adult learners in EFL classrooms when it comes to motivating, solving problems and teaching especially to zero beginners (Işık, 2023). Based on these findings, the aim of this research is to explore teachers' perceptions on adult EFL learners in Türkiye's EFL settings as well as to provide solutions for the problems and challenges observed by the instructors in their teaching practices.

1.3. Summary

Adult English learners face numerous challenges that hinder their language learning progress. A lack of motivation and feelings of helplessness often worsen these difficulties, impacting not only on their own learning but also on the motivation and teaching strategies of their instructors. Compared to younger learners, adults are more prone to focus on rules rather than communicative chunks, as their learning experiences have traditionally highlighted structural approaches (d'Anglejan & Tucker, 1975). This situation can create a challenge to accept the modern instructional techniques, which hinders their engagement with contemporary communicative methods. Motivation plays a key role in enabling learners to achieve their goals. However, many adult learners perceive language learning as a boring and obligatory task (Huang & Zhang, 2025). Additionally, some of them view themselves as too old to acquire new skills, while others struggle to find enough time for language learning due to professional and personal responsibilities. These problems highlight the importance of implementing diverse teaching materials that support learner interest and motivation. The integration of technological tools in teaching can also enrich the learning experience, although some adult learners, who are used to traditional methods, may refuse to use digital materials. Therefore, adult learners' backgrounds and preferences require a special approach to teaching. While some learners may be less comfortable with technology due to limited digital proficiency, they often benefit from authentic materials that connect

learning to real-life contexts (Hauge et al., 2024). Furthermore, integrating cultural elements into language instruction raises engagement by connecting the target language to its cultural context. From the perspective of instructors, teaching adult learners may present certain challenges, many of which are similar to those that are encountered in younger learner classrooms. For instance, some adult learners may experience anxiety about speaking in class, since they believe that their peers will judge them in case of a mistake (Horwitz et al., 1986).

Despite this, adult learners are often overlooked in language teaching research and practice. Educational resources, methodologies, and training programs mostly focus on younger learners, this leaves a significant gap in support for adult beginners (Assapari et al., 2019). In Türkiye, for example, teacher education programs highlight courses on teaching English to young learners (Gezer, 2022). This lack of practice can make teachers feel as if they are not yet ready to teach English to the adult EFL learners, particularly those who are at the beginner level. As a final point, this research aims to explore teachers' perceptions of adult EFL learners in the Turkish context, in light of the challenges faced by instructors. Based on the findings, a syllabus for teaching English to adult learners will be suggested to be used in teacher training programs. The suggested syllabus is expected to improve the effectiveness of adult English language education as well as to provide insights for instructors and curriculum developers.

THE SECOND CHAPTER

LITERATURE REVIEW

2.1 Introduction

The main point of this chapter is to introduce the topic from different perspectives and review the literature which is related to this research study. The aim of the related literature review is to explore and identify previous research on adult EFL education including the challenges, perceptions and the instructional strategies used in classroom settings, comparing to young learners. Additionally, teacher training programs, brain-based learning discussions and suggested solutions to the existing problems are going to be examined by providing theoretical foundations. This section will identify the philosophies of BBL and how these principles may help instructors meet the specific needs of adult learners in foreign language education. The addition of concepts such as neuroplasticity, brain-based learning, the characteristics of adult and young learners, and the critical period hypothesis in the literature review is essential for gaining a deeper understanding and analysis of adult learners. This theoretical foundation allows for the development of a more effective syllabus that is designed for specific needs and cognitive characteristics of adult learners. By reviewing key research, studies and theories, the aim is to observe how perceptions from neuroscience can enhance language learning for adults. Besides, this chapter will analyze previous research to identify common trends, and gaps in the instructional field. How brain-based teaching strategies can help address common challenges in adult EFL classrooms, such as motivation, memory retention, and individual learning differences are going to be focused. By combining these findings, this review will provide context for the current study and explore the necessity for further research in this area.

2.2 How Adult Learners Differ from Young Learners

Identifying the specific characteristics of young and adult learners is of importance to develop effective teaching strategies in language education since they have quite different expectations and personalities (Miller et al., 2024). Young learners are naturally curious and able to absorb new information quickly by means of social interaction and repetition Mulyadi

(2021). Therefore, they learn easily with the help of interactive Total Physical Response activities which help them spend their energy in the learning process (Xie, 2021). According to Duan “It can capture children’s attention and enhance their learning experience” (2021, p.1324). Young learners are usually eager to discover something unfamiliar, whether it is a new game or a word (Reynolds et al., 2021). In contrast, adult learners tend to approach education with more specific goals, expectations and critical thinking skills modelling their learning preferences accordingly (Nguyen et al., 2015). Since they have different models in their lives such as being a parent, employee or a partner, they may not have sufficient time to learn a new language easily (Ho & Lim, 2020).

According to Akpur and Fer (2021), language learning is also affected by different conditions such as learnt helplessness, anxiety, lack of motivation and so on. Hence, adult learners’ attitudes towards difficulties in learning a language can turn into negative thoughts. According to Brooks Lewis (2009), adult students already have general knowledge of the world, life, and potential requirements around them. Owing to this, EFL instructors encounter certain challenges in the adult classroom settings or private lessons since the characteristics, responsibilities, burdens, and the expectations of adults differ a lot compared to the young learners. However, since they also have advantages compared to young learners, such as regulating or designing the studies on their own, they can also become successful in the learning process (Wu et al., 2014). As also stated by Cozma (2015), thanks to the characteristics and maturity of adult learners, people tend to ponder that it is easier to teach English to them rather than to young and very young learners; however, it is not correct most of the time. Most adult learners have a lot of responsibilities as also mentioned above; therefore, they may not have self-regulation skills all the time.

While learning a new language, it is essential to be able to regulate one’s own studies according to the schedule they need to follow. Adult students are mostly expected to have self-regulation skills due to being responsible for their own learning process (Song & Hill, 2009). Achieving success in any learning environment requires self-regulation, as stated by Arnesen (2019). To Vaculikova, in today's technology-driven world, the growing preference of adult learners for online platforms has made self-regulation skills more important than ever (2024). In a study conducted by Zaky (2021), it was stated that writing instruction plays a crucial role in language education, as writing proficiency largely relies on self-regulation

and transcription skills. This helps students develop better study habits, monitor their performance, and assess their academic progress through self-regulated learning. However, not every adult is able to regulate their own studies, and this differs according to certain factors such as gender. For instance, in a study conducted by Lin (2019), it is stated that female learners tend to use self-regulation strategies more compared to male students. However, this is a skill that can be developed in most cases regardless of these issues.

2.3 Use of Technology in Adult EFL Classes

The development of the internet, social networks, and multimedia has changed our lives in every respect, including foreign language teaching and education in (Tolibovna, 2022). Therefore, both students and teachers benefit from technology during the educational process. According to Boonmoh et al. (2022), the reason why EFL teachers use digital technology is that they would like to meet the expectations of learners by motivating and engaging them into the activities. In a study conducted by Zhang (2022), it was demonstrated that use of technology -especially the ones including peer collaboration- contributes learners' self-efficacy. Shortly, instructional technology has been used in education in different departments for many years. Technology, like all other fields, is constantly evolving, and with the advent of artificial intelligence, it is replacing traditional methods in education gradually (Wang et al.,2024). It is used for enhancing students' vocabulary, speaking or listening performances by exposing them into English more, by means of AI-based applications and so on, which significantly supports learning and teaching processes. Nevertheless, as also stated by Mohamed (2024), such technologies as AI have both advantages and disadvantages. In this respect, there is an ongoing debate about benefiting from artificial intelligence in educational settings. For instance, in a study conducted by Dilzhan (2024), it was identified that in-service teachers value AI for its ability to quickly generate lesson ideas, reduce workload, and enhance student engagement. Key challenges include overdependence on technology and concerns about integrity since students may misuse it for their homework and so on.

In a study conducted by Tsvetelina and Tsvetomir (2024), on the other hand, it was found that pre-service EFL teachers had more positive attitudes about use of AI in foreign language education. For example, young learners who are especially between five and twelve

years have very short attention span (Laksmi et al., 2021); therefore, they may need to watch content-regarding videos to be able to comprehend the related subjects. By means of multi-media materials, it can be easier for them to learn English inside and outside of the classroom, which is helpful in young learners' language education. However, as also suggested by Taghizadeh and Yourdshahi (2019) for the effective integration of technological approaches in young learners' classrooms, the crucial role of teachers in the most appropriate use of technology must be taken into consideration too. To effectively integrate technology into EFL classrooms, teachers need specific digital competencies, including media literacy, digital security, adaptability, as well as communication and collaboration skills (Lucas et al., 2021). When the right technology is chosen, young EFL learners become more committed and motivated to learn the target language. Instructional technologies and AI-based applications are also useful for adult students. For instance, when they are able to customize their own processes, adult learners can increase their language learning performance (Love et al., 2023). Besides, in a research study conducted by Norouzifard (2021), it was pointed out that adult learners, regardless of their age or educational background, benefit from augmented reality (AR) as it positively influences their attitudes and motivation toward language learning. Both AI-based and traditional digital technologies help students improve their language skills by providing them with several opportunities and resources. Nevertheless, as claimed by Dithale and Berg (2024), many adult learners are unfamiliar with blended, online, or hybrid learning methods, and thus may not be accustomed to using various devices to acquire essential skills and knowledge. Also, due to their habits, they may be prejudiced against using technology to improve English.

2.3.1 Digital Natives and Digital Immigrants

The role of technology is crucial in enhancing vocabulary acquisition and reading comprehension, a claim supported and validated by numerous research studies (Alqahtani, 2024). As supported by Riasati (2013), students' exposure and experience to new languages is no longer restricted to their textbooks or immediate surroundings. Given their easy access to technology and preferred content, students may lose interest in traditional lessons if the activities fail to be engaging and interactive. As stated by Lisenbee (2016), over the past 20 years, the widespread availability of technology has emphasized the gap between students' expectations and teachers' way of incorporating technology into their lessons. Gen Z

students, who haven't experienced the pre-Internet era, are moving away from traditional learning methods, and taking charge of their learning outside the classroom using technologies like mobile apps (Szymkowiak et al., 2021). Therefore, they are called digital natives as suggested by Prensky (2001). These individuals are the ones who are highly skilled at modern technology, using it daily to access information through digital tools and apps, allowing them to learn anytime and anywhere (Prensky, 2001). According to Prensky, as digital immigrants, adult students may not feel competent enough to benefit from technology inside or outside of the classroom settings. Digital immigrants are individuals who haven't had prior exposure to digital technologies and are often reluctant to embrace the unfamiliar world of e-learning (Baron, 2024). Also, in a study conducted by Yang and Wang (2024), it was emphasized that not only the adult students but also some of the teachers may be technophobic individuals due to their being digital immigrants. They avoid using technology in their classroom activities owing to feeling unfamiliar with the technology and being lack of professional training. Yoon's (2019) study also found that while teachers generally hold positive views on AI, they are hesitant to integrate it into their classroom practices. At this point, it also becomes increasingly important for EFL instructors to guide their adult students in taking advantage of technology during their learning processes.

2.4 Reflective Teaching in Adult EFL Settings

In the continuously advancing field of language education, various methods, techniques, and approaches have been developed to ensure effective teaching by considering students' needs, learning styles, language proficiency, cognitive and physical developmental characteristics, as well as the beliefs of both students and teachers. As stated by Natsir and Sanjaya (2014), communicative language teaching, the grammar-translation method, the direct method, the audiolingual method, and total physical response are just a few examples of the diverse approaches that have shaped English language teaching during the method era. As stated by Liu and Shi (2007), language teaching has long relied on various methods, techniques, and strategies. However, with advancements in technology, shifts in education, and other changes, using a single method is no longer considered effective. A flexible, integrative approach is essential for successful language learning (Alaye & Tegegne, 2021). Thus, the shift from the method era to the post-method era has emerged as a new concept in English language teaching. As Kumaravadivelu (2006) stated, the post-method era focuses

on exploring various options rather than following a single fixed method. The eclectic approach has gained significance by incorporating a variety of teaching strategies in a combined and flexible manner. (Valledor et al., 2023). In the post-method era, it is clear that the roles of both learners and teachers have evolved. According to Anggraeni and Yusnita (2017), in the past, teachers were seen as authorities, but today they are viewed as facilitators, mentors, and guides. Similarly, students, once passive recipients of knowledge, are now active participants, critical thinkers, and explorers in the classroom. Considering these perspectives, a new concept has emerged in this era known as reflection. Reflection in education refers to the process where teachers and students evaluate their experiences to improve learning and teaching practices (Archer et al., 2024). In this way, they are able to observe at what pace they are in the learning journey.

Reflecting on one's own learning process and strategies is key to achieving successful learning. Therefore, as also stated by Phan, (2021) using self-assessment techniques, particularly in language learning, is important as it allows learners to understand their progress; and reflect on their own development at the same time. Reflection helps teachers continually grow professionally by providing deeper insights into their classroom practices through action research or needs analysis (Vadivel et al., 2021). For students, reflection helps them become more aware of their learning pace while encouraging critical thinking (Lew & Schmidt, 2011). It is often assumed that adult learners manage self-awareness, self-reflection, and related processes more effectively due to their higher levels of self-awareness. However, owing to their responsibilities or work burden, it may not always be the case (Kellenberg et al., 2017). As Tajik and Ranjbar (2018) pointed out, teachers may also encounter challenges when implementing self-reflection in young learners' classrooms for various reasons, including limited resources in language classes or administrative expectations. Therefore, adult learners should be guided appropriately by their EFL instructors. As stated by Ayana and Chali (2017), teachers must act as dynamic agents of change, possessing the ability and potential to make informed decisions, critically reflect on contexts, and analyze and understand the underlying causes of perceived challenges. Each learner has unique needs and expectations in the language learning process, which is why they must find their own learning approach (Rodek, 2019). Once they discover the methods that work best for them, they can independently plan their learning process by enhancing their self-regulation and self-reflection skills. Both students and teachers should enhance

their self-reflection skills, as this allows teachers to critically assess their classroom practices and beliefs, evaluating whether these approaches are truly effective (Valdez et al., 2019).

2.5 Brain-Based Learning and Adult EFL Settings

Adult students and adult EFL instructors encounter certain challenges during the processes of learning and teaching from time to time as mentioned previously. According to Pawlak (2015), there might be lots of different reasons underlying these challenges. For instance, learners may struggle with motivation, have difficulty developing self-regulation and self-efficacy skills, and experience anxiety when speaking; In this sense, they display similar characteristics as young learners (Özer & Akçayoğlu, 2021). However, these can be solved by means of certain principles such as the integration of BBL and adding new aspects into teacher training programs (Amini et al., 2025). Brain-based learning is an educational method that incorporates the latest findings from neuroscience research (Bonomo, 2017). These techniques also help students learn in ways that feel most comfortable to them. According to Bonomo (2017, p. 28) “brain-based learning accommodates the learning style of individual students”. Implementing brain-based activities into the language classrooms make learning and teaching easier (Thadphoothon, 2019). In the study conducted by Khalil et al. (2019), it was found that brain-based learning facilitates and accelerates the development of speaking skills. Also, in the study conducted by Oghyanous (2017), it was revealed that brain-based approach had a positive and significant impact on developing self-efficacy skills. Brain-based learning can also be integrated into teacher training programs to help learners become more aware of different learning strategies (Cui & Zhang, 2021).

According to Salem (2017), “BBL is an organic, positive and an encouraging way maximizing learning and teaching processes”. In a study conducted by Gözüyeşil and Dikici (2014), it was revealed that brain-based learning results in higher academic performance compared to conventional teaching approaches. Apart from this, in a study conducted by Koşar and Bedir (2020), it was demonstrated that integrating brain-based learning into teaching settings could lead to changes in adult students' misconceptions about language learning. For these kinds of reasons, it would be beneficial to integrate this approach into teacher training programs as well. Students should be informed about how to discover the best way of learning on their own by making use of the two hemispheres of their brains in

harmony. However, as mentioned by Atmaca (2016), understanding the roles of each hemisphere alone may not be sufficient to help learners fully utilize their brain's potential, as effective implementation of brain-based learning also requires addressing some physical and psychological needs. For instance, teachers should consider reducing stress in the classroom by undergoing some changes (Krashen, 1981). According to Kuş and Bakır (2013), implementing certain brain-based learning techniques could enhance learners' motivation to develop their writing skills. To be able to apply BBL approach in foreign language teaching settings, instructors should pre-expose the learners to the lesson, reduce stress level in the class, assist learners in understanding how to learn best, provide non-judgmental feedback and so on (Atmaca, 2016). In accordance with the findings of the study conducted by Lunenberg (2010) indicated that while nearly half of the participants had a moderate understanding of how the brain learns, they still expressed a need for training on ideal brain learning strategies to adapt their teaching methods accordingly.

Brain-based approaches provide educators with insights into the specific brain regions that play a crucial role in language acquisition. Among these, while Broca's area is primarily responsible for spoken language and production, Wernicke's area is crucial for language comprehension (Friederici, 2017). Garman (2014) stated that neurolinguistics provides insights into how the brain acquires a second language. This understanding enables educators for design more effective language learning programs. By understanding these mechanisms, teachers can adapt their instructional approaches to align with the brain's natural learning processes, leading to more effective language acquisition and improved communication skills. According to Eid (2024), neurolinguistics emphasizes the significance of repetition and practice in the process of language learning. Providing timely and precise feedback enables students to refine their language skills and prevent repeated errors. Richards and Rodgers (2014) stress that a supportive, safe environment is key to effective language learning, enabling students to engage without fear of judgment. Therefore, teachers should benefit from certain techniques such as mirroring, where the teacher displays the student's body language and articulation, helps build connection in the learning space. To Eid (2024), this method activates the brain's mirror neuron system, fostering empathy and understanding. According to Korkmaz and Karatepe (2018), engaging various senses such as sight, hearing, and movement enhances language learning by creating multiple connections in the brain. This process improves memory retention and comprehension.

According to Harden and Jones (2022), there are 12 different principles of BBL. In their study, it was stated that each brain is unique, learning is influenced by both conscious and unconscious mental processes, the brain functions as a parallel processor, handling multiple streams of information simultaneously, emotions are powerful patterns that significantly shape the learning process, the brain learns best when knowledge and skills are practiced meaningfully in real-life contexts, discovering meaning is an innate tendency of the human brain, learning engages the entire body, including physiological and emotional systems, the brain identifies patterns to extract meaning and organize new information, memory involves more than just memorization; there are distinct systems for storing and retrieving information, social interaction and holistic processing are central to how the brain learns, focus, attention, and perception play a vital role in effective learning, appropriate levels of challenge enhances learning.

2.5.1 Why Use BBL Principles in Teaching English to Adult Learners

BBL is of an important role in adult EFL education since it is in line with instructional practices and how the adult brain naturally acquires, processes new information (Caine & Caine, 1990). Unlike children, adult learners bring a quite amount of prior knowledge and experiences into the classroom (Belzer, 2004). Moreover, adult learners often face emotional barriers such as anxiety and low self-confidence (Pastogianni & Koutsoukos, 2018). BBL addresses the challenges mentioned in the previous paragraph by creating supportive learning environments that lower affective filters. By fostering engagement, personalization, and cognitive flexibility, BBL contributes not only to improved language competence but also to greater learner autonomy and long-term learning practices making it quite relevant and beneficial in adult EFL education (Akman et al., 2020).

2.5.2 Neuroplasticity in Adult Learners

Neuroplasticity is a broad concept that describes the brain's capacity to adjust its structure and function over time, adapting in response to experiences (Voss et al., 2017). Neuroplasticity is the incredible capacity of the brain to reshape and modify both its structure and functionality over the course of a person's lifetime (Ruge et al., 2012). This dynamic process allows the brain to create new links and strengthen existing ones depending on the

experiences and learning the individual encounters (Costandi, 2016). For instance, when a person learns a new language, the brain strengthens neural pathways in areas related to language processing, improving skills such as listening, speaking, and reading. As stated by Li (2017), this plasticity is not limited to recovery or learning new skills; but rather it is an ongoing process, with the brain continually reshaping itself based on environmental interactions, cognitive challenges, and even emotional experiences. Neuroplasticity is fundamental to our ability to learn, adapt, and recover throughout our lives. Therefore, not only younger learners but also adult students are able to learn a new language by taking this into consideration during their process. As also noted by Jumiati and Widiastuty (2024), Neuroplasticity is called as the brain's capacity to redesign, reshape and adapt new experiences, which is important for language learning, even in the teaching settings with adult learners who are facing age-related cognitive inflexibility.

According to Guglielman (2012), recent neuroscience research indicates that brain aging may be reversible since the brain retains its plasticity throughout life and can reshape its neural pathways through learning. When adult learners start learning a foreign language, it is observed that they are capable of attaching their background knowledge into new input and thus creating neural connections. Neuroimaging studies suggest that bilingual older adults have greater gray matter volume in specific brain regions linked to target language identification ability (Abutalebi et al., 2014). Also, according to Ware et al. (2021), language acquisition has a significant impact on the brain's ability to adjust and reshape.

2.6 Teacher Training Programs for Adult EFL Learners

In Türkiye, teacher training programs typically last four years and are offered by faculties of education at universities as organized by Council of Higher Education. These programs address a wide range of courses, including classroom management, innovative teaching methods, technology integration, and special education (Yigit et al., 2024). Additionally, English language teacher training programs cover other courses such as teaching language skills, use of literature in language teaching, language assessment and teaching English to young learners (Kuzu, 2021). Besides, the students in ELT departments are able to get access to the 21st century skills such as being able to think critically, media literacy, creativity, collaboration, productivity, responsibility and so on, by means of

selective courses (Ataberk & Mirici, 2022). In this way, they are expected to teach these skills to their future students as an addition to the foreign language skills. ELT programs in Türkiye are designed to equip future in-service English teachers with both theoretical knowledge and practical skills necessary for effective language instruction (Sönmez & Köksal, 2022). Additionally, students engage in practicum experiences where they observe and teach in real classroom settings in different state schools. By means of this, they have an opportunity to experience real classroom environments by putting their theoretical knowledge into practice. Nevertheless, it is also demonstrated that there may be certain challenges to be addressed in different research studies.

A study conducted by Taşcı (2023) revealed fundamental challenges in Türkiye's teacher education programs, assessment systems, curriculum, teaching methodologies, teachers, learners, and overall educational context. The findings indicated that many of the issues in ELT in Türkiye aligned with those encountered in international contexts. In ELT programs, there are various courses focused on young learners, while specific courses on adult learners are generally more limited. Teacher education programs primarily focus on working with children and young learners, and the curriculum includes courses (Çelik & Kasap, 2019). However, a dedicated course on teaching adult learners is not typically included in most programs (Karsantık & Yağcı, 2021). Therefore, teachers may need to seek additional training through private language courses or graduate programs to gain more specific knowledge about adult learners. While ELT graduates are well-equipped to teach children, their access to detailed pedagogical knowledge for adult learners may be more limited; and these are offered mostly as selective courses such as “adult education and lifelong learning” (Yaman, 2018). In another study conducted by Hamsi (2015), it was also revealed that in ELT programs in Türkiye, there is no separate course specifically designed for adult language teaching. Instead, the topic is addressed indirectly in courses such as ‘teaching language skills’.

2.7 Summary

Throughout this literature review, the challenges and opportunities associated with language learning, particularly in the context of adult learners, have been explored. With the increase of the number of adult individuals who learn English for different purposes, the

need for using modern and various techniques is certainly considered in ELT. As examined in the existing literature, it became obvious that age-related cognitive decline often discourages adult learners, fostering beliefs in limitations when it comes to language acquisition. However, emerging research in neuroplasticity has highlighted that the brain's capacity for change and adaptation remains intact throughout life, offering a promising foundation for adult language learners Widiastuty (2024). The discussion on neuroplasticity, bilingualism, and the brain's remarkable ability to reorganize neural maps highlights the importance of creating supportive learning environments. Language learning as a dynamic process can actually have an impact on promoting mental flexibility (Guglielman, 2012). This denies the traditional belief that language acquisition is limited to a certain age, as also mentioned by Ware et al. (2021). Additionally, various language teaching techniques, starting from method era, have been shown to enhance language learning in adults. These approaches, when combined with an understanding of neuroplasticity, offer a strong approach for instructors who aim to help adult learners overcome certain challenges. In conclusion, while challenges exist, recent advancements in understanding of the brain's capacity for learning at any age may provide a more hopeful view (Fer & Akpur, 2021). By examining these kinds of perceptions, adult learners can be guided more effectively by their instructors according to their needs.

THE THIRD CHAPTER

METHODOLOGY

3. Introduction

This MA thesis employs a mixed-method approach to investigating EFL lecturers' perceptions of teaching English to adult learners, with a particular focus on the teaching strategies. Data collection includes a two-part questionnaire as well as the open-ended questions. The questionnaire aims to demonstrate an overview of instructors' attitudes and beliefs regarding adult learners, while the interviews provide an opportunity to deeper understand the practical strategies that educators utilize to meet the needs of adult learners. Also, by means of the open-ended questions, this thesis aims to explore EFL lecturers' detailed perceptions about adult learners' brain-based learning discussions. By integrating both quantitative and qualitative methods, this study offers a portrayal of the difficulties involved in adult EFL teaching and signals the need in EFL education. Accordingly, the findings highlight not only the lecturers' perceptions but also the pedagogical approaches they utilize in order to overcome challenges encountered during teaching. Based on these findings, a syllabus for an adult EFL teacher education program has been designed, providing a foundation for future EFL lecturers to better meet the challenges and demands of teaching adult learners effectively.

3.1. Setting and Participants

In this study, participants were selected through random sampling to ensure a reduced potential selection bias. Data was collected online via a questionnaire, which allows for efficient and accessible participation while maintaining anonymity and consistency during the data collection process. The participants are experienced instructors who have been working with adult learners in a university located in western part of Türkiye. They have been in EFL classroom settings for several years varying from 2 to 25. The participants have been teaching English to students whose ages generally vary from 17 to 20 mostly. However, depending on the profiles of the students, age groups may show variance too, but they are in the category of adult learners.

The number of the female participants is 22 whereas the number of the male participants is 14. Their age range is between 24 and 59 with the mean of 36,3. A significant part of the participants, that is, 26 of them (%72) graduated from the department of English Language Teaching, 7 of them (%19) graduated from English Language and Literature, 2 (%5) of them graduated from Translation and Interpretation and only 1 of them (%2) graduated from American Culture and Literature programs. 11 of the participants (%30) completed BA program, whereas 21 of them (%56) completed MA and 4 of them (%11) completed PhD programs.

Table 1
Participants' Demographic Information

Variable	Category	<i>n</i>	%
Gender	Female	22	61.1
	Male	14	38.9
Age Range	24-59 (M = 36.3)		
Graduated Department	English Language Teaching	26	72.2
	English Language and Literature	7	19.4
	Translation and Interpretation	2	5.6
	American Culture and Literature	1	2.8
Educational Background	Bachelor's Degree (BA)	11	30.6
	Master's Degree (MA)	21	58.3
	Doctorate Degree (PhD)	4	11.1

N = 36

3.1.1. Instrument

In order to collect comprehensive data on instructors' perceptions of adult learners and the strategies they employ in EFL classrooms, this study utilizes a two-part questionnaire and semi-structured interviews. The questionnaire was developed by Le Thanh Thao et al. (2022) consisting of two sections: the first part includes seven questions designed to gather quantitative data on instructors' general attitudes, beliefs, and experiences regarding adult learners. These questions are structured using a 5 point Likert scale to ensure comparable responses. The second part includes 14 questions, allowing participants to elaborate on their perspectives and provide qualitative insights into their teaching practices.

This particular questionnaire has been chosen due to its comprehensive structure because it effectively catches both the characteristics of adult learners from the perspective of EFL instructors, and the instructional strategies commonly employed in adult EFL classrooms. Its two-part design allows for a deeper and more detailed understanding of the relationship between learner behaviors and teaching practices. This structure makes it particularly appropriate for addressing the research aims, as it provides valuable insights into both the perceptions of instructors and the pedagogical approaches they utilize in their teaching settings. To further explore the themes emerging from the questionnaire, open-ended structured questions have been shared with selected participants. Open-ended questions designed to collect qualitative data have also been shared with the participants selected through random sampling to ensure unbiased answers. These questions have been carefully developed based on the results obtained from quantitative data analysis as well as the central research questions of the study. This approach led to a more detailed exploration of the themes identified in the quantitative phase, providing more contextualized insights into the participants' perspective, since the open-ended questions allow participants to explain their experiences in more detail, which helps to clarify why certain survey results emerged. For example, while the survey shows that time limitations were a challenge, participants describe how work and family responsibilities affected their attendance.

3.1.2. Research Design

An explanatory sequential mixed methods design was employed in the study. By integrating both quantitative and qualitative methods through a sequential design, the study ensured a comprehensive understanding of the research problem, allowing the previous responses to be enriched. The open-ended questions in the interview enabled a deeper investigation into the instructional strategies used by EFL instructors, their challenges, and the grounds behind their pedagogical choices. The open-ended questions were developed based on the responses obtained from the quantitative data. The combination of both instruments ensures a more complete understanding of the subject matter, facilitating the design of the teacher training syllabus mentioned previously (Griensven et al., 2014).

3.3. Data Collection Procedures

The data collection process for this study was carried out in two phases. The aim was to ensure a comprehensive understanding of instructors' perceptions and strategies regarding adult EFL education and brain-based learning. However, before starting to collect data in two phases, ethical approval was obtained from the ethical committee (see Appendix 2). Then, institutional approval was obtained from Çanakkale Onsekiz Mart University, School of foreign languages (see Appendix 3), to be able to collect data from EFL instructors. Shortly after this process, in the first phase of data collection, a structured questionnaire was administered to 36 EFL instructors to gather quantitative data regarding their perceptions of adult learners and the strategies they employ in their teaching practices. The questionnaire consisted of 21 questions, allowing for a systematic analysis of patterns among participants (see Appendix 1.1). The responses provided initial insights into the common practices and beliefs which are held by the instructors. To gain a deeper understanding of the quantitative findings, open ended questions (see Appendix 1.2) were distributed in the second phase. A selected group of instructors (3 of them) who had completed the questionnaire participated in the interviews have been selected randomly to ensure an unbiased division of participants from the larger survey pool. This method was employed to increase the generalizability of the qualitative findings. After the quantitative data were analyzed, three of the individuals who had completed the questionnaire were randomly selected and invited to participate in

follow-up questions. This approach allowed for a deeper exploration of emerging themes while maintaining consistency with the sampling strategy used in the quantitative phase. As also stated by Almeida (2018), use of mixed method design study in a research study provides better ideas. By selecting interviewees randomly, the study aimed to portray a range of perspectives that reflected the diversity of the overall participant group. The open-ended questions aimed to explore instructors' perspectives in more detail, providing qualitative insights into the logic behind their teaching approaches and their experiences with adult learners. Open-ended questions were used to facilitate an in-depth discussion. Not only the qualitative but also the quantitative data were collected online. Both the quantitative and qualitative data were in English.

3.4 Data Analysis

The data analysis process in this study includes two stages, combining both quantitative and qualitative methods to ensure a comprehensive understanding of the research problem. In the first stage, quantitative data collected through structured instruments were analyzed using the SPSS software program. During this stage, descriptive analysis was conducted and the most/least preferred answers about teaching strategies and perceptions toward adult students were examined. As stated by Snyder and Bish (1989), statistical analysis helps ensure objectivity and reliability, providing a strong basis for understanding trends in the data. In the second stage, the qualitative data that had been gathered to complement the quantitative findings, were analyzed employing Atlas.ti, a qualitative data analysis software that facilitates the categorization and thematic interpretation of textual data. In this phase, the data were categorized, and the themes were found out to be observed and ordered according to the results. Conducting thematic analysis assists in categorizing the data according to certain themes (Clarke & Braun, 2014). Through this approach, emerging themes and patterns were identified, allowing for a more detailed exploration of the research topic. Qualitative analysis provides context for statistical results, helping to connect numerical findings with real-world experiences, according to Ezzy (2013). This mixed-methods approach enhances the depth of the study by combining numerical data with detailed insights, allowing for a more inclusive understanding of the research topic (Almeida, 2018).

3.5 Credibility and Trustworthiness

To ensure credibility and trustworthiness in the qualitative component, the open-ended questions were developed based on patterns and themes emerging from the quantitative data. This approach provided alignment between both data sets and ensured that the questions addressed relevant and meaningful aspects of the research focus. Expert reviews were sought to assess the clarity, and relevance of the items, and minor revisions were made accordingly. Additionally, the questions were piloted with a small group of participants similar to the study sample to confirm comprehensibility. These procedures followed the principles suggested by Lincoln and Guba (1985) to enhance the rigor of qualitative inquiry.

3.6 Summary

This study provides a comprehensive examination of instructors' perceptions of adult learners in EFL education and the pedagogical strategies they employ to identify the challenges faced by these learners. By integrating both quantitative and qualitative methodologies, the research offers a detailed understanding of the instructional approaches used in adult EFL classrooms. The study implements a mixed-methods approach, combining surveys in order to obtain quantitative data on general patterns in teaching practices, with interviews that offer deep qualitative insights into the experiences and perceptions of instructors. These data collection methods provide a broad perspective on the realities of teaching adult learners. The research findings, which will be explored in greater depth, aim to highlight the common obstacles that instructors face when teaching adult learners, as well as the most successful strategies to overcome these challenges. Additionally, the study identifies certain areas where further support to enhance the quality of adult EFL instruction. The syllabus developed as a result of this research is expected to serve as a framework for future teacher training programs. By addressing the specific needs of adult learners, this research contributes to the ongoing improvement of EFL teaching practices, making them more effective in engaging in the demands of adult learners in diverse educational contexts.

THE FOURTH CHAPTER

FINDINGS

4. Introduction

In this research, it has been found out that EFL instructors who are working with adult learners in the preparatory schools encounter some sort of difficulties and challenges in the classroom settings due to certain reasons such as inadequacy of materials, teacher training and so on. Apart from this, the solutions to these kinds of problems have been suggested under the perceptions of the experienced EFL instructors and brain-based learning discussions.

4.1. What are the main perceptions of EFL instructors on the characteristics of adult learners?

Table 2

Descriptive analysis of the characteristics of the adult learners

Characteristics	<i>M</i>	<i>SD</i>
3 Having a rich foundation of living experience	3.56	1.23
4 Having a strong background in work, personal responsibility, and education	3.31	1.35
6 Having a good rationale for learning	2.86	1.27
5 Having clear learning objectives	2.72	1.23
1 Having a high degree of self-control	2.67	1.43
2 Having good learning self-orientation	2.56	1.34
7 Having excellent assessment of learning content.	2.17	1.11

$N = 36$

The descriptive results from the first questionnaire show that adult learners were mostly seen as having rich life experience (M = 3.56, SD =1.23) and strong backgrounds in work, responsibility, and education (M = 3.31, SD=1.35). Among the other items evaluated, having a good rationale for learning received the third highest mean score (M = 2.86, SD = 1.27), indicating that instructors generally perceive adult learners as individuals who engage in language learning with clear and meaningful goals. Similarly, having clear learning objectives was also rated relatively high (M = 2.72, SD = 1.23), which may suggest that adult learners tend to approach their learning process with intention. On the other hand, having a high degree of self-control showed a moderate level of agreement (M = 2.67, SD = 1.43). Having good learning self-orientation received the second lowest mean score (M = 2,56, SD=1.34), which may suggest that instructors do not strongly associate adult learners with self-directed learning behaviors, or that such characteristics are not always evident in instructional settings.

The results given above support the idea that adult learners bring valuable past experiences to the learning process. However, the lowest average was found in their ability to assess learning content (M = 2.17, SD =1.11), which may mean they are not very confident or skilled in evaluating what they learn. Overall, the participants saw adults as experienced but not very strong in areas like self-directed learning, motivation, and evaluating their own learning process.

4.2. What are the challenges that EFL instructors encounter while teaching English to adult learners?

Table 3

Thematic Summary of the Challenges Encountered by the Instructors

Themes	<i>Sub-themes</i>	<i>Quotes from Participants</i>
1 Emotional and Psychological Barriers	- Mixed proficiency levels - Varying educational histories	Participant 1: “One major challenge is dealing with their

Table 3 continues

		anxiety and fear of making mistakes.”
		Participant 2: “Many adult learners fear failure or feel embarrassed to speak.”
		Participant 3: “Some adults are complete beginners, while others already know some English.”
2 Heterogeneous Proficiency and Backgrounds	- Mixed proficiency levels - Varying educational histories	Participant 2: “Adults come with varying educational backgrounds, which makes it hard to keep pace.”
3 External Constraints and Material Limitations	- Time limitations (work/family) - Lack of suitable materials	Participant 1: “Many of them have jobs or families, which makes consistent attendance difficult.”
		Participant 3: “A lot of beginner materials feel too childish, which can be demotivating.”

$N = 3$

The qualitative findings in this part revealed several key challenges perceived by EFL instructors while working with adult learners. First, emotional and psychological barriers are seen as a significant theme. As noted by Participant 1, anxiety and the fear of making mistakes are common among adult learners, while Participant 2 highlighted that many feel embarrassed or they are afraid of failure, which can affect their participation. Secondly, heterogeneous proficiency and educational backgrounds were reported to make classroom management and instructional planning complicated. Participant 3 emphasized that adult learners often vary widely in their language proficiency, ranging from complete beginners

to more advanced individuals. In line with this, participant 2 emphasized that the diversity in their educational histories made it difficult to maintain a consistent instructional pace. Lastly, external constraints and material limitations were identified as additional barriers. Participant 1 pointed out that adults' work and family responsibilities often affected their attendance regularly; and participant 3 mentioned that existing beginner materials are often too childish, reducing learner motivation. These themes underline the complex nature of adult EFL education and the need for more learner-centered approaches.

4.3. Do EFL instructors encounter problems in terms of the availability of appropriate materials and teaching strategies while working with adult learners?

Table 4

Thematic Summary of Problems

Themes	<i>Quotes from Participants</i>
1 Lack of Age-Appropriate Materials	<p>Participant 3: “Most beginner materials are made for children... Finding something that takes adults’ interests in consideration is a real struggle.”</p> <p>Participant 1: “While there are plenty of beginner resources, many are designed for children and not suitable for adults.”</p>
2 Time-Consuming Adaptation Process	<p>Participant 1: “I often find myself adapting materials or creating my own content... It’s quite time-consuming.”</p> <p>Participant 2: “Integrating authentic materials demands extra effort and creativity.”</p>
3 Inadequate Pre-Service Training	<p>Participant 3: “Not really. Most of the training I received focused on young learners or general language teaching principles.”</p> <p>Participant 3: “Most of what I know now, I’ve learned through experience.”</p>
4 Need for Adult-Specific Pedagogical Content	<p>Participant 3: “I wish there had been more emphasis on adult education specifically, like how to manage a multi-level class, deal with learners’ anxieties, or make materials relevant for adults.”</p>

N=3

As presented in Table 3, the instructors have noted that finding appropriate materials for beginner-level adult learners is often a challenge. They noted that many available resources are either too simplified or too advanced, which forces them to frequently adapt or create their own materials. Moreover, all participants mentioned that their initial training did not adequately prepare them for teaching adults. Instead, they had to build this expertise over time, which they believe points to a clear gap in teacher education programs.

The qualitative data highlights several challenges experienced by EFL instructors working with adult learners. One of the most important issues is the lack of age-appropriate materials, as expressed by Participant 3, who emphasized the difficulty in finding beginner resources. Similarly, Participant 1 stated that although there are a lot of beginner-level resources available, most are designed for children. The time-consuming adaptation process was another emerging theme in this part. Participant 1 reported that they frequently modify the existing content to use in adult learners’ settings, which demands considerable time and effort. Similarly, participant 2 noted that integrating authentic materials into lessons requires additional creativity and energy. The theme of inadequate pre-service training was also highlighted by Participant 3, who reported that their teacher education largely focused on young learners. Finally, the need for adult-specific pedagogical content was mentioned. In short, these findings emphasize the necessity for more support, materials, and training designed specifically to the adult EFL teaching context.

4.3.1. What strategies do EFL instructors use to deal with these challenges?

Table 5

Thematic Summary of Solutions

Themes	<i>Quotes from Participants</i>
1 Creating a Supportive Environment	Participant 1: “I try to create a safe and supportive classroom environment where mistakes are seen as part of the learning process.”

Table 5 continues

2	Personalization and Relevance	Participant 3: “I use real-life situations and topics they’re likely to encounter like ordering food, work emails, or travel.”
3	Flexible and Differentiated Tasks	Participant 1: “Flexible assignments and self-paced activities help learners with busy schedules.” Participant 2: “I rely on differentiated instruction”
4	Promoting Learner Autonomy	Participant 2: “I often design reflective tasks that help them observe their own progress.”
5	Collaborative Learning	Participant 1: “I also encourage peer collaboration and discussions” Participant 3: “I use pair work and flexible tasks, so everyone could be engaged.”
6	Project- and Task-Based Learning	Participant 2: “I also make use of project-based learning and task-based activities”
7	Addressing Practical Constraints	Participant 2: “Implementing these strategies effectively in large or mixed-level classes still leads difficulties.”

N=3

Instructors shared several strategies they use to manage challenges in adult EFL classrooms. They highlighted the importance of creating a safe and supportive environment to help reduce learners’ fear of making mistakes. Making lessons relevant to real-life situations and personal experiences have been seen as an effective way to boost motivation. Instructors also mentioned using flexible tasks, clear instruction, and encouraging learner autonomy through reflective activities. Peer collaboration and task-based learning were shared as common tools to promote active participation.

One main strategy used by EFL instructors is creating a supportive learning environment. As Participant 1 stated, “I try to create a safe and supportive classroom environment where mistakes are seen as part of the learning process,” which emphasizes the importance of reducing learners’ anxiety and the fear of failure. Instructors also give importance to personalization. As participant 3 also explained, “I use real-life situations and

topics they're likely to encounter like ordering food, work emails, or travel," they do not only try to enhance engagement but also ensure that the learning is meaningful for the students' real-life scenarios. Additionally, flexible and differentiated tasks are used to address the various needs and time constraints of adult learners. Participant 1 noted, "Flexible assignments and self-paced activities help learners with busy schedules," while Participant 2 emphasized the use of "differentiated instruction" to cover the mixed groups. Another key theme is promoting learner autonomy; as Participant 2 mentioned, "I often design reflective tasks that help them observe their own progress,". In this way, they are able to encourage adult learners to take responsibility for their own journey and to observe how they learn best. Despite these strategies utilized in the classes, addressing practical limitations remains a challenge. As Participant 2 pointed out, "Implementing these strategies effectively in large or mixed-level classes still leads difficulties," suggesting that while these methods are helpful, structural and contextual barriers may limit them. In short, the data indicates that instructors benefit from a variety of strategies embedded in adult learning principles to meet learners' needs.

4.4. Which instructional strategies are used the most and the least by the EFL instructors in adult classroom settings?

Table 6

Descriptive analysis of the Instructors' Attitudes Towards Adult Learner-Centered Practices

	Characteristics	<i>M</i>	<i>SD</i>
14	I am willing to help adults achieve their goals whatsoever.	4.52	0.70
8	I actively encourage adult learners to learn.	4.42	0.73
9	I play the role of a facilitator of the learning process instead of just giving lectures.	4.27	0.80
15	I establish conditions for linking adult learners' existing knowledge with the lesson topic.	4.27	0.73

Table 6 continues

10	I develop self-understanding of what adults think about the topics.	4.24	0.81
16	I increase adults' self-understanding of the value of their background knowledge.	4.23	0.76
11	I enhance self-understanding of adult learners' interests.	4.22	0.79
17	I increase learners' self-understanding of the value of the learning subjects towards their learning goals in general.	4.15	0.82
19	I foster self-understanding of adult learners' learning goals.	4.06	0.95
21	I provide adults better self-understanding of how a specific lesson is useful to them in work.	4.03	0.93
20	I give opportunities for adult learners to decide what learning tasks (project assignments) they want to undertake to fit their individual learning goals.	3.88	1.10
12	I create opportunities for adult learners to take responsibility for themselves through presentations.	3.79	1.01
18	I offer good pre-course orientation.	3.70	1.12
13	I provide opportunities for adults to increase self-responsibility through group leadership.	3.64	1.12

N = 36

As shown in Table 6, instructors expressed the strongest agreement with helping adult learners achieve their goals ($M = 4.52$, $SD = 0.70$) and actively encouraging them ($M = 4.42$, $SD = 0.73$). They also emphasized the importance of facilitating learning and linking new content to learners' existing knowledge. The following items also reflect EFL instructors' perceptions regarding adult learners' self-understanding and autonomy within the learning process. Item 9 "I play the role of a facilitator of the learning process instead of just giving lectures" was positively chosen ($M = 3.05$, $SD = 1.18$), suggesting that instructors commonly play a learner-centered role not only by giving the related information but also by guiding the students. Item 15 "I establish conditions for linking adult learners' existing

knowledge with the lesson topic" received a moderate mean score ($M = 2.92$, $SD = 1.26$), indicating that many instructors are aware of connecting new content to learners' prior experiences. Item 10 "I develop self-understanding of what adults think about the topics", the responses ($M = 2.89$, $SD = 1.28$) reveal that instructors generally consider learners' perspectives. Item 16 (I increase adults' self-understanding of the value of their background knowledge" ($M = 2.83$, $SD = 1.35$) demonstrates that instructors recognize the importance of connecting learners' previous experiences into new ones. Similar to this, item 11 "I enhance self-understanding of adult learners' interests" showed a more comparable score ($M = 2.83$, $SD = 1.20$), pointing to a moderate effort to support instruction with learners' individual preferences and motivations. Instructors also recognize the need to help learners see the relevance of the content more, as also seen in Item 17 "I increase learners' self-understanding of the value of the learning subjects towards their learning goals in general" ($M = 2.81$, $SD = 1.33$). When it comes to the item 19 "I foster self-understanding of adult learners' learning goals" ($M = 2.78$, $SD = 1.25$) the findings suggest that instructors struggle to clarify and support learners' personal objectives within the course context. The application of learning is also addressed in item 21 "I provide adults better self-understanding of how a specific lesson is useful to them in work" ($M = 2.78$, $SD = 1.38$), showing that instructors consider work relevance in lesson design.

Item 20 "I give opportunities for adult learners to decide what learning tasks they want to undertake to fit their individual learning goals" ($M = 2.75$, $SD = 1.25$) highlights an effort to integrate learner-centered activities though this may depend on certain constraints. When it comes to the item 12 "I create opportunities for adult learners to take responsibility for themselves through presentations" ($M = 2.75$, $SD = 1.27$), it indicates a moderate emphasis on promoting learner autonomy. However, lower mean values have been reported for practices involving group leadership ($M = 3.64$, $SD = 1.12$) and pre-course orientation ($M = 3.70$, $SD = 1.12$), which may suggest that these activities may be less frequently implemented due to being more challenging in practice.

4.5. To what extent are English language educators knowledgeable about brain-based learning?

Table 7

Thematic Analysis of the Instructors' Awareness and Knowledge of Brain-Based Learning

	Themes	<i>Sub-themes</i>	<i>Quotes from Participants</i>
1	General Awareness	Basic familiarity with the concept Encountered through literature/seminars	Participant 1: “Yes, I’ve heard of it, but I can’t say I’m very familiar with the details.” Participant 2: “I’ve come across brain-based learning in literature and at a few professional development seminars.”
2	Understanding of Core Principles	Association with brain-based strategies Uncertain understanding	Participant 1: “It involves teaching strategies that align with how the brain naturally learns, things like repetition, emotion, and multi-sensory input.” Participant 3: “I think it has something to do with understanding how the brain learns best maybe involving emotions, memory, or how we process information.”
3	Implementation in Practice	Lack of practical experience	Participant 2: “While I understand its value, I should admit I haven’t had much opportunity to implement it in a structured way.”
4	Motivation to Learn	Interest in practical application	Participant 1: “I’d like to learn more about it because it sounds promising, especially for helping adults remember the information more effectively.”

N = 3

As given in Table 7, three of the participants have already heard of brain-based learning, however, their depth of knowledge varies. Two instructors had only a general idea of the concept, while one reported some exposure through literature and seminars. The participants generally associated brain-based learning with principles like revision and emotional input. For example, as stated by participant 1 “As far as I know, it involves teaching strategies that align with how the brain naturally learns, things like repetition, emotion, and multi-sensory input.” As also stated by participant 2 “I understand that it's an approach that emphasizes teaching strategies aligned with how the brain naturally processes and retains information”. However, none of them reported applying these strategies systematically in their teaching practice. For instance, participant 3 suggested that they would like to learn more about it. All three expressed an interest in learning more, particularly to improve adult learners’ engagement. These findings suggest that while they are aware to a certain degree, there is a need for deeper understanding among EFL educators.

4.6. What specific elements should be included in a teacher training syllabus designed to prepare EFL instructors for enhancing adult EFL education?

Table 8

Thematic Analysis of Suggested Teacher Training Syllabus Components for Adult EFL Education

	Themes	<i>Sub-themes</i>	<i>Quotes from Participants</i>
1	Foundations of Adult Learning	Adult learning psychology/theory Motivation and confidence in adults	Participant 1: “A good training program should cover adult learning psychology”
2	Classroom Management and Group Dynamics	Mixed-ability adult group strategies	Participant 3: “...strategies for dealing with mixed-level classes, time constraints, and real-life communication needs.”

		Time constraints and flexibility	
3	Material Design and Adaptation	Adapting or creating adult-appropriate materials Real-life and communicative focus	Participant 1: "...hands-on strategies for adapting materials and incorporating real-life contexts."
4	Socio-Emotional and Cultural Skills	Emotional intelligence and rapport	Participant 3: "Establishing rapport and creating a supportive classroom atmosphere for adults is of importance."
5	Reflective and Theoretical Enrichment	Cultural awareness and sensitivity Exposure to applied neuroscience	Participant 2: "I would also include reflective teaching practices, training in cultural awareness, and modules on technology integration tailored to adult learners."
6	Technology and Innovation	Technology integration for adult learners	Participant 2: "...modules on technology integration specified for adult learners."
7	Needs-Based Instruction	Conducting needs analysis	Participant 2: "Practical components like needs analysis, classroom management strategies for adult groups, and designing age-appropriate but engaging materials should be in the center of the suggested syllabus."

N = 3

All of the participants agreed that teacher training for adult EFL education should include adult learning theory (andragogy), adapting materials, and practical classroom strategies. For example, participant 2 suggested that "A comprehensive syllabus should begin with adult learning theory and cover the psychological and emotional dimensions of

adult education.” Also, as noted by participant 3, “Training on how to adapt materials or create your own for adult beginners would also be super useful”. They stressed the importance of meeting adults’ emotional and practical needs, such as building confidence, managing mixed-level classes, and focusing on real-life use of language. Cultural awareness, emotional intelligence, and technology have also been seen as helpful. In general, the findings suggest that an effective syllabus should balance theory with hands-on practice and support both thinking and emotional aspects of learning.



THE FIFTH CHAPTER

DISCUSSION, CONCLUSION, AND IMPLICATIONS

5.1. Introduction

In the last chapter of this study, it is aimed to interpret the findings of the collected data about adult learners, their characteristics and the instructional technologies utilized in their classroom settings by comparing the results with the other recent studies in this field by means of discussion parts. Subsequently, it is aimed to provide recommendations for further studies in this field and for the teacher training programs of English language both theoretically and practically. At the end of this section, a syllabus for ELT teacher training programs about improving adult EFL education is going to be suggested in the light of the data collected from EFL instructors working in preparatory schools by means of interview questions.

5.2. Discussion

The aim of this study was to specify the perceptions of EFL instructors about adult learners, their characteristics and learning styles. It was also aimed to examine the teaching strategies that adult EFL instructors utilize in their classroom by means of quantitative data collection. Apart from this, in the qualitative part, EFL instructors' ideas about brain-based learning and the place of adult education in teacher training programs were investigated. The first research question was about the characteristics of adult learners. According to the results revealed, adult learners were mostly viewed as having valuable life experience ($M = 3.56$, $SD = 1.23$) and strong backgrounds in areas like work, education, and responsibility ($M = 3.31$, $SD = 1.35$). These results support the idea that adults bring meaningful experiences into the classroom. However, their lowest score was in evaluating learning content ($M = 2.17$, $SD = 1.11$), which may suggest that they lack confidence or skill in judging what they learn. Overall, while participants saw adults as experienced, they found them less strong in areas such as self-directed learning, motivation, and reflecting on their own learning. These results are consistent with the research conducted by Niwaz and Khan (2015). In this study,

it was also reported that adult learners share both similar and distinct physiological, social, cultural, and psychological backgrounds.

The second research question was about identifying the instructional strategies used the most and the least by the EFL instructors in adult classroom settings. The results revealed that instructors showed the highest level of agreement with supporting adult learners in reaching their goals ($M = 4.52$, $SD = 0.70$) and actively motivating them ($M = 4.42$, $SD = 0.73$). It can be clearly understood that instructors place strong emphasis on learner-centered practices, which is in line with the study of Marwan (2017). This also aligns with adult learning theories, which highlight the importance of goal orientation and motivation in adult education (Knowles, 1984). They also highlighted the importance of guiding the learning process and connecting new material to learners' previous knowledge and experience aligning with the study of Jukil et al. (2020). On the other hand, lower scores were found for practices such as leading group activities ($M = 3.64$, $SD = 1.12$) and providing pre-course orientation ($M = 3.70$, $SD = 1.12$), which may indicate that these strategies are used less often, possibly due to practical difficulties in implementation.

The third research question was about the challenges that EFL instructors encounter while teaching English to adult learners. In this part, the qualitative findings revealed certain challenges that instructors face when working with adult learners, particularly in terms of emotional, cognitive, and contextual factors. Participants frequently referred to affective and psychological barriers such as anxiety and fear of making mistakes. These affective factors align with previous research emphasizing the role of emotional safety and confidence in adult learning environments (Merriam & Bierema, 2014). Moreover, instructors highlighted the divergency of adult classrooms. This diversity often causes management issues, reflecting the need for personalized instruction strategies. They also mentioned about the effects of external situations such as learners' limited time due to work or family responsibilities and the insufficiency of age-appropriate materials that are especially for beginners. As one of the participants highlighted, many resources designed for beginner levels are too childish. This appears as a factor reducing motivation and engagement. These findings indicate the importance of flexible, contextual approaches and highlight the necessity of developing for adults. However, it should be noted that not all studies highlights

difficulties with adult learners. Some researchers argue that adult students are more self-disciplined, motivated, and easier to manage compared to younger learners (Borg, 2006). In such cases, their life experience and clear learning goals may facilitate classroom instruction. This contrast suggests that the teaching experience may vary depending on the context, learner profiles, and so on.

The fourth research question focused on the challenges that EFL instructors face regarding the availability of appropriate teaching materials and the sufficiency of their professional training, as well as the strategies they benefit from addressing these issues. The findings revealed that instructors often struggle to find appropriate materials for beginner-level adult learners. Many of the resources were reported as too simplified or too complex, which causes instructors to adapt or design their own materials most of the time. This concern aligns with previous studies highlighting the insufficiency of adult-specific resources to be used in the classrooms (Rehak & McGinty, 2022). Moreover, all of the participants agreed that their pre-service training did not prepare them for teaching adults sufficiently. Therefore, they developed their attitudes through experience, which may highlight a significant gap in teacher education programs as also mentioned as a concern in the study conducted by Chan (2010) claiming that andragogical principles are not presented in ELT curricula as it is supposed to. To be able to handle the challenges encountered in the classroom, instructors reported that they use various strategies. They emphasized the position of forming a safe, supportive atmosphere to reduce anxiety and encourage participation as well as supporting students' engagement. Benefitting from authentic materials as much as possible in adults' settings was also found to be effective in increasing motivation. In this way, the students can implement the information they learn in the classroom into their daily lives. Flexible task design, giving clear instructions, and promoting learner autonomy through reflection or self-assessment techniques were also commonly demonstrated in the findings. Additionally, peer collaborative activities appeared as tools to enhance student engagement. However, the effectiveness of these strategies was sometimes seen as limited by mixed proficiency levels within the same group. On the contrary, some studies provide another point of view, suggesting that adult learners' higher motivation and goal-oriented attitudes can make it easier to teach them than younger learners as it was stated by Borg (2006). This indicates that while adult education presents different challenges, it may also offer specific advantages when appropriate training and resources are provided.

The fifth research question was about the degree of awareness that EFL instructors have in brain-based learning strategies. The findings in this part revealed that although all participants were familiar with the concept of brain-based learning to some extent, their understanding remained as limited. Two of the instructors described only a basic awareness of the term, it was stated that they often acquired it through professional seminars, while one demonstrated a slightly more understanding by associating the concept with strategies such as repetition and emotional engagement. However, despite this general awareness, none of the participants reported applying brain-based strategies in a structured way in their classrooms. Similar patterns have been observed in previous research, such as Tokuhama-Espinosa (2010), emphasizing that many teachers are aware of neuroscientific strategies, but they struggle to use these as a classroom practice. The findings also align with the study conducted by Chang et al. (2021), highlights the importance of brain and learning. All in all, the instructors in this current study expressed a strong interest in learning.

When it comes to the sixth and the last research question, it mainly focused on which specific brain-based teaching principles and andragogical techniques should be included in a teacher education syllabus to be specially designed to prepare EFL instructors for teaching English to adult learners. The findings revealed that certain key competencies such as adult learning theories (andragogy), techniques for adapting instructional materials, and the implementation of practical strategies for classroom management should be added to the ELT teacher training programs, as also mentioned in the study by Livingston and Cummings-Clay (2023). They highlighted that addressing adult learners' needs is essential especially in fostering learner confidence, handling classes with various proficiency levels or backgrounds, and making sure that language instruction is connected to real-life situations, which is also in line with the findings of the study conducted by Aydemir and Gökay (2023). Additionally, the integration of cultural sensitivity, emotional intelligence, and appropriate technological tools was regarded as beneficial for improving the teaching environment. Overall, the results indicate that a syllabus should not only include theoretical foundations but also provide practical applications.

5.3. Implications for Further Research and ELT

The findings of the study on adult learners have several implications for both theoretical understanding and practical application in the field of English Language Teaching. Firstly, although EFL instructors are aware of the theoretical part of brain-based learning, they do not mostly integrate it into their lessons. Therefore, for further studies about the topic, action research can be conducted in real classroom settings with students. Also, in order to be able to understand the needs of adult students with different backgrounds and learning styles, more studies can be conducted both as explanatory and exploratory. In addition to these, given the participants' emphasis on emotional safety, future studies could explore how emotional intelligence influences adult EFL learners' academic achievement and classroom engagement. Teachers use technology with adults in different ways and have different opinions about it. So, more studies could be carried out on how easy and useful these tools are for teaching adult EFL learners. The findings of the current study point to instructors' views on the fundamentals of an effective teacher training syllabus for adult EFL education. Building on this, further research could examine the genuine impact of such education programs on instructional practices and adult learners' progress when applied in real classroom settings.

Secondly, certain implications can be asserted for teacher training programs such as integrating brain-based learning classes into ELT programs. In this way, pre-service teachers can direct their future students to improve their own learning progress. Also, workshops and in-service training courses or seminars about the needs of adult learners can be organized in the faculty of education. Another important implication of this study for ELT departments is the need to prepare teacher candidates to work effectively with adult learners. The findings show that many instructors are not fully equipped with strategies about adult students' needs. To address this problem, ELT programs could offer an elective course such as "Teaching English to Adult Learners", that is similar to the already existing course, titled "Teaching English to Young Learners".

The importance of providing ELT students with opportunities to observe and teach in adult classrooms as well as the young learners classrooms is yet another important implication. Teaching adults requires different pedagogical and psychological approaches

compared to teaching younger learners. To support this, ELT departments would collaborate with public education centers, language schools, or university education programs. Through such practicum opportunities, teacher candidates can gain valuable experience and better understand the dynamics of adult language learning in real settings. The study also highlights the need to include not only pedagogy but also andragogy in teacher education programs. While most ELT curricula focus on pedagogical methods designed for younger learners, teaching adults requires different principles and strategies based on andragogy. Introducing pre-service teachers to the main elements of adult learning theory is going to help them better address the motivations, experiences, and expectations of adult learners.

5.4. Conclusion

In this research, it was aimed at exploring the perceptions of EFL instructors about the characteristics and learning styles of the adult learners. Subsequently, it was aimed to investigate the strategies EFL instructors utilize in adult classroom settings as well as their insights of brain-based learning. The research was designed as an explanatory study. Firstly, the quantitative data was collected by the scale developed by Thao, Hue, Tu and Lap in 2022 from 36 EFL instructors. Secondly, the qualitative data was collected by means of certain interview questions from 3 EFL instructors chosen as random sample. After the first analysis conducted to explore perceptions, it has been stated that adult learners have a rich foundation of living experience and have a thorough background in work, personal responsibility, and education. Also, it has been stated that EFL instructors use different strategies for adult students such as actively encouraging them to learn and playing the role of facilitators instead of just giving lectures. After the second analysis conducted to explore the degree of awareness, it has been asserted that EFL instructors encounter certain challenges while teaching adults in terms of the suitability of the material and the training received. To be able to address these challenges, they try to create a safe learning environment, promote learner autonomy, provide collaboration among students and give project or task-based assignments. They also addressed the lack of andragogical knowledge and content. Apart from these, it was noted that they are aware of brain-based solutions mostly, nonetheless, they do not have a deeper understanding and knowledge of it.

The findings from both the qualitative and quantitative analyses demonstrate that teaching English to adults works best when teachers combine theory with practical strategies.

Instructors often mentioned the need to adapt materials according to the needs analysis of the classroom, use real-life situations, and manage classes with different levels of learners. They also highlighted the importance of creating a supportive and dynamic classroom environment where adults feel comfortable and confident enough. Encouraging learner independence, using group work, and focusing on adults' goals and past experiences were also common themes in the findings. The survey results supported these ideas, showing that instructors appreciate helping adults take responsibility for their own learning by means of promoting learner autonomy and connecting lessons to their real lives. When it comes to brain-based learning, even though they didn't know much about it, they were interested in the way it could help adult learners with memory, motivation, and emotional involvement. Thereby, the results suggest that adult EFL teaching should be flexible, supportive, and focused on the specific needs of adult learners. Teacher training programs should reflect this by offering both theoretical background and hands-on tools that prepare instructors for real adult classrooms.

Instructors also emphasized the importance of including adult learning theory, practical classroom strategies, and emotional support in teacher training programs. The suggested key topics were mostly in material adaptation, classroom management for adult groups, reflective practices, and cultural awareness. Remarkably, although most participants had very limited knowledge of brain-based learning, they stated that they are curious and show interest in its importance to improve adult learning through techniques that associate with how the brain naturally processes information such as repetition, emotional connection, and meaningful context. In summary, the findings suggest that adult EFL education requires a specialized approach that considers not only the intellectual processes but also emotional and motivational factors. Teacher training programs should be redesigned to include andragogical aspects that assist instructors to meet the complex and diverse needs of adult learners more effectively.

Overall, this study revealed important insights into how EFL instructors perceive and address the needs of adult learners. The qualitative and quantitative findings together demonstrate that many instructors are totally aware of the emotional and practical challenges adult learners undergo, such as low confidence, time constraints, and mixed-ability classroom dynamics. Accordingly, instructors reported that using various learner-centered

strategies like real-life tasks, personalized instruction, providing constructive feedback, flexible learning, and peer collaboration to support engagement and reduce anxiety. However, many of these strategies were developed informally through teaching experience over the years rather than structured training. This highlights a significant gap in professional programs for adult EFL education.

5.3.1. Suggested Syllabus for the Course titled “Teaching English to Adult Learners”

Table 9

Suggested Syllabus

Week	Topic	Focus Areas	Activities
1	Introduction to Adult Education	Characteristics of adult learners, comparison with young learners	Group discussion: Compare your experience with adult vs. young learners
2	Andragogy Principles & Adult Psychology	Adult learning theory “Malcolm Knowles” self-directed learning	Fictional analysis: Recognize the adult learner
3	Needs Analysis	Conducting learner interviews, using surveys or interview questions	Create a tool and practice interviews
4	Brain-Based Learning Foundations	Memory, attention, emotional engagement How brain learns?	Brain-friendly lesson planning workshop
5	Emotionally Safe Environments	Anxiety reduction, encouraging risk-taking, creating safe environment	Create strategies to reduce anxiety in adult learners
6	Classroom Management	Mixed-ability groups, adult learner autonomy	Simulation: Managing mixed-level adult classes

7	Motivation in Adult Learners	Intrinsic/extrinsic motivation, sustaining interest	Reflective task: What motivates your adult learners?
8	Material Selection	Evaluating, adapting, and designing materials for adult beginners	Workshop: Adapt a textbook unit for zero beginners
9	Real-Life Task Design	Task-based learning, communicative approach	Design and present a task for adult learners
10	Material Development	How to use music/drama/masks with adults?	Design an activity using drama for a diverse adult group
11	Emotional Intelligence & Culture	Cultural sensitivity, emotional regulation in class	Group activity: Explore cultural scenarios and emotional responses
12	Reflective Practice	Reflective teaching, teacher identity development	Keep a teaching journal and reflect on one teaching experience
13	Technology Integration	Tools and apps for flexible instruction, digital literacy in adults	Explore and present on a digital tool for adult learning
14	Final Presentations	Sharing project outcomes, peer feedback	Each trainee presents a sample lesson plan choosing a grammar topic

This 14-week teacher training program has been designed to equip EFL teacher candidates with both theoretical and practical knowledge specified for adult learners. By integrating key concepts such as andragogy, brain-based learning, emotional safety, and learner autonomy, the syllabus reflects the cognitive, emotional, and social needs of adult education. It has been developed according to the results of qualitative data collected from adult EFL instructors. During the process, the opinions and suggestions of the participant EFL instructors were taken into account. For instance, according to participant 1 “A good

training program should cover adult learning psychology, classroom management for mixed-ability adult groups, and how to build confidence in learners who may feel insecure”. Also, according to participant 2, “First, there should be a focus on how adults learn differently, things like motivation, confidence, and previous learning experiences.

Apart from the EFL instructors, ELT experts who have been working in the faculty of education for at least 15 years, were asked about their suggestions for a course outline to be designed for the suggested course. Expert 1 suggested that use of technology in adult classes should be added to the course content. Additionally, expert 2 suggested that use of technology such as digital literacy and computer skills courses may be added to the program. In addition to the results of collected data and expert views, the course content of the lesson “Teaching English to Young Learners” was taken into consideration. For example, in the study conducted by Tekin and Baykara (2023), the importance of preparing age-related activities for learners was pointed out. Also, according to the study about the young learners’ curriculum of Berdiyeva (2024), it was suggested that introducing the characteristics of young learners is of importance. According to these, the characteristics of adult learners are added as a beginning of the designed course content for “Teaching English to Adult Learners”. Including adult psychology provides a deeper understanding of learner motivation, confidence, and their classroom behaviors. Essential skills such as modifying instructional materials, designing tasks based on real-life contexts, and providing personalized instruction may equip pre-service teachers to effectively meet the necessities of the different learning profiles that they will encounter in their future classrooms (Mokoena & van Tonder, 2024).

Though none of the participants directly suggested integrating brain-based learning discussions into the suggested syllabus, it was included in the proposed syllabus since it addresses many of the challenges mentioned by the EFL instructors. The findings showed that adult learners often struggle with motivation, emotional barriers, time constraints, and a need for personalized learning experiences. Brain-based learning provides useful strategies for these issues by focusing on how the brain naturally learns by means of emotion, meaningful context, and real-life connections. Even though it was not named by participants in a direct way, the principles of brain-based learning are clearly in line with what instructors mentioned about what they need in adult EFL teaching. For this reason, including it in the

syllabus is seen as both appropriate and beneficial to equip EFL candidate teachers in adult learning settings as well as young learners.

When it comes to the sequence of the syllabus, it is designed to ensure logical progress from theoretical knowledge to practical competencies in adult education. It begins with introducing the general characteristics of adult learners (Week 1), so that the teacher candidates become knowledgeable about the general attitudes and features of them at the very beginning. Subsequently, the key principles of andragogy (Week 2), following the needs analysis (Week 3) are added, which is important for understanding learner profiles before designing the way of instruction. After that, brain-based learning (Week 4) and creating emotionally safe environments (Week 5) are going to help trainees plan lessons aligning with cognitive and emotional needs. Classroom management (Week 6) and motivation (Week 7) come next, addressing how to keep students engaged and in diverse adult classrooms. The following weeks (8–10) move into material adaptation and creative task design, assisting trainees to conduct meaningful, age-appropriate activities. In Weeks 11 and 12, the focus changes to emotional intelligence and reflective teaching, promoting both learner and teacher growth. Finally, technology integration (Week 13) and the final presentations (Week 14) offer opportunities for trainees to apply almost all knowledge in practical ways. This structure aims to ensure a coherent development of skills, starting from understanding adult learners to delivering effective lessons for adults.

REFERENCES

- Abutalebi, J., Canini, M., Della Rosa, P. A., Sheung, L. P., Green, D. W., and Weekes, B. S. (2014). Bilingualism protects anterior temporal lobe integrity in aging. *Neurobiol. Aging* 35, 2126–2133. doi: 10.1016/j.neurobiolaging.2014.03.010
- Akman, P., Yapici, A., Kutlu, M. O., Tuncel, F., & Demiroglari, G. (2020). The Effect of English Teaching on Academic Achievement Based on Brain Based Learning Theory (BBL). *African Educational Research Journal*, 8, 158-163.
- Alaye, A., & Tegegne, W. (2021). The Roles of the Teachers and Students in the Integrative Language Teaching Approach and Factors That Affect the Use of the Approach in Actual Classroom. *Journal of Literature, Languages and Linguistics*, 80, 2422-8435.
- Almeida, F. (2018). Strategies to perform a mixed methods study. *European Journal of Education Studies*.
- Alqahtani, A. A. (2024). Using technology to assist in EFL vocabulary acquisition and reading comprehension. *English Language Teaching*, 17(4), 70-81.
- Amini, D., Asl, M. R., & Ghasemzadeh, A. (2025). The Impact of Brain-Based Teaching on Iranian EFL Learners' Vocabulary Retention and Recall. *Journal of Modern Research in English Language Studies*, 12(1).
- Anggraeni, K. A., & Yusnita, R. (2017, May). Teachers' Role In 21st Century: Teacher Is A Facilitator, Not A Dictator. In *Lunar* (Vol. 1, No. 1).
- Archer, L., Godec, S., Patel, U., Dawson, E., & Calabrese Barton, A. (2024). 'It really has made me think': Exploring how informal STEM learning practitioners developed critical reflective practice for social justice using the Equity Compass tool. *Pedagogy, Culture & Society*, 32(5), 1243-1265.
- Arnesen, K. T. (2019). *Understanding Adult English Language Learners' Experience with Self-Regulation in a Blended English Language Course*. Brigham Young University.
- Ataberk, B., & Mirici, I. H. (2022). An Investigation of the 21st Century Skills in English Language Teaching (ELT) Programs in Turkey. *International Online Journal of Education and Teaching*, 9(4), 1513-1544.

- Atmaca, Ç. (2016). Brain-based learning practices of teacher educators in an English language teaching programme.
- Aydemir, H., & Gökay, M. (2023). Yetişkin Eğitimi İhtiyaç Analizi. *Ordu Üniversitesi Sosyal Bilimler Enstitüsü Sosyal Bilimler Araştırmaları Dergisi*, 13(3), 3119-3142.
- Assapari, M. M., Martha, I. N., Sutama, I. M., & Artini, L. P. (2019). Developing EFL learning materials for adult learners. *International Journal of Linguistics, Literature and Culture*, 5(3), 32-42.
- Baron, M. (2024). Digital Transformation For Digital Immigrants: Converting A Nontechnical Course Into A Digital Format.
- Belzer, A. (2004). "It's not like normal school": The role of prior learning contexts in adult learning. *Adult Education Quarterly*, 55(1), 41-59.
- Berdiyeva, S. (2024). Teaching young learners through the use of CLIL method. *Modern Science and Research*, 3(2), 473-480.
- Bonomo, V. (2017). Brain-based learning theory. *Journal of Education and Human Development*, 6(1), 27-43.
- Boonmoh, A., Jumpakate, T., & Karpklon, S. (2022). A close look at the use of technology by Thai teachers in secondary EFL classrooms. *Computer-Assisted Language Learning Electronic Journal*, 23(1), 78-107.
- Borg, S. (2006). The distinctive characteristics of foreign language teachers. *Language teaching research*, 10(1), 3-31.
- Borg, N., & Pace, M. (2022). Needs and motivations of adults learning foreign languages: the Maltese perspective.
- Brooks-Lewis, K. A. (2014). Adult Learners' Perceptions of the Significance of Culture in Foreign Language Teaching and Learning. *Journal of Education and Training Studies*, 2(2), 9-19.
- Bugreeva, E.A. (2021). Edutainment And Infotainment In Distance Learning And Teaching English To University Students And Adult Learners. *Journal of Teaching English for Specific and Academic Purposes*.

- Byram, M. & Fleming, M. (1998). *Language learning in intercultural perspective: Approaches through drama and ethnography*. Cambridge, UK: Cambridge University Press
- Caine, R. N., & Caine, G. (1990). Understanding a brain-based approach to learning and teaching. *Educational leadership*, 48(2), 66-70.
- Celik Korkmaz, S., & Karatepe, C. (2018). The Impact of Multi-Sensory Language Teaching on Young English Learners' Achievement in Reading Skills. *Novitas-ROYAL (Research on Youth and Language)*, 12(2), 80-95.
- Chan, S. (2010). Applications of andragogy in multi-disciplined teaching and learning. *Journal of adult education*, 39(2), 25-35.
- Chang, Z., Schwartz, M. S., Hinesley, V., & Dubinsky, J. M. (2021). Neuroscience concepts changed teachers' views of pedagogy and students. *Frontiers in psychology*, 12, 685856.
- Chanseawrassamee, S. (2012). Teaching adult learners English through a variety of activities: Perception on games and rewards. *US-China Foreign Language*, 10(7), 1355-1374.
- Clarke, V., & Braun, V. (2014). Thematic analysis. In *Encyclopedia of critical psychology* (pp. 1947-1952). Springer, New York, NY.
- Costandi, M. (2016). *Neuroplasticity*. MIT Press.

Cozma, M. (2015). The challenge of teaching English to adult learners in Today's World. *Procedia-social and behavioral sciences*, 197, 1209-1214.

“Educational Neuroscience Training for Teachers’ Technological Pedagogical Content Knowledge Construction”

Çelik, Ş. N., & Kasap, S. (2019). Türkiye’de uygulanan ingilizce öğretmen yetiştirme programları üzerine karşılaştırmalı bir değerlendirme. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 16(1), 1010-1031.

d'Anglejan, A., & Tucker, G. R. (1975). THE ACQUISITION OF COMPLEX ENGLISH STRUCTURES BY ADULT LEARNERS 1. *Language learning*, 25(2), 281-296.

Derakhshan, A., Tahery, F., & Mirarab, N. (2015). Helping adult and young learners to communicate in speaking classes with confidence. *Mediterranean Journal of Social Sciences*, 6(2), 520-525.

- Dilzhan, B. (2024). Teaching English and Artificial Intelligence: EFL Teachers' Perceptions and Use of ChatGPT. *SDU University (Dissertation)*.
- Dithhale, T.W., & Berg, G.V. (2024). Expanding Access to Education: Mobile Learning Solutions for Adult Learners. *International Journal of Learning, Teaching and Educational Research*.
- Duan, Y. (2021). The application of total physical response method (Tpr) in preschool children's english teaching. *Theory and Practice in Language Studies*, 11(10), 1323-1333.
- Dunagin Miller, C., Greenberg, D., Hendrick, R. *et al.* The relationship between childhood education and adult learner characteristics. *ZfW* 47, 231–251 (2024). <https://doi.org/10.1007/s40955-024-00283-z>
- Eid, F.M. (2024). Integrating Neurolinguistic Approaches in ELT: Overcoming Communication Barriers for Arab Learners. *European Modern Studies Journal*.
- El-Henawy, W. M. (2020). The Effect of Brain-Based Professional Development on Shifting English Language Teachers' Pedagogical Perceptions. *Paradigm Shifts in 21st Century Teaching and Learning*, 118-130.
- Ellis, S., & Rogoff, B. (1982). The strategies and efficacy of child versus adult teachers. *Child development*, 730-735.
- Ergashevna, T. A. (2022). The effective ways, Methods and techniques for teaching English. *Central asian journal of literature, philosophy and culture*, 3(2), 32-37.
- Ethelb, H., Shalabi, M., & Sasi, I. (2020). Teaching English to adult learners: a practical remedial method. *Journal of English Language Teaching and Applied Linguistics*, 2(4), 62-69.
- Ezzy, D. (2013). *Qualitative analysis*. Routledge.
- Fenyvesi, K. (2020). English learning motivation of young learners in Danish primary schools. *Language Teaching Research*, 24(5), 690-713.
- Foley, G. (2020). Teaching adults. *Understanding adult education and training*, 34-58.
- Friederici, A. D. (2017). *Language in Our Brain: The Origins of a Uniquely Human Capacity*. MIT Press.
- Garman, M. (2014). *Psycholinguistics*. Cambridge University Press.

- Gezer, M. Ü. (2022). English for young learners in Turkey: Reflections from pre-service English language teachers. In *English for Young Learners in Asia* (pp. 85-105). Routledge.
- Gozuyesil, E., & Dikici, A. (2014). The Effect of Brain Based Learning on Academic Achievement: A Meta-analytical Study. *Educational Sciences: Theory and Practice*, 14(2), 642-648.
- Guglielman, E. (2012). The ageing brain: Neuroplasticity and lifelong learning. *eLearning Papers*, 29, 1-7.
- Hamsi, M. (2015). *Türkiye ve Hollandadaki İngilizce öğretmenliği lisans programlarının pedagojik alan bilgisi kazandırma açısından karşılaştırılması* (Master's thesis, Eğitim Bilimleri Enstitüsü).
- Harakchiyska, T., & Vassilev, T. (2024). Pre-Service Teachers' perceptions Of A1 And Its Implementation In The Foreign (English) Language Classroom. *Strategies for Policy in Science & Education/Strategii na Obrazovatelna i Nauchna Politika*, 32.
- Harden, V., & Jones, V. N. (2022). Applying the principles of brain-based learning in social work education. *Advances in Social Work*, 22(1), 145-162.
- Hauge, L., Durgunoğlu, A. Y., & Stewart, J. (2024, April). Developing digital proficiencies of English learners in adult education. In *Frontiers in Education* (Vol. 9, p. 1386738). Frontiers Media SA.
- Ho, Y.Y., Lim, W.Y.R. (2020). Educating Adult Learners: Bridging Learners' Characteristics and the Learning Sciences. In: Sanger, C., Gleason, N. (eds) *Diversity and Inclusion in Global Higher Education*. Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-15-1628-3_4
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern language journal*, 70(2), 125-132.
- Huang, F., & Zhang, H. (2025). The relationship between boredom and second language achievement: A multilevel meta-analysis. *Studies in Second Language Acquisition*, 1-24.

- Hue, V. T. K., Tu, T. T. C., & Lap, T. Q. (2022). Adult Learners' characteristics: Teachers' perception And Corresponding Instructional Strategies-A Case In A Political Academy In Vietnam. *European Journal of Education Studies*, 9(4).
- İpek, H., & Kanatlar, M. (2018). Factors affecting EFL teacher motivation. *Eğitimde nitel araştırmalar dergisi*, 6(2), 25-41.
- Isik, O. (2023). Identifying problems and difficulties in teaching English for zero beginner adult learners. *International Journal of Teaching, Learning and Education*, 2(6).
- Janschitz, G., & Penker, M. (2022). How digital are 'digital natives' actually? Developing an instrument to measure the degree of digitalisation of university students—the DDS-Index. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 153(1), 127-159.
- Jing, Z. (2019). Brain-based learning: A remedy to teaching EFL in China. *Frontiers in Educational Research*, 2(11), 26-31.
- Joshua, A. M. (2022). Neuroplasticity. In *Physiotherapy for adult neurological conditions* (pp. 1-30). Singapore: Springer Nature Singapore.
- Jukil, A. P. D. A. M., Hasan, A. I. H. S., & Ali, R. I. The Role of EFL Teachers and Students in Activating ELLs' Background Knowledge to Increase Comprehension.
- Jumaah, F.M. (2024). BRAIN-BASED LEARNING THEORY AND ITS IMPACT ON ENGLISH LANGUAGE TEACHING. *American Journal Of Social Sciences And Humanity Research*.
- Jumiati, N., & Widiastuty, H. (2024, December). EXPLORING NEUROPLASTICITY IN ADULT LANGUAGE LEARNING: A LITERATURE REVIEW. In *INTERNATIONAL SEMINAR* (Vol. 6, pp. 744-752).
- Kano, D. D., Ayana, D. K., & Chali, G. T. (2017). Practices and challenges on reflective teaching: An investigation of second cycle primary schools (5-8) EFL Teachers' in South West Cluster Zones of Oromiya Regional State. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 33(2), 225-247.
- Karsantık, Y., & Yağcı, E. (2021). Türkiye'de İngilizce Dersi Öğretim Programlarındaki Değişim Üzerine Araştırmalar: Bir Meta-Sentez Çalışması. *Bayburt Eğitim Fakültesi Dergisi*, 16(32), 625-654.

- Kellenberg, F., Schmidt, J., & Werner, C. (2017). The adult learner: Self-determined, self-regulated, and reflective. *Signum Temporis*, 9(1), 23.
- Khalil, L., & Kholofelo Semono-Eke, B. (2020). Appropriate teaching methods for general English and English for specific purposes from teachers' perspectives. *Arab World English Journal (AWEJ) Volume, 11*.
- Knowles, M. S. (1984). *Andragogy in action*.
- Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. Cambridge Book Company.
- Knudsen, E. I. (2004). Sensitive periods in the development of the brain and behavior. *Journal of cognitive neuroscience*, 16(8), 1412-1425.
- Koşar, G., & Bedir, H. (2020). An intervention in brain-based learning: Leading to shifts in language learning beliefs. *International Journal of Curriculum and Instruction*, 12(2), 176-190.
- Krashen, S. (1981). *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon Press.
- Kumaravadivelu, B. (2006). TESOL methods: Changing tracks, challenging trends. *TESOL quarterly*, 40(1), 59-81.
- Kuş, A., & Bakir, N. (2013). Yabancı Dil Öğretiminde Beyin Temelli Tekniklerle Yazma Becerilerinin Geliştirilmesi. *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic*, 8(10), 395-403.
- Kuzu, E., Özkan, Y., & Bada, E. (2021). An EFL program evaluation: A case from Turkey. *The Reading Matrix: An International Online Journal*, 21(1), 94-106.
- Laksmi, N. K. P., Yasa, I. K. A., & Mirayani, K. A. M. (2021). The Use Of Animation Video As Learning Media For Young Learners To Improve Efl Students' motivation In Learning English. *Lingua*, 17(1), 42-52.
- Lenneberg, E.H. (1967) *Biological Foundations of Language*. Wiley, New York.
- Lew, M. D., & Schmidt, H. G. (2011). Self-reflection and academic performance: is there a relationship?. *Advances in Health Sciences Education*, 16, 529-545.

- Li, P. (2017, September). Neuroplasticity and second language learning: Identifying functional and structural brain changes. In *11th International Conference on Cognitive Science: Symposium on Neuroplasticity across Lifespan Development*.
- Lin, X. (2019). Self-Regulated Learning Strategies of Adult Learners Regarding Non-Native Status, Gender, and Study Majors. *Journal of Global Education and Research*, 3(1), 58-70.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications
- Lisenbee, P. (2016). Generation gap between students' needs and teachers' use of technology in classrooms.
- Liu, Q. X., & Shi, J. F. (2007). An Analysis of Language Teaching Approaches and Methods-Effectiveness and Weakness. *Online Submission*, 4(1), 69-71.
- Livingston, M., & Cummings-Clay, D. (2023). Advancing adult learning using andragogic instructional practices. *International Journal of Multidisciplinary Perspectives in Higher Education*, 8(1), 29-53.
- Love, A. S., Labay-Marquez, J., & Valadez, R. (2023). Understanding Adult Learners' Needs and Integrating Technology for Effective Online Education: Adult-Centered Approaches for Teaching and Learning. In *Handbook of Research on Innovative Frameworks and Inclusive Models for Online Learning* (pp. 172-193). IGI Global.
- Lucas, M., Bem-Haja, P., Siddiq, F., Moreira, A., & Redecker, C. (2021). The relation between in-service teachers' digital competence and personal and contextual factors: What matters most? *Computers & Education*, 160, 104052. <https://doi.org/10.1016>
- Lunenberg, M. (2010). Characteristics, Scholarship and Research of Teacher Educators. *Teacher Education – Teacher Educators*, 676-680.
- Marwan, A. (2017). Implementing learner-centered teaching in an English foreign language (EFL) classroom. *Celt: A journal of culture, English language teaching & literature*, 17(1), 45-59.
- McKnight, C. P. (2012). *Creating an effective educational environment for adult learners: a qualitative, multi-case study of off-campus center administrator's use of invitational leadership* (Doctoral dissertation, University of Missouri--Columbia).

- Merriam, S. B., & Bierema, L. L. (2013). *Adult learning: Linking theory and practice*. John Wiley & Sons.
- Mohamed, A. M. (2024). Exploring the potential of an AI-based Chatbot (ChatGPT) in enhancing English as a Foreign Language (EFL) teaching: perceptions of EFL Faculty Members. *Education and Information Technologies*, 29(3), 3195-3217.
- Mohammed, D. A. M. A. (2019) Using a Brain-Based Learning Program for Optimizing EFL In-Service Teachers' Professional Delivery of Instruction.
- Mokoena, T. D., & van Tonder, G. P. (2024). Influencing beginner teachers' autonomy: the impact of mentorship in fostering self-directed learning. *International Journal of Educational Management*, 38(5), 1265-1288.
- Mollaei, F., & Riasati, M. J. (2013). Teachers' perceptions of using technology in teaching EFL. *International Journal of Applied Linguistics and English Literature*, 2(1), 13-22.
- Mulyadi, A. (2021, December). Teaching English to young learners. In *PROSIDING SEMINAR NASIONAL PROGRAM PASCASARJANA UNIVERSITAS PGRI PALEMBANG*.
- Natsir, M., & Sanjaya, D. (2014). Grammar translation method (GTM) versus communicative language teaching (CLT); A review of literature. *International Journal of Education and Literacy Studies*, 2(1), 58-62.
- Nilsson, J., Berggren, R., Garzón, B., Lebedev, A. V., & Lövdén, M. (2021). Second language learning in older adults: Effects on brain structure and predictors of learning success. *Frontiers in aging neuroscience*, 13, 666851.
- Niwaz, A. (2015). CHARACTERISTICS OF TEACHERS, TEACHING METHOD AND CONTENT IN ADULT LITERACY: PERCEPTIONS OF ADULT LEARNERS. *VFAST Transactions on Education and Social Sciences*, 3(1), 119-124.
- Nguyen, T. L. Motivating Adult and Young Learners for Effective Collaborative Learning in EFL Classrooms: An Action Research.
- Norouzifard, A., Bavali, M., Zamanian, M., & Rassaei, E. (2021). The Effect of Augmented Reality on Adult EFL Learners' Attitudes and Motivation: A Mixed Methods Study.
- Oghyanous, P. A. (2017). The Effect of Brain-Based Teaching on Young EFL Learners' Self-Efficacy. *English Language Teaching*, 10(5), 158-166.

- Orem, R. (2012). Teaching adults. *Burns, A. and Richards, JC The Cambridge guide to Pedagogy and Practice in Second Language Teaching*. New York: Cambridge University Press, 120-127.
- Oroji, M. R., & Ghane, A. (2014). Are Young Learner's Better Learners of Foreign Language Learning or Adults?. *Procedia-Social and Behavioral Sciences*, 136, 84-88.
- Önal, A., & Özdemir, A. (2024). Reforming English Language Teaching Undergraduate Programs for Age Divisions in Türkiye: Perspectives of In-Service English Language Teachers. *Journal of Language Research*, 8(1), 1-16.
- Ozfidan, B., & Burlbaw, L. M. (2019). A Literature-Based Approach on Age Factors in Second Language Acquisition: Children, Adolescents, and Adults. *International Education Studies*, 12(10), 27-36.
- Özer, Ö., & Akçayoğlu, D. İ. (2021). Examining the roles of self-efficacy beliefs, self-regulated learning and foreign language anxiety in the academic achievement of tertiary EFL learners. *Participatory Educational Research*, 8(2), 357-372.
- Pastogianni, M., & Koutsoukos, M. (2018). The Role of the Adult Educator in Eliminating Internal Psychological Barriers in Adult Learning. *Education Quarterly Reviews*, 1(2), 268-278.
- Pawlak, M. (2015). Teaching foreign languages to adult learners: Issues, options, and opportunities. *Theoria et historia scientiarum*, 12, 45-65.
- Phan, T. T. T. (2021). Self-assessment and language learner autonomy: An exploratory study in a Vietnamese university. *Vietnam Journal of Education*, 72-83.
- Polson, C. J. (1993). Teaching Adult Students. IDEA Paper No. 29.
- Prensky, M. (2001). Digital natives, digital immigrants part 2: Do they really think differently?. *On the horizon*, 9(6), 1-6.
- Piccinin, S., & Dal Maso, S. (2021). Promoting literacy in adult second language learners: a systematic review of effective practices. *Languages*, 6(3), 127.
- Rajeshkumar, M. (2023). Correlation between Teachers Knowledge Beliefs and Frequency of Implementation of Brain Based Learning Strategies. *Journal of Enterprise and Business Intelligence*, 3(4), 190-200.

- Rehak, K. M., & McGinty, J. M. (2022). Using Learning Science Strategies to Enhance Teaching Practices and Empower Adult Learners. *American Association for Adult and Continuing Education*.
- Reynolds, B. L., Liu, S., Milosavljevic, M., Ding, C., & McDonald, J. (2021). Exploring Pre-service Pre-primary EFL Teacher Beliefs about Teaching English to Very Young Learners: A Macau Case Study. *Sage Open*, 11(4). <https://doi.org/10.1177/21582440211052932>
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching* (3rd ed.). Cambridge University Press.
- Rodek, V. (2019). Learning and its effectiveness in students' self-reflection. *The New Educational Review*, 55, 112-120.
- Rodgers, D. L., & Hales, R. L. (2021). Brain-Based Learning. *Comprehensive Healthcare Simulation: ECMO Simulation: A Theoretical and Practical Guide*, 43-50.
- Roths, A., Lemos, M. S., & Gonçalves, T. (2014). Motives and beliefs of learners enrolled in adult education. *Procedia-Social and Behavioral Sciences*, 112, 939-948.
- Ruge, D., Liou, L. M., & Hoad, D. (2012). Improving the potential of neuroplasticity. *Journal of Neuroscience*, 32(17), 5705-5706.
- Russell, S. S. (2006). An overview of adult-learning processes. *Urologic nursing*, 26(5).
- Salem, A. A. M. S. (2017). Engaging ESP students with brain-based learning for improved listening skills, vocabulary retention and motivation. *English language teaching*, 10(12), 182-195.
- Satimboyevna, K. S., Kizi, S. S. S. D., & Igorovna, B. Y. (2020). Differences between teaching children and adults. *Достижения науки и образования*, (7 (61)), 19-20.
- Setiyadi, A. B. (2020). *Teaching English as a foreign language*. Graha Ilmu
- Seval, F. E. R., & AKPUR, U. (2021). Learned Helplessness, Foreign Language Anxiety and Their Impacts on Language Learning. *MSGSÜ Sosyal Bilimler*, 1(23), 283-295.
- Seven, M. A. (2020). Motivation in language learning and teaching. *African Educational Research Journal*, 8, 62-71.

- Snyder, R. L., & Bish, D. L. (1989). Quantitative analysis. *Modern powder diffraction*, 20, 101-144.
- Sogunro, O. A. (2015). Motivating factors for adult learners in higher education. *International Journal of Higher Education*, 4(1), 22-37.
- Song, L., & Hill, J. R. (2009). Understanding adult learners' self regulation in online environments: A qualitative study. *International Journal of Instructional Media*, 36(3), 263-275.
- Sönmez, G., & Köksal, O. (2022). A Critical Overview of English Language Education Policy in Turkey. *Shanlax International Journal of Education*, 11(1), 1-9.
- Suleimenova, Z. (2013). Speaking anxiety in a foreign language classroom in Kazakhstan. *Procedia-social and behavioral Sciences*, 93, 1860-1868.
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 101565.
- Taghizadeh, M., & Hasani Yourdshahi, Z. (2019). Integrating technology into young learners' classes: language teachers' perceptions. *Computer Assisted Language Learning*, 33(8), 982–1006. <https://doi.org/10.1080/09588221.2019.1618876>
- Tajik, L., & Ranjbar, K. (2018). Reflective teaching in ELT: Obstacles and coping strategies. *Journal of research in applied linguistics*, 9(1), 148-169.
- Tamimi, M. A. M. A. (2024). Effects of Digital Story-Telling on Motivation, Critical Thinking, and Academic Achievement in Secondary School English Learners. *Research in Social Sciences and Technology*, 9(1), 305-328.
- Taşçı, S. (2023). A Comprehensive Study On The Problems Of English Language Teaching In Turkey: Reflections From Pre-Service Elt Teachers. *Trakya Eğitim Dergisi*, 13(3), 1656-1672.
- Thadphoothon, J. (2019). Brain research and its implications for English Language Teaching (ELT). *Dhurakij Pundit University*.

- Tekin, S., & Baykara, T. (2023). Teaching English to young learners: Combining theory and practice through practicum in pre-service teacher education. *Journal of Teacher Education and Lifelong Learning*, 5(1), 400-412.
- Tokuhama-Espinosa, T. (2010). *Mind, brain, and education science: A comprehensive guide to the new brain-based teaching*. WW Norton & Company.
- Tolibovna, S. R. (2022). USE OF TECHNOLOGY IN MODERN CLASSROOM TEACHING. *Journal of new century innovations*, 14(1), 192-195.
- Tsai, C. C. (2018, April). The effects of communication strategy training on EFL speaking anxiety and speaking strategy among the community college adult learners in Taiwan. In *International Forum of Teaching and Studies* (Vol. 14, No. 2, pp. 3-19). American Scholars Press, Inc..
- Uysal, N. D., & Yavuz, F. (2015). Teaching English to very young learners. *Procedia-Social and Behavioral Sciences*, 197, 19-22.
- Vaculíková, J. (2024). Comparing self-regulation strategies among adult learners from Poland, Serbia, Slovakia, and the Czech Republic. *Frontiers in Psychology*, 15.
- Vadivel, B., Namaziandost, E., & Saeedian, A. (2021, November). Progress in English language teaching through continuous professional development—teachers' self-awareness, perception, and feedback. In *Frontiers in Education* (Vol. 6, p. 757285). Frontiers Media SA.
- Vanhove, J. (2013). The critical period hypothesis in second language acquisition: A statistical critique and a reanalysis. *PloS one*, 8(7), e69172.
- Valdez, P. N., Navera, J. A., & Esteron, J. J. (2018). What is reflective teaching? Lessons learned from ELT teachers from the Philippines. *The Asia-Pacific Education Researcher*, 27, 91-98.
- Valledor, A., Olmedo, A., Hellín, C. J., Tayebi, A., Otón-Tortosa, S., & Gómez, J. (2023). The eclectic approach in English language teaching applications: a qualitative synthesis of the literature. *Sustainability*, 15(15), 11978.
- Wang, Y., Wu, J., Chen, F., Wang, Z., Li, J., & Wang, L. (2024). Empirical assessment of AI-powered tools for vocabulary acquisition in EFL instruction. *IEEE Access*.

- Ware, C., Dautricourt, S., Gonneaud, J., & Chételat, G. (2021). Does second language learning promote neuroplasticity in aging? A systematic review of cognitive and neuroimaging studies. *Frontiers in Aging Neuroscience, 13*, 706672.
- Winantaka, B. (2024). The impact of Brain-Based Learning on critical and creative thinking in English Language Teaching. *Jurnal Ilmiah WUNY*.
- Witteman, J., Chen, Y., Pablos-Robles, L., Parafita Couto, M. C., Wong, P. C., & Schiller, N. O. (2018). (Pushing) the Limits of Neuroplasticity Induced by Adult Language Acquisition. *Frontiers in Psychology, 9*, 1806.
- Wlodkowski, R. J., & Ginsberg, M. B. (2017). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults*. John Wiley & Sons.
- Van Griensven, H., Moore, A. P., & Hall, V. (2014). Mixed methods research—The best of both worlds?. *Manual therapy, 19*(5), 367-371.
- Voss, P., Thomas, M. E., Cisneros-Franco, J. M., & de Villers-Sidani, É. (2017). Dynamic brains and the changing rules of neuroplasticity: implications for learning and recovery. *Frontiers in psychology, 8*, 274878.
- Wu, R., & Wu, R. (2014). Challenges of adults in learning English as a second language: Focus on adult education in China. *Journal of Language Teaching and Research, 5*(5), 1132.
- Xie, R. (2021). The effectiveness of total physical response (TPR) on teaching English to young learners. *Journal of Language Teaching and research, 12*(2), 293-303.
- Yaman, İ. (2018). 2006 Ve 2018 İngilizce Öğretmenliği Lisans Programları Üzerine Karşılaştırmalı Bir Değerlendirme. *EKEV Akademi Dergisi, (76)*, 149-164.
- Yang, L., & Wang, J. (2024). Exploring the causes, consequences, and solutions of EFL teachers' perceived technophobia. *The Asia-Pacific Education Researcher, 33*(4), 931-942.
- Yigit, N. B., Güvelioglu, E., & Erden, F. T. (2024). The Impact of Online Professional Development on Teachers: A Systematic Review of the Literature. *Online Submission*.
- Yoon, S. Y. (2019). Student Readiness for AI Instruction: Perspectives on AI in University EFL Classrooms. *Multimedia-Assisted Language Learning, 22*(4).

- Yu, X. (2013). From Memorized Chunks to Rule Formation: A Study of Adult Chinese Learners of English. *International Journal of Applied Linguistics and English Literature*, 2, 98-111.
- Zaky, H. (2021). Self-Regulation and Adult Learners. *International Journal of Curriculum Development and Learning Measurement*.
- Zhang, Y. (2022). The effect of educational technology on EFL learners' self-efficacy. *Frontiers in Psychology*, 13, 881301.
- Zhang, C., & Zheng, G. (2013, October). Supporting adult learning: enablers, barriers, and services. In *Proceedings of the 14th annual ACM SIGITE conference on Information*
- Ziwei, J. (2018). Critical Period of Second Language Acquisition and Children's English Learning Strategi

APPENDICES

APPENDIX 1 SURVEY/INTERVIEW FORM

Appendix 1.1.

Teachers' perceptions of adult learners' characteristics

Characteristic	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Having a high degree of self-control.					
2. Having good learning self-orientation.					
3. Having a rich foundation of living experience.					
4. Having a strong background in work, personal responsibility, and education.					
5. Having clear learning objectives.					
6. Having a good rationale for learning.					
7. Having excellent assessment of learning content.					

Teachers' self-report of their use of instructional strategies for teaching adult learners

Needs	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8. Actively encourage adult learners to learn.					
9. Play the role of a facilitator of the learning process instead of just giving lectures.					
10. Develop self-understanding of what adults think about the topics.					
11. Enhance self-understanding of adult learners' interests.					
12. Create opportunities for adult learners to take responsibility for themselves through presentations.					

13. Provide opportunities for adults to increase self-responsibility through group leadership.					
14. Be willing to help adults achieve their goals whatsoever.					
15. Establish conditions for linking adult learners' existing knowledge with the lesson topic.					
16. Increase adults' self-understanding of the value of their background knowledge.					
17. Increase learners' self-understanding of the value of the learning subjects towards their learning goals in general.					

18. Offer good pre-course orientation.					
19. Foster self-understanding of adult learners' learning goals.					
20. Give opportunities for adult learners to decide what learning tasks (project assignments) they want to undertake to fit their individual learning goals.					
21. Better adults' self-understanding of how a specific lesson is useful to them in work.					

Appendix 1.2

(Interview Questions)

1. What do you think about the characteristics of adult learners, are they good at regulating their own learning?
2. What are the certain challenges you encounter while teaching English to adult learners?
3. Which strategies do you utilize to overcome these challenges?
4. Can you find appropriate materials for adult learners easily, especially for beginners?

5. Do you think that you got enough training in teaching to adult classroom settings during your bachelor's or master's degree?
6. Have you ever heard of brain-based learning? If so, what can you say about it?
7. Based on your experience, what key elements should be included in a teacher training syllabus focused on enhancing adult EFL education?

Gender		<input type="checkbox"/> Female		<input type="checkbox"/> Male
Years of teaching experience	<input type="checkbox"/> 0-5	<input type="checkbox"/> 5-10	<input type="checkbox"/> 10-15	<input type="checkbox"/> 15-20
The last degree you get	<input type="checkbox"/> BA	<input type="checkbox"/> MA	<input type="checkbox"/> PHD	
Age				
The department you graduated from	<input type="checkbox"/> English Language Teaching	<input type="checkbox"/> English Language And Literature	<input type="checkbox"/> American Culture and Literature	<input type="checkbox"/> Translation and Interpretation

Thank you for your valuable insight.

APPENDIX 2
ETHICAL BOARD APPROVAL



T.C.
ÇANAKKALE ONSEKİZ MART ÜNİVERSİTESİ REKTÖRLÜĞÜ
Lisansüstü Eğitim Enstitüsü Etik Kurulu
Bilimsel Araştırma ve Yayın Etiği

Sayı : E-84026528-050.99-2400300546
Konu : Başvuru İncelenmesi

15.11.2024

Sayın Hilal ALTEN

Yürütücülüğünüzü yapmış olduğunuz 2024-YÖNP-5330 nolu projeniz ile ilgili Bilimsel Araştırma ve Yayın Etiği Komisyonu'nun almış olduğu 14.11.2024 tarih ve 16/23 sayılı kararı aşağıdadır.

Bilgilerinize rica ederim.

KARAR 23- Sorumlu yürütücülüğünü **Dr. Öğr. Üyesi Mustafa TEKİN**'in yaptığı ve proje araştırmacısı **Hilal ALTEN** tarafından gerçekleştirilen "A Suggested Syllabus for Teaching English to Adult Learners Based on EFL Instructors' Perceptions and Brain-Based Learning Discussions" başlıklı araştırmanın, ilgili **taahhüt edilen izinlerin alınması** ve Bilimsel Araştırma ve Yayın Etiği Komisyonuna sunulması koşulu ile Etik Komisyon ilkelerine **uygun** olduğuna oy birliği ile karar verilmiştir.

APPENDIX 3

INSTUTIONAL APPROVAL

ÇANAKKALE ONSEKİZ MART ÜNİVERSİTESİ REKTÖRLÜĞÜNE
(Öğrenci İşleri Daire Başkanlığı)

İlgi : 10.12.2024 tarihli ve E-93130991-302.08.01-2400319599 sayılı yazınız.

Lisansüstü Eğitim Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı 23414951009 numaralı İngiliz Dili Eğitimi Yüksek Lisans Programı öğrencisi Hilal Alten'in yaptığı "Exploring EFL İnstructors' Perceptions and Practices In Teaching English To Adult Learners From Brain-Baset Learning Perspective: Suggested Teacher Training Syllabus For Adult EFL Education" konulu tez çalışması ile ilgili çalışmalarını Yüksekokulumuzda bulunan öğretim elemanlarıyla anket ve röportaj aracılığıyla yapma isteği tarafımızca uygun görülmüştür.

Bilgilerinizi ve gereğini arz ederim.

APPENDIX 4

