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DEPARTMENT OF ENGLISH LANGUAGE EDUCATION**

**EXPLORING THE AWARENESS OF UNIVERSITY EFL LECTURERS ON  
ATTENTION DEFICIT HYPERACTIVITY DISORDER**

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**MASTER THESIS**

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## DEDICATION

This thesis is dedicated to each and every member of my family;

Ali Hayri Tohma

Serpil Tohma

Ahmet Orhan Tohma

Yusuf Tohma

Merve Tohma

, whom I will love forever.

**ETHICS DECLARATION**

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I hereby declare that;

I prepared this master thesis in accordance with Çağ University Institute of Social Sciences Thesis Writing Directive,

I prepared this thesis within the framework of academic and ethics rules,

I presented all information, documents, evaluations and findings in accordance with scientific ethical and moral principles,

I cited all sources to which I made reference in my thesis,

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**ABSTRACT****EXPLORING THE AWARENESS OF UNIVERSITY EFL LECTURERS ON  
ATTENTION DEFICIT HYPERACTIVITY DISORDER****Sümeyye Safa TOHMA****Master Thesis, Department of English Language Education****Supervisor: Dr. Aysun DAĞTAŞ****June 2021, 115 pages**

Attention deficit hyperactivity disorder (ADHD) is a disorder whose effects can be observed from a very young age. Even people ranging in age from 1 to 4 can experience its symptoms. This may lead to the misperception that the disorder concerns only the individuals at a tender age. But in fact, ADHD is a life-long situation that changes and develops as the personages. In adults, hyperactivity may decrease, but symptoms such as impulsivity, restlessness, and difficulty concentrating may persist. For this reason, it is important that university EFL teachers have sufficient knowledge about ADHD in order to educate these students more efficiently. This study aims to investigate the awareness of EFL teachers on ADHD. 160 EFL teachers working at 3 private universities and 4 state universities in different regions of Turkey participated in the survey. The survey also reveals the effect of demographic characteristics on their level of knowledge about ADHD. In order to get in-debth information, semi-structured interviews were conducted with 8 English teachers selected among the participants. According to the Attention Deficit Hyperactivity Disorder Scale, teachers' average awareness level is moderate. Demographic variables such as gender, educational background, expert support, in-service training, books, pamphlets, handouts, teaching experience, and having students diagnosed with ADHD were found to be ineffective on EFL teachers' level of knowledge about this disorder. It has been determined that the ADHD training course, the number of students with ADHD, articles, TV programs and the internet are effective on teachers' ADHD knowledge. The results revealed that teachers need training to increase their theoretical and practical acquisitions in this field.

*Keywords:* attention deficit hyperactivity disorder (ADHD), university EFL teachers, knowledge of ADHD, adults with ADHD



**ÖZ****ÜNİVERSİTE EFL ÖĞRETMENLERİNİN DİKKAT EKSİKLİĞİ  
HİPERAKTİVİTE BOZUKLUĞU HAKKINDAKİ FARKINDALIKLARININ  
İNCELENMESİ****Sümeyye Safa TOHMA****Yüksek Lisans Tezi, İngiliz Dili Eğitimi Anabilim Dalı****Tez Danışmanı: Dr. Öğr. Üyesi Aysun DAĞTAŞ****Haziran 2021, 115 sayfa**

Dikkat eksikliği hiperaktivite bozukluğu (DEHB), etkileri çok küçük yaşlardan itibaren gözlenebilen bir rahatsızlıktır. 1-4 yaşlarındaki kişilerde bile semptomlarıyla karşılaşılabilir. Bu durum, bozukluğun, daha genç yaşlardaki bireyleri ilgilendirdiği gibi bir fikir yaratabilir. Fakat aslında DEHB, şahsiyet olarak değişen ve gelişen, ömür boyu sürecek bir durumdur. Yetişkinlerde hiperaktivite azalabilir, ancak dürtüsellik, huzursuzluk ve dikkati toplamada zorluk gibi belirtiler devam edebilir. Bu nedenle, üniversite EFL öğretmenlerinin bu öğrencilere daha verimli şekilde eğitim verebilmeleri için, DEHB konusunda yeterli bilgiye sahip olmaları önemlidir. Türkiye'nin farklı bölgelerinde bulunan 3 özel üniversitede ve 4 devlet üniversitesinde görev yapan 160 EFL öğretmeni ankete katılmıştır. Anket, öğretmenlerin demografik özelliklerini, DEHB hakkındaki bilgi düzeylerini ve demografik özellikleri ile bilgi birikimleri arasındaki ilişkiyi ortaya koymaktadır. Çalışmanın güvenilirliğini artırmak için, katılımcılar arasından seçilen 8 İngilizce öğretmeni ile yarı yapılandırılmış görüşme gerçekleştirilmiştir. Dikkat Eksikliği Hiperaktivite Bozukluğu Ölçeği'ne göre, öğretmenlerin elde ettikleri ortalama puan X üzerinden Y'dir. Demografik değişkenlerin birçoğunun, EFL öğretmenlerinin bu bozukluk konusundaki bilgi düzeyleri üzerinde etkisiz olduğu saptanmıştır. Öğretmenlerin DEHB bilgisi üzerinde etkili olan demografik özellikler ise DEHB eğitim kursu, DEHB olan öğrenci sayısı, makaleler, TV programları ve internettir. Sonuçlar, öğretmenlerin bu alandaki teorik ve pratik edinimlerini artırmak için eğitime ihtiyaçları olduğunu ortaya çıkarmıştır. Bulgulara odaklanıldığında, hizmet içi eğitim ve rehberlik birimi gibi kaynakların, öğretmenlerin DEHBye dair bilgi düzeyleri için faydalı olabilecek faktörleri tekrar ele alması



gerektiđine deđinilebilir. DEHB hakkında gerekli bilgi, üniversite EFL öğretmenlerine bu kaynaklar tarafından sağlanabileceđi için, konuya dair inceleme yapılması önem arz etmektedir.

*Anahtar Kelimeler:* dikkat eksikliđi hiperaktivite bozukluđu (DEHB), üniversite İngilizce öğretmenleri, DEHB bilgisi, ADHDli yetişkinler



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## ABBREVIATIONS

<b>DSM IV</b>	: Diagnostic and Statistical Manual of Mental Disorders Fourth Edition
<b>EFL</b>	: English as a Foreign Language
<b>ELT</b>	: English Language Teaching
<b>IBM SPSS</b>	: International Business Machines Corporation Statistical Package for the Social Sciences
<b>ICF</b>	: International Classification of Functioning, Disability, and Health
<b>KADDS</b>	: Knowledge of Attention Deficit Disorder Scale
<b>N</b>	: Total Score
<b>SD</b>	: Standard Deviation



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## 1. INTRODUCTION

### Introduction

Attention deficit and hyperactivity disorder (ADHD) is a neurodevelopmental disorder that causes impairment in functionality due to excessive mobility, impulsivity, and attention problems (Biederman and Faraone, 2005). According to recent studies, ADHD is one of the most common adverse effects, especially in childhood and adolescence. This lifelong illness can adversely affect human life in many different ways. Individuals with this psychiatric disorder experience problems during their daily lives in attention-focused actions such as focusing, planning, and following the steps required to realize the plan. In addition, they face various problems in domestic life, education process, social life, physical activities, and social activities (Yochman et al., 2013). According to the Diagnostic and statistical manual of mental disorders of the American Psychiatric Association, people with ADHD who experience dysmnnesia daily are confronted with features that make their daily routine difficult, such as inattention and impulsivity excessive mobility. For this reason, they make mistakes involuntarily, they are not able to complete their tasks, and they cannot even gather their attention while communicating (APA, 2005).

Although ADHD is a disorder that has been experienced for years, it has started to attract the attention of both parents and educators in recent years. The possible reason for this may be that individuals with ADHD were referred to with different adjectives such as rebellious, naughty, irresponsible, disobedient, and so on (Stark-Städele, 2005). However, today, thanks to technological developments, people's knowledge of the subject have increased. In the past, parents and teachers who perceived themselves as helpless in the face of behavioral problems of individuals with ADHD have now begun to gain awareness to approach the subject more consciously, and this situation highlights the significance of the related research (Fettahoğlu & Özatalay, 2006).

Parents and teachers have assumed that individuals' inappropriate behaviors can be controlled with various drugs compared to their age. However, essentially, during the drug treatment process, essential responsibilities fall not only upon the individual with ADHD but also upon their families and teachers (Öner et al., 2003). Because, as stated in the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association, ADHD is a disorder that causes a high rate of social and academic problems (2000), so the positive effects of support from the immediate

environment are apparent. The research carried out by Klein et al. in 2003 also emphasizes the importance of support in ADHD. One hundred three individuals diagnosed with ADHD were divided into two groups. One group received only medication, while the other group received a versatile form of treatment that continues in home and educational settings and medicine. Treatments lasted two years. According to the data obtained as a result of the treatments, it was observed that the individuals in the second group showed more improvement compared to the other group. As can be understood from the study, issues such as the behaviors of the families and teachers of individuals with ADHD and the arrangement of both home and school environments to address the needs of the individual are issues that need to be considered (McDonnell et al., 1998; Kış, 2007; Turanlı, 1999).

A pre-school infant is energized, dedicated and enthusiastic in response to adults. As people of these ages discover the environment, they move freely from activity to activity. There are, however, few ADHD signs. If the baby is overly busy and is challenging to maintain focus relative to its counterparts, it cannot build successful relationships or even has trouble with its peers. Much of this may be termed as signs of ADHD. Other factors may be founded on the assumption that children are less self-regulated than expected by developing their minds, and their functionality is disturbed in many respects, including social, neurological, and family issues (Barkley, 2003).

ADHD is a disorder diagnosed mainly at an early age. For this reason, it has been ignored that hyperactivity disorder is a phenomenon experienced by adults as well. Until recent years, hyperactivity was perceived only as a childhood disorder. However, this neurodevelopmental problem started in childhood and continued into adulthood. At the same time, the level of awareness of people about ADHD has increased day by day because it is a discomfort that can bring along many problems regarding individual, educational, and social issues. Those adverse effects or disadvantages of the discomfort can be alleviated with an expert's help or even can completely be overcome. Psychiatrists, psychologists, and psychological counselors are responsible for helping children with ADHD to remove the obstacles that prevent children from developing and helping them move on. Young individuals suffering from hyperactivity can get help from the aforementioned experts to smoothly overcome these obstacles and continue their lives. This is not the case in adults because compensation for this ailment must be added to the more mature individual's lives. The scope of hyperactivity can take on different dimensions for both children and adults. Since students spend an average of



one-third of their day in school environments, teachers need to be aware of the negative effects that can be experienced due to discomfort. In this study, the reader is informed about the definition, prevalence, causes, diagnosis and treatment of ADHD, which concerns a wide range of society. Moreover, the problems caused by hyperactivity are expressed, and the experiences gained during the English lesson with this disorder are emphasized in an educational-oriented manner. Thus, the learning problems that occur due to hyperactivity are examined, and the knowledge level of EFL teachers working at the university is focused on. Therefore, this study focuses on the basic information about ADHD and the knowledge level of university EFL teachers on the subject.

### **Statement of the Problem**

Since ADHD is a disorder that can be observed not only in children but also in adults, the knowledge level of university EFL teachers on this subject can be considered as significant. Individuals with ADHD experience problems such as attention deficit, excessive mobility, difficulty in focusing, inability to comply with rules, and participating in educational environments. Teachers have to obtain information about preventing these potential problems and supporting individuals with ADHD during the instructional process (Mc Donnell et al., 1998; Kış, 2007; Turanlı, 1999).

At the end of the twentieth century, ADHD and coping strategies have become increasingly common globally. However, because the diagnosis is accepted worldwide, the definition and treatment of ADHD have often changed in the context of different medical systems and cultures. Just as a medical diagnosis differs between contexts and cultures, interventions in class contexts also differ across cultures in addition to different levels of ADHD knowledge. Thus, it is hoped that this study's findings raise awareness among English as a foreign language (EFL) teachers working in different contexts and different cultures about undiscovered and unused interventions.

### **Purpose Statement**

This study aims to reveal EFL teachers' knowledge about ADHD symptoms, diagnosis, causes, and treatment. It also aims to point out the difference between teachers' demographic characteristics and their level of knowledge about ADHD. This study shed lights on the following research questions;

1. What is the level of ADHD awareness of EFL lecturers?
2. Are there any significant differences in ADHD awareness of lecturers based upon their demographic information such as:
  - a. Educational background?
  - b. Years of teaching?
  - c. Quality and the Quantity of the Experience?
  - d. Expert Support?
  - e. In-service training involvement?
  - f. Activities for self-study?
  - g. Age?
  - h. Attending an ADHD course?
  - i. The number of adult ADHD students?
3. What are EFL lecturers' views regarding teaching students with ADHD?

### **Significance of the Study**

It is expected that the information to be obtained as a result of this study increases the awareness of university EFL teachers about ADHD disorder, which is widespread throughout the world and experienced in adulthood as well. Moreover, it is hoped that the study helps the teachers about how to approach the individuals with this disorder from the right angle.

Although ADHD symptoms lose their dominance over time, they persist into adulthood, so this issue also concerns university teachers (Bunford et al., 2015). For example, hyperactivity, one of the symptoms of ADHD, is inversely proportional to age. So as age gets older, hyperactivity decreases (APA, 2000). However, this does not mean that the individual's ADHD disappears in time. Symptoms observed in adults with ADHD are not as straightforward as they are noticed in children. That's why, university teachers might approach the subject more consciously.

### **Definition of Terms**

**ADHD:** Attention deficit hyperactivity disorder (ADHD) is a neuropsychiatric syndrome, and its symptoms include attention deficit, mobility, and impulsivity (American Psychiatric Association, 1994).

**CBT:** Cognitive behavioral therapy is a practical approach used to treat various mental disorders such as anxiety and depression (Hawton, 1989).

## **Literature Review**

### **Attention Deficit Hyperactivity Disorder (ADHD)**

ADHD is the most prevalent neurodevelopment condition for children with reduced attention, hyperactivity, and impulsive behavior (Leung and Hon, 2016). This disease is described as follows in the 5th edition of the diagnostic and statistical manual for mental disorders; “ADHD: A neurodevelopmental disorder with inattention, impulsivity, and hyperactive patterns that impair the quality of life, functioning, and development” (American Psychiatric Association, 2013). The acts of the people do not match their developmental age. In other words, extreme agility, carelessness, and impulsiveness are observed, and in many fields of activity and engagement, this condition causes problems (Sharma, 2014). To be diagnosed with ADHD, these three signs are the primary symptoms of ADHD. These signs must be experienced in at least two distinct settings for a person with ADHD for a period of six months (American Psychiatric Association, 2014).

The neuro-psychiatric lifelong condition ADHD is observed at a young age by considering attention deficit, development disorder, and impulsivity. By the use in conjunction with the Diagnostic and Statistical Manual of Mental Disorders IV version (DSM IV) launched in 1994, neuropsychiatric was assessed under three subtitles; reckless, impulsive, and mixed (APA, 2013).

Although hyperactivity is presumed to be a disorder that has begun to be known in recent years, this disorder has a long history when going back in time. German doctor Heinrich Hoffman mentioned that there was such a disorder in the 19th century and even claimed that he created Phil and Harry's characters in his children's book in the profile of ADHD traits (Hoffman, 1848). ADHD was described as a behavioral problem that only existed in children (Leibson et al., 2001).

However, as the subject's knowledge increased over time, it was understood that ADHD does not have a specific age restriction. It has been found that hyperactivity disorder, which is generally noticed in early age in individuals, continues in adolescence and even in mature ages, but its effects can diminish in intensity (Tannock, 1998). ADHD-related behavioral issues disrupt the lives of people living with ADHD in many fields, including social and occupational lives (Holton and Nigg, 2016).

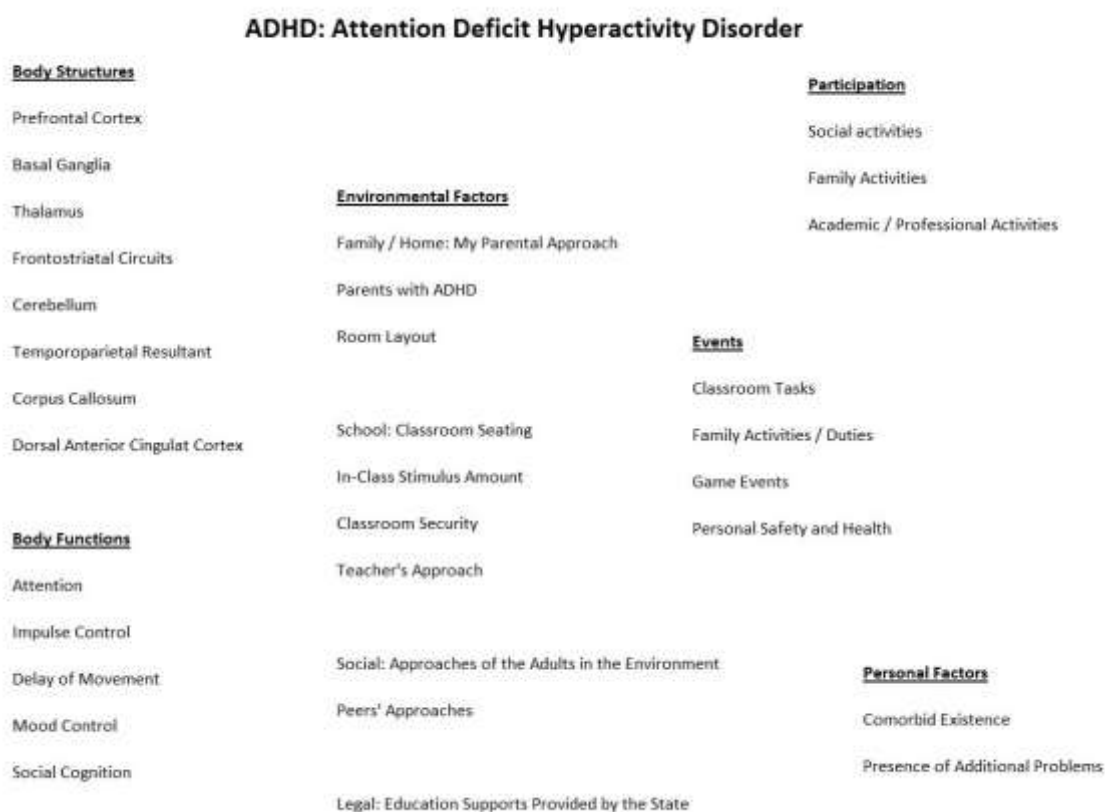


Figure 1. *Model of the ICF World Health Organization*

As seen in **Figure 1**, functions of the body changes in neural structures by the genes that occur. These are the main symptoms, including hyperactivity, concentration, impulsiveness, sensory issues, motor impairment, and mental disorders. In addition, the structure and functional problems affect environmental and human aspects, trigger person engagement problems, and inhibit participation in activity and roles (Chan et al., n.d)

### **Prevalence of ADHD**

In several studies, hyperactivity has been found to affect a large proportion of the world's population. In the past, ADHD was considered a particular illness restricted to infancy, teenage resolution, behavior regulation, and developmental delay. However, Hechtman and McGough (2007) point out that new long-term follow-up studies indicate that 50% to 70% of cases of ADHD in childhood persist until young adulthood. Furthermore, in persons under the age majority, the worldwide prevalence of the condition is 5.29% (Polanczyk et al., 2007), and it can differ between 0.6% and 7.3% in

adults (Fayyad et al., 2017).

The incidence of ADHD in preschool in Turkey was determined to be 3-6% (Aktepe, 2011). The prevalence of ADHD was shown as 5% in the study of primary school children in Istanbul (Motavallı, 1994). The rate of ADHD was 8% in the study conducted in Denizli by Zorlu (2012) with 1508 primary school students. In a primary school study in Bursa, a prevalence of 8.6 % was observed (Albayrak, 1998). In Uyan et al.'s study with 251 teenagers in 9 schools in Turkey's capital city, Ankara, 5.9% of students have had ADHD signs as shown by their parents' and teachers' joint statements (Bataş Bilgeç, 2012).

The disorder goes on after infancy and puberty in adulthood. There are preliminary epidemiological studies on adult ADHD. ADHD is hard to sample accurately, often confusing with other disorders. Besides, some situations cannot be represented in the general group because of the homeless and the inmates. The statistics available indicate that the impacts and outcomes of ADHD are very damaging for adults (Martin, 2005).

Studies have shown that hyperactivity symptoms decrease 8 to 10 years after establishing medical criteria met with childhood diagnosis and persistent symptoms of carelessness (Barkley, 1990). However, ADHD issues in half of the babies with this condition have been identified even in adulthood (Columbia et al., 2015). In a study, the ADHD prevalence was observed at a rate of 1.6 percent in 850 consecutive patients first tested or diagnosed at the adult outpatient clinic (Judge et al., 2008).

Research has shown that boys' amount of ADHD is two to five times higher than in girls. For females, the prevalence of ADHD is 5.5%, for males 10.9%, and for males/females 1.67/1 (Öztürk, 2011).

## **Ethnology**

While numerous studies on ADHD pathophysiology have been performed, the growth mechanisms of the condition have not been fully understood. In addition, the studies assume ADHD to be multifactorial. This means genetic as well as environmental factors interfere in diverse ways and damage the physical and functional growth of the brain ADHD has been shown (Banaschewski et al., 2017). The key force in its development is genetics, with a prevalence of 70-76%. (Burt, 2009; Thapar et al., 2000). ADHD studies on etiology show that a genetic defect causes monoamine mechanics and frontal neuronal striation (Yang and Raine, 2009). According to research on the etiology

of ADHD, this condition has been seen to have heterogeneous characteristics, as it has a vital function of hereditary causes, but also environmental and interactive disorder (APA, 2013; Ayaz et al., 2012; Ercan & Aydın, 2012; Öç et al., 2009; Öktem et al., 2004; Öner et al., 2003; Rodriguez, 2008; Wilmshurst, 2009). The risk of having ADHD of the infant is 57% in a parent with ADHD (Biederman et al., 1995). Two hundred fifty-six parents with two or more children with ADHD (n = 132) were investigated for more than one psychiatric disorder, and ADHD was found in at least one parent in 55% of these families (Smalley et al., 2000). Children whom ADHD induces are seven times more likely than children whose parents are not induced by the disorder. Studies that have revealed a wide range of chromosome regions susceptible to ADHD have shown that no single gene can be used in ADHD etiology. It has been shown, in particular, that the receptor dopamine (DRD4) and the dopamine carrier gene (DAT) are related. Fewer rates of ADHD were reported in adoptive families with adopted children compared to ADHD biological families (Sprich et al., 2000). In line with Neuroimaging ADHD research, the minds of children diagnosed with ADHD mature 2-5 years older than those with average growth. The intrinsic and functional connections of the brain have been shown to clarify this situation (Shaw et al., 2007). The differences in white material contacts and thickness were observed among people affected by ADHD for a period of 33 years (Cortese et al., 2013; Proal et al., 2011).

The first neuroimaging study on adult ADHD was published by Zametkin et al. in 1990. With PET, scientists matched 25 adults with 50 daily hyperactive controls to compare cortical glucose metabolism. Metabolism was usually reduced among hyperactive adults, particularly in the premotor cortex and superior prefrontal cortex, when attention and motor activity were regulated (Zametkin et al., 1990). Adulthood etiology is similar to childhood etiology.

### **ADHD Triggers**

The precise causes of ADHD are still unclear. However, tests have shown that many factors can be identified in the condition's progression as etiological factors (Weyandt, 2007). Various genetic, psychosocial, biochemical, and environmental causes are believed to interfere with the disorder's etiology. Most of the reasons for this are genetic and family reasons, children's disposition, and society's demands on action and success (Taylor, 1995; Weiss, 1996). The risk factors increase the susceptibility and ADHD symptoms of the individual. None of these triggers alone is enough to cause the

disease. Various combinations of these factors are required to generate ADHD (Biederman & Faraone, 2005). ADHD is, from a commonly recognized perspective, the usual indication of multiple illnesses (Arnold & Jensen, 1995).

The genetic inheritance ratio is estimated at 71-75% (Faraone et al., 2005; Nikolas & Burt, 2010). Several clinical family trials have been carried out to determine whether ADHD is linked to genes. Studies have shown that in parents with children with ADHD, the risk of ADHD is 2–8 times higher (Faraone and Biederman, 1998). The collected data indicates that genetic factors are significant in ADHD. However, genetic inheritance is less than 1.0, indicating that genes and other factors, environmental factors, have importance in ADHD etiology (Faraone and Biederman, 1998).

It has been suggested that the development of the disorder can be affected by some environmental factors. It was claimed that certain environmental factors might also contribute to the development of ADHD, such as pre and perinatal problems, toxins like lead and various nutritional additives, sugar poisoning, and factors not confirmed by scientific evidence, including elevated vitamin and dietary needs in children with ADHD (Cantwell, 1996). Mobile phones (Birks et al., 2017), tobacco (Linnet et al., 2003; Silva et al., 2014), paracetamol (Liew et al., 2014), pesticides (Rauh & Margolis, 2016), alcohol (Mick et al., 2002), pregnancy, childbirth or postpartum can be considered as the environmental causes. Minder et al. (1994) found similarities between the hyperactive and control groups in pregnancy problems, difficulties encountered during delivery, and neonatal disorders.

Several factors have been observed in families of individuals with ADHD disorder, such as induction of labor, the possibility of preterm birth (Silva, Colvin, & Hagemann, 2014), brain injury (Toren et al., 1996; Ana et al., 2008) postpartum intense psychological problems (McCann & Roy-Byrne, 2000) and severe depression (Sagiv et al., 2013). However, it is not clear to what extent the mentioned adversities affect daily life (Tarver et al., 2014). In addition, Senol et al. (2001) found no clinically significant disparity in birth complications between ADHD, oppositional syndrome, and group diagnoses of behavioral illness. Families with adolescents with ADHD have been shown to have more negative consequences than typical teen families. This situation is thought to lead instead of ADHD to produce signs of behavioral and oppositional disturbances (Cantwell, 1996).

### **ADHD-related Issues in Adults**

Adults diagnosed with ADHD had a lower quality of life than adults without ADHD (Agarwal et al., 2012). In contrast with other non-ADHD students, university students face an equally low standard of living as adults (Pinho et al., 2017). Studies have demonstrated that movements, facial expressions, and verbal intonations cannot be understood quickly, and because of their impulsivity, they cannot identify feelings. Children with ADHD who find social issues challenging to grasp sometimes respond improperly. They have few friends and sometimes face family relationship tension and difficulties (Biederman et al., 2011; Deault, 2010; Johnston & Mash, 2001).

Additionally, they are more profound and anxious, depressed or emotionally inhibited, less developed in academics, and faintly encouraged in their social activities (Advokat et al., 2011; Kim et al., 2016). Symptoms of ADHD have many detrimental impacts on the lives of students. Although many children with ADHD are now in ordinary schools, some benefit from special education and related programs in the Turkish education system. In compliance with a decision of the specific Advice Testing Center in the Individual Education Package, children identified with ADHD pursue individual education in special education facilities or subclasses of special education as mainstream students in schools (MEB, 2017).

However, during their university or corporate life, adults do not have such chances. Hence, owing to their grievances, they are most frequently victimized. ADHD students were still very inefficient in continuing higher education. In puberty, delinquent behavior can sometimes be seen, particularly in cases of aggression. Similarly, potential drug dependency and childhood anti-social behavior are related to ADHD (Ackermann-Stoletzky & Stoletzky, 2004; Lauth & Naumann, 2009; Rossbach, 2002). Illegal acts, alcohol, and drugs are seen in particular as a substantially rising risk factor (6-39 percent) (Lauth & Heubeck 2006).

Genetic, environmental, and neurobiological factors include the pathophysiological structure of adult ADHD. Drugs used in treating ADHD that affect the central nervous system's dopaminergic and northerner processes provide insight into neuronal pathways and hereditary locus defects. In addition, the increasing trend in genetic data demonstrates that many genes and environmental factors are significant in the pathophysiology of ADHD (Shannon et al., 2007). Even environmental risk factors for ADHD include organic waste, air quality, and plumage exposure.



During breastfeeding, the risk of ADHD may also be enhanced by smoking, and increasing blood mercury levels and using antioxidants in patients with ADHD may raise the number of oxidants (Fluegge, 2016; Nigg, 2008). Females have a high ADHD rate compared with young children, have fewer problems with pleasure and schooling, fewer developmental difficulties, and fewer opportunities for behavioral comorbidity and oppositional disorders (Biederman, 2002). In addition, women with ADHD have been reported to have more genetic stress than men with ADHD to indicate the disorder (Smalley et al., 2000; Faraone and Doyle, 2001).

In addition to their academic and social lives, students with such symptoms typically encounter self-esteem issues (Pinho et al., 2017; Danckaerts et al., 2010, Uneri, Senses-Dinc, & Goker, 2015). ADHD is frequently associated with sleep-related addiction disorders (Piñeiro-Dieguez et al., 2016). Hardness contributes to a disturbance in a person's everyday life (Stevens et al., 2011). These behavioral issues that ADHD students encounter more prominently in behaviors that involve long-term focus or cognitive effort and when stimuli lose their novelty (e.g., continuously listening to the instructor and single repetitive tasks). Parents and teachers assume that the source of all the child's actions is his own free will (Lauth et al., 2007).

There is no indication that ADHD persists in adulthood, and such criteria do not extend to adulthood ("excessively running or climbing," etc.) Accordingly, adequate activity for adults is reasonable in words like "employment" and "workplace." Further tests are therefore needed to determine if ADHD symptoms are adult-like (Kalbag and Levin, 2005; McGough and Barkley, 2004). The signs have demonstrated that adults with ASD are identified by unrest, problems sitting, difficulties waiting, and potentially harmful activity (Alyanak et al., 2011). For specific individuals with ADHD, organizations, relationships, jobs, and lifestyles are more suited to their symptoms to compensate for their deficits. There is also an underdiagnosis for adults where at least six infant criteria are fulfilled (McGough and Barkley, 2004; Riccio et al., 2005). Significantly in regards to hyperactivity and impulsivity, significant symptoms decrease with age. Since ADHD adults do not fulfill all diagnostic criteria, significant functional impairments may arise due to residual symptoms (Mick et al., 2004).

Also, ADHD-diagnosed adults are particularly vulnerable to behavior associated with frustrated, depressive, and distressful feelings. These emotions can cause social matters, emotional difficulties, and in extreme cases, personality disturbances. Adults with these conditions also receive adverse environmental input from others. Individuals

with such continuous failures are likely to commit suicide somehow (DuPaul et al., 2009; Advokat et al., 2011; Kim et al., 2016; Barkley et al., 2008; Meaux et al., 2009).

Studying in a university is a critical time in the future and social life of a person. This time can be considered challenging, given individuals' orientation towards the new world (Kim, 2013). Academic, social, emotional, and psychological challenges are some of the problems that university students face during this time (Fleming & McMahon, 2012). The problems caused by these factors lead to a reduction in life satisfaction of people with ADHD, demonstrating the need to treat and implement the required interventions comprehensively (Lee, 2015).

60% of people with ADHD have signs and experience minor to severe workplace, academic, and social difficulties (Turgay, 2001; Goldstein, 2002). The continuing education prevalence and its adult life consequences are as high as 78% (Waldman and Rhee, 2002), leading to a lack of work and decline in life satisfaction in many fields of adulthood (Hoza et al., 2005; Owens et al., 2009). ADHD-diagnosed teenagers are more persistent, challenging, and less comfortable than those with average growth (Segal, 2001; Whalen et al., 2006). More regular shifts in the workplace (Barkley et al., 1996) in people with ADHD, less technical degree (Mannuzza et al., 1991), and more contrary to those without ADHD. In this demographic, legal incidents are more frequent. In patients with ADHD, there were high separation and divorce rates and lower rates of happiness of marital, family, and social life (Murphy and Barkley, 1996). Complaints are often recorded; hearings of others or intervening with others when doing business, unable to pay attention to other people's emotional needs, problematic organization, lack of coordination, and failure to resolve householder duties (Eakin et al., 2004).

### **ADHD Diagnosis and Treatment**

ADHD is a neurodevelopment condition with disadvantaging implications for adolescents, teenagers, and adults. ADHD, which is considered an illness but not a disease and has the following main symptoms: weakness in concentration and organization, hyperactivity, and impulsivity due to the vital loss of the senses before and immediate gratification (seeking immediate reward and loss of consciousness before behaviors) (Dias et al., 2013). These primary symptoms of ADHD contribute to functional issues that adversely influence patients' everyday lives and their surroundings. It has been noted that children with ADHD are frequently faced with

academic issues. They also have difficulties in their relationships with their peers and in managing their emotions. In later times, children diagnosed with ADHD in school-age have been diagnosed without treatment (APA, 2013; Hinshaw, 2002; Kopp, 2010).

### DSM-5 criteria for diagnosis of ADHD in adults

≥5 symptoms per category in adults, persisting at least 6 months; present prior to age 12; several symptoms are present in ≥2 settings; symptoms interfere with, or reduce the quality of social, academic, or occupational functioning

#### Inattention

- a. Lack of attention to details/careless mistakes
- b. Difficulty sustaining attention in tasks
- c. Does not seem to listen when spoken to directly
- d. Does not follow through on instructions
- e. Difficulty organizing tasks and activities
- f. Avoids tasks that require sustained mental effort
- g. Loses or misplaces objects
- h. Easily distracted
- i. Forgetful in daily activities

#### Hyperactivity and impulsivity

- a. Fidgetiness (hands or feet)/squirms in seat
- b. Leaves seat frequently
- c. Feeling restless
- d. Unable to engage in leisure activities quietly
- e. Always "on the go," difficulty being still for extended time
- f. Talks excessively
- g. Blurts out answers
- h. Difficulty waiting his or her turn
- i. Interrupts or intrudes on others

Figure 2. *Diagnosis of Attention Deficit Hyperactivity Disorder in Adults*

<https://www.qandadhd.com/diagnostic-criteria>

As seen in **Figure 2**, various symptoms can be observed in a person in order to be diagnosed with ADHD. The main symptoms of ADHD can be identified as medication failure, hyperactivity, dynamism. Furthermore, this disorder also enables adults with mental, psychological, career, and employment problems (Wender, 1995). ADHD is one of the most common psychiatric disorders for adults. The first studies on the effects of stimulants in adults diagnosed with a minimum brain function were carried out in 1976 by Wood, Reimherr, Wender, and Johnson. Paul Wender first suggested separate ADHD diagnostic criteria for adults. One-third of ADHD patients

are adult-free, one third have some symptoms, and one third are experiencing severe problems.

The nature of the symptoms suggests that ADHD clashes with the role of the infant and, in several different cases, leads to problems in academia, society, and family (Barkley, 1998; Harpin, 2005). It decreases the wellness and quality of life perceived in children and adults (Adler et al., 2006; Klassen et al., 2004). Biederman et al. (2008) estimated that the persistence rate of ADHD was 40% in his study on 128 kids. In this sense, the disease does not just have infancy; it does not only have permanent consequences in young people and adulthood and poses a risk for injuries and illegal behavior, particularly for people and families and the use of social substances (Elena & Laura, 2010). Poor childhood quality excludes the infant from safe living and jeopardizes a healthy adult's life (Riley et al., 2006).

Persons with ADHD have a greater incidence of opioids, narcotics, alcohol, and pregnancy than individuals who do not have ADHD in childhood and early adulthood (Caye et al., 2016). An individual with ADHD experiences problems such as lack of focus, forgetfulness, inability to complete an initiated task, inability to perform tasks in order of priority, inability to make plans, break quickly from external stimuli, and inability to arrange objects in order of importance (Lauth & Minsel, 2009). Adults with ADHD are also affected by social and personal problems, economic challenges, job loss, and low self-esteem. Another significant issue is elevated clinical comorbidity in people diagnosed with the condition (Ginsberg et al., 2014).

ADHD is a common condition, and its treatment is inevitable because social and psychiatric problems may occur in the individual with this disorder if not treated. Moreover, ADHD is not temporary. It occurs even before school begins and continues until adulthood, but it changes developmentally with age. It is one of the most important causes of psychiatric disorders for children and adolescents.

Treatment of ADHD is considered necessary to minimize complications and psychological discomfort and increase the individual's functioning, thereby leading to beneficial effects, such as enhanced academic skills and reduced criminal behavior (Kooij et al., 2010; Lichtenstein et al. 2012). Many studies have explored the effect on the quality of life of drug treatment. In annual retrospective CHIP-CE multicenter analysis in 977 ADHD diagnosed patients receiving or not, no statistically meaningful discrepancy between those receiving the care was discovered (Goetz et al., 2012).

ADHD therapies are the most common forms of pharmacotherapy, parenthood, and rehabilitation, human interviews (Özcan et al., 2010). While trials have shown dominance in symptomatic medicinal therapy, combined therapy has been shown in functional domains, including academic achievement, social skills, and parenting. This means that combined care works well when prescription therapy is required to treat significant symptoms (Simon et al., 1995).

Psychostimulant therapy is the main treatment option for people with ADHD. It is made of short-acting methylphenidate (Ritalin), 10 mg tablet, and long-acting methylphenidate (Concerta) capsules and sold under a red prescription in Turkey. The therapeutic dosage range of short-acts methylphenidate is 0,3 to 1,0 mg/kg administered three times a day, and the daily dose is no more than 60 mg. The common side effects are sleeplessness, diminished appetite, stomach pain, irritability, weight loss, and headache. These side effects depend on the dose and will disappear before the therapy ends. While medications are necessary for the success and effectiveness of the individual being treated, the support they are used is when the person's dedication is most important. When a boy, teenager, and adult-use medicine, the person's anxiety should be treated, the drug promoted, and the people in the region should be clarified when appropriate, and the stigma of the child prevented (Senol, 2008).

Although tests have indicated the dominance of medications in symptomatic therapy, the superiority of combination treatments has been shown in practical fields such as academic performance, cognitive skills, and parental practice (Hinshaw and Arnold, 2015). ADHD counseling is based on a multimodal strategy that incorporates treatment with several other special steps (Kooij et al., 2010; National Center for Mental Health Collaboration, 2009). The utilization of drug treatment and behavioral modification incorporates better student achievement, decreased behavior issues, enhanced family happiness, and reduced dose criteria for medicine (Leung and Hon, 2016).

Although therapeutic and educational therapies are considered successful approaches, drugs alone are not considered an essential part of care for infants, teens, and adults diagnosed with ADHD. Bearing improvement is one of the critical aspects of the recovery process, in addition to medical treatments. A new trial has demonstrated the effectiveness of cognitive-behavioral therapy treatment for ADHD. In a Fabiano et al. Meta-analysis review. In 2008 they reported that conduct therapy was a highly successful tool for treating ADHD in 114 cases examined to evaluate behavioral

modification therapy's impact in treating ADHD.

While promising interventions are known to be behavioral and educational treatments, medications are alone not an integral part of therapy for ADHS-diagnosed children, teenagers, and adults (Cananddra, 2011; Kooij et al., 2010 National Coordinating Center of Mental Health, 2009). In comparison to surgical procedures, carrying progress is one of the significant facets of the healing process. Recent research has proven the feasibility of ADHD cognitive-behavioral therapy. In a meta-analysis study by Fabiano et al., They reported in 2008 that lead counseling was a very effective intervention in treating ADHD in 114 cases investigated to determine the effect of behavioral adjustment therapy on ADHD (Fabiano et al., 2008). However, drug treatment with CBT has improved better than CBT alone (Cherkasova et al., 2016).

Given that ADHD symptoms include complex school environment challenges such as behavioral management issues, academic success, and peer relationships (DuPaul & Weyandt, 2006), behavioral treatments are needed for the diagnosed individual to achieve better outcomes. A reduction in symptoms of ADHD was observed in the community CBT prescribed by medical care at an older age (Vidal et al., 2015). People with ADHD usually suffer in contrast with their peers without ADHD more from academic issues. Adolescents, teens, and adults diagnosed with the condition reported the need for more vital special education programs, reduced standards, a higher rate of absenteeism, and the possibility of school dropouts (Molina et al., 2010). ADHD is one of the most troublesome chronic conditions for individuals suffering from this condition and their families and school settings. Since it can be confused with different health problems, it is essential to be careful in educational settings for early diagnosis and treatment (Warrington et al., 2007)

Studies propose a host of instructional steps to handle ADHD problems. In addition to increasing the complexity and the duration of the job, direct instructions, encouragement for peer and classroom-wide teaching, time, creativity and engagement levels of the work, the facilitation of structures and structural reminders, the development of rules and visual signs, the acceleration of the collection of work series tasks, consistent and direct instruction (Brock, Jimerson, & Hansen, 2009).

In comparison to drug medicine, non-pharmacological therapy is also used in adults. The most extensively researched therapy is administered for cognitive and behavioral purposes in person or group format. Strategies for improving ADHD asymptotic and recovery through psychoeducation, inspiration, concentration, listening,

organization and time utilization are established in cognitive-behavioral treatment (Faraone et al., 2004; Hesslinger et al., 2002; Stevenson et al., 2002); Rostain and Ramsay, 2006; Elliott, 2002). Pairs and family therapies and support groups are also recommended for non-drug therapies (Murphy, 2005; Siver, 2000; Wender et al., 2001). The mechanisms of individual interviewing should be allowed to increase their confidence while individuals take responsibility for the problems they face. Therefore, because of its ADHD, the person can externalize its problems (Toone et al., 1999).

### **ADHD Awareness of University EFL Teachers**

The basis of knowledge is experience, and experiences can be obtained through a person or working on a topic. At the same time, education is one of the primary methods of acquiring knowledge. A teacher gains various experiences and knowledge while working in an educational institution (Gehrman, 2013; Graeper, 2010; Jones & Chronis-Tuscano, 2008). Gehrman et al. (2013) examined the pre-performance education curricula in terms of both general education and special education in their study. As a result, it was understood that general education teachers did not have enough experience and knowledge about ADHD. ADHD negatively affects students in terms of both behaviors and school achievement. For this reason, teachers need to have an absolute command of the subject to be beneficial to them (Altherr, 2006).

On the other hand, special education teachers are exposed to ADHD more than general education teachers, and thus their awareness of the subject increases with their experiences (Anderson et al., 2012; Kos et al., 2004; Kos et al., 2006). The ADHD awareness can be explained not by how long teachers have been in this profession but by how close the relationship they have established with their ADHD students (Anderson et al., 2012). Kos et al. (2006) state that in-service training is one of the key elements in raising this awareness. Jones and Chronis-Tuscano (2008) claim that teachers will understand the difference between theory and practice in ADHD, thanks to in-service training. In studies on ADHD, the detailed comments about the students with this disorder based on their teachers' observations are extremely important (Atkins & Pelham, 2001). Accordingly, teachers need to enrich their knowledge by adding some necessary information about ADHD to it. It is not the teachers' task to distinguish students with this disorder from other students, identify them, and then treat them. The teacher's primary responsibility in this area is to be helpful in diagnostic procedures by sharing their observations and conclusions about those students (Atkins & Pelham, 2001).

## **Learning Difficulty and ADHD**

Kirk first explained the term learning difficulty and emphasized that a particular place should be given to the students who fit this definition in the education system (Kirk, 1977). Current studies have defined ADHD as a learning disability (Bizier, Till, & Nicholls, 2014). Problems experienced in learning and ADHD accompany each other (Larson et al., 2011). Almost 30% of children with ADHD suffer from learning disabilities (DuPaul et al., 2013). Harris and Turkington (2003) claimed that one in five children and one in seven adults had learning difficulties. DSM-V (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition) defines these learning difficulties as long-term problem learning and inefficient use of academic skills and argues that they cannot be cured by operating method (Germano, Gagliano and Curatolo, 2010). Learning disabilities can vary according to the personal characteristics of the students. Considering the general characteristics of students with ADHD, kinesthetic learning can be accepted as a learning style that can positively affect their learning disability. Teachers' use of three-dimensional teaching materials and concrete objects during the lesson may attract the attention of students with ADHD. Moreover, asking students to participate in the lesson by making use of these materials can also have a positive effect on learning (Demirel, 2012).

Problems encountered with reading, writing, and mathematics constitute the majority of learning disorders that should be considered (Cortiella & Horowitz, 2014). In particular, it is stated that problems with reading arise from hereditary ADHD factors, and in this case, it is necessary to be more sensitive about treatment (Moll et al., 2014). For example, dyslexia, a disorder of reading comprehension, is a shared learning problem. Phonetic descriptions are not easy for a person with dyslexia. In dyscalculia, another learning problem, his job is unsuccessful in mathematical calculations. An individual with this disorder experiences problems during daily life, even in calculations such as determining the number of numbers and counting money (Cortiella & Horowitz, 2014, p.4). Besides, there are also people with dysgraphia who have difficulties writing (Cortiella & Horowitz, 2014). The sooner people with ADHD or other psychiatric disorders are treated, the better their quality of life will be preserved (Gilger et al., 1992; DuPaul and Volpe, 2009).



### **ADHD in EFL Classes**

Attention is one of the cornerstones of foreign language learning (Leow & Bowles, 2005; Robinson, 2003; Schmidt, 1995). ADHD causes problems in memory and organizational management, affecting the development of different language skills by affecting the memorization mechanism (Kosmos, 2017).

The mental and linguistic characteristics of people with ADHD have been studied by Sparks et al. (2008). It has been found that individuals with this disorder show the same ability to understand, interpret, and memorize as other learners. In other words, people with ADHD show a high level of performance in the field of grammar. However, it is not possible to say that they are equally good at spelling. Cognitive processes and memory are instrumental in making sense of the text read (Cain, 2006). Consequently, concentration and comprehension may be directly proportional to individuals with ADHD. In light of the findings of research conducted by Sparks et al. (2008), it can be expected that a series of compensatory strategies can be developed to enable adult students with ADHD to perform their reading tasks successfully.

Sources of motivation are diverse, and the most important demotivating barriers faced by adults living with ADHD are oblivion and difficulty organizing tasks. In this regard, improved self-regulation skills, a diary, and organizing plans of the work would be advantageous. Thus people will plan their day without any other stimuli being interrupted. It has also been said that action stimulation, for example, physical exercise, should be incorporated periodically between situations in which long-term concentration such as work and employment should be maintained (Toone et al., 1999).

According to the research of Alloway et al. (2010) and Martinussen and Tannock (2006), memorizing visual-spatial data is hard for people with ADHD. However, there is no problem with recalling the knowledge left when given orally. Hence, it can be argued that the primary source of the grammar and lexical forms of ADHD students should be a verbal stimulus or a multi-faceted approach to the learning of foreign languages (Kelly & Phillips, 2011; Kormos & Smith, 2012; Nijakowska, 2010).

Individuals with ADHD may have trouble writing words, maintaining the integrity of logic between sentences, preparing a written text, expressing details, and reading the translated version of the text they have written (Sparks et al., 2008). People with ADHD skip most of the information in the article they read, and so cannot control the article's integrity. Just like in the act of reading, they write phonetically in missing words what they want to express during writing. Accordingly, Turketi (2010)

recommends that the teacher should positively affect the student's language motivation. This can be achieved by constructive feedback on students' work, praising the right pieces, and then pointing out the errors carefully. Additionally, Turketi (2010) recommended an activity that would allow students to self-correct paragraphs they had written. The aim is also to increase students' self-confidence. The limited participation of learners who think that they are unsuccessful in writing skills confirms the activity's purpose (Turketi, 2010).

Students with ADHD successfully access the information given by the teacher during the English lesson (Alloway et al., 2010; Martinussen and Tannock, 2006). In other words, students with ADHD do not have problems with verbal knowledge. However, this is also related to the proper structure of the sentences they hear. Students with ADHD cannot understand phrases that contain irrelevant data and have a corrupt sentence structure.

Das (2015) presents the Multi-Sensory Instruction for teaching in which he explains why integrating the various senses during the lessons is necessary. He remarks that the multi-sensory approach allows students to recall and get the topic and obtain knowledge. Then, he proposes to use mathematical facts, the alphabet, and so on. It also emphasizes the importance of providing opportunities for students to relax their bodies throughout the day. It recommends that different positions, tournaments, or other communication activities should be included for these purposes.

Students with ADHD cannot be efficient in learning actions due to hyperactivity and impulse reasons. Intense impulsivity contributes to impaired functionality as well as excessive mobility (Biederman and Faraone, 2005). Physical movement and contact with other students is a great need for students with ADHD. So this prevents individuals from doing a job in a fixed place. In general, due to the nature of ADHD students, it is not easy to learn a particular subject without kinesthetic and tactile methods (Barkley, 2006). When classroom management is inadequate, these students can harm other class participants' success with their destructive attitudes.

## 2. METHODOLOGY

### 2.1. Introduction

This study focuses on the knowledge of university EFL teachers about teaching English to students with ADHD. This section outlines the configurations and techniques used in selecting participants, data collection tools, and the interpretation of data. This research is descriptive and focuses on the EFL teachers' knowledge in teaching English to adults with ADHD.

153 EFL teachers from different universities were asked for the questionnaire. The interview was held with 8 university EFL teachers. Due to the Covid 19 pandemic, only 8 teachers were able to get approval for the interview. The Knowledge of Attention Deficit Disorders Scale (KADDS), demographic survey, and interview were used as the data collection instruments. Quantitative data analysis was provided with statistics. Reliability was tested and evaluated. Calculations were performed using SPSS. Content analysis was preferred for the analysis of the interviews.

### 2.2. Research Design

Table 1

*Research Design of the Study*

Research Design	Mixed-Method
Sampling Strategy	Convenience Sampling (Survey and Interview)
Participants	153 university EFL teachers (Survey), eight university EFL teachers (Interview)
Data Collection Tools	Demographic Questionnaire, Knowledge of Attention Deficit Disorders Scale (KADDS), Semi-Structured Interview

### 2.3. The Context and the Participants of this Study

This study was carried out with the participation of EFL teachers from 7 universities in different regions of Turkey.

Table 2  
*The List of Universities*

Regions	Universities
Mediterranean Region	Çağ University (Private University), Mustafa Kemal University (State University)
Aegean Region	Dokuz Eylül University (State University)
Central Anatolia Region	Atılım University (Private University)
Black Sea Region	Bolu Abant İzzet Baysal University (State University)
Eastern Anatolia Region	Van Yüzüncü Yıl University (State University)
Marmara Region	Bahçeşehir University (Private University)

As shown in **Table 2**, 4 State Universities and 3 Private Universities contributed to the study. English language education is provided at all universities on the list. In addition to this, more emphasis is placed on teaching English in universities, which are stated in parentheses as private universities. University EFL teachers who work at the departments of English Language Teaching, English Language Literature, American Culture and Literature, Vocational School, and Preparatory School (School of Foreign Languages) were included in this study. First of all, permission was obtained from the universities, and 153 EFL teachers participated in the survey. Then, with the convenience sampling method, eight university EFL teachers were interviewed. The demographic backgrounds of the participants were given in **Table 3**. In **Table 4**, ADHD experience of the participants are given.

The procedure used to carry out the research are stated in this section. In the next section, the findings of the methods used are specified. The findings of the questionnaire, including demographic questions and KADDS questions, are highlighted. In addition, the findings of the interview are reflected by categorizing them into themes.

Table 3  
*Demographic Background of Participants*

	F	%
<b>Gender</b>		
Male	37	24,2
Female	116	75,8
<b>Age</b>		
21-30	36	23,5
31-40	53	34,6
41 and above	64	41,8
<b>Highest Degree</b>		
Bachelor	79	51,6
Master	60	39,2
PHD	14	9,2
<b>Years of Experience</b>		
1-5 years	37	24,2
6-10 years	32	20,9
11-20 years	42	27,5
21 and above years	42	27,5

In **Table 4**, ADHD experience of the participants are given. As it can be seen from **Table 4**, 83% of the participants did not receive an ADHD training course. Moreover, %58,8 of the participants did not taught students with ADHD. Also, according to the **Table 4**, it can be seen that 95,4% of the participants did not participate in in-service training about ADHD. Therefore, it can be implied that most of the participants' ADHD experience is low/moderate.

Table 4  
*ADHD Experience of Participants*

	F	%
<b>Participation in an ADHD training course</b>		
No	127	83,0
Yes, briefly	24	15,7
Yes, entire semester course	2	1,3
<b>No. of students with ADHD</b>		
0	90	58,8
1-2	40	26,1
3-5	17	11,1
6 or more	6	3,9
<b>Had Students Diagnosed with ADHD</b>		
No	100	65,4
Yes	53	34,6
<b>Collaboration with a physician/psychiatrist</b>		
No	132	86,3
Yes, once or twice	18	11,8
Yes, many times	3	2,0
<b>Participation in in-service training</b>		
No	146	95,4
Yes	7	4,6
<b>Self-study books</b>		
No	121	79,1
Yes	32	20,9
<b>Self-study pamphlets and handouts</b>		
No	130	85,0
Yes	23	15,0
<b>Self-study Articles</b>		
No	69	45,1
Yes	84	54,9
<b>Television programs</b>		
No	62	40,5
Yes	91	59,5
<b>Internet</b>		
No	59	38,6
Yes	94	61,4

## 2.4. Instruments

Questionnaire and semi-structured interview were used to achieve the purpose of this study. The questionnaire consists of 2 parts, demographic questions and KADDS. The demographic questionnaire was used to obtain information about the essential characteristics of participating in EFL teachers. Besides, KADDS was preferred to identify teachers' knowledge of ADHD. The interview was then conducted to support the survey results. In the demographic survey, 15 questions address the gender, age, education, past teaching experience, whether they have received an education-related to ADHD in the past, the resources they have used about ADHD in students, and their methods to cope. The adaptation of the demographic questionnaire was based on Anastopoulos' questionnaire. Demographic questions focus on teachers' characteristics and their knowledge about ADHD. The first five questions of the survey reveal the characteristics of the teachers. The remaining ten questions focus on their past experiences with ADHD.

With the questionnaire adapted from the Knowledge of Attention Deficit Disorders Scale (KADDS) developed by Sciutto et al., the participant EFL teachers' knowledge about ADHD was examined under three headings; causes, diagnosis, treatment. In addition, Professor Mark Sciutto was contacted to obtain the necessary approval for the survey. There are 34 items in the questionnaire. The options are divided into three as 'True,' 'False,' 'I do not know.' The correct answer is worth 1 point. The answer "I do not know" is not graded. Thus, the overall number and proportion of points of the responses are determined. The survey questions were translated into Turkish and indicated in parentheses reducing the participants' possibility of the questions being misperceived. The questionnaire consists of 49 questions in total, including demographic questions at the beginning. Aiming to prevent the participants from getting distracted while participating in such a long survey, it was preferred to translate the items in a simple and explanatory way, although the Turkish version of this survey has been used before. The translation was controlled by backtranslation with the help of an expert in the field. Also, after the descriptive analysis, data was recoded in order to analyze inferential statistics.

Since the interview is more spontaneous than other scales, it enabled teachers to express their feelings and thoughts better (Kvale, 1996). The semi-structured interview was conducted to collect data about teachers' attitudes and perceptions regarding

ADHD. Since the information obtained through the questionnaire is more restrictive than the details learned through the interview, it was decided to conduct an interview simultaneously. The questionnaire is restrictive, but the interview allows the participants to reflect their thoughts more transparently (Psacharopoulos, 1980). In order to collect data, an interview guide with a total of 10 questions was created, including the points where there was not enough clear information in the survey results. The interview had two primary purposes. The first one was to reveal the knowledge of university EFL teachers about ADHD. The second one was to focus on teachers' past experiences on this topic.

## 2.5. Data Collection

Since universities were in distance education process due to Covid 19 pandemic, the EFL teachers who participated in this study were contacted using email and video chat (Zoom interview). Surveys were transferred to Google form. Teachers were informed about the aims of the thesis and the importance of getting detailed and honest answers, and the questionnaire was sent to the EFL teachers working at the universities where permission was obtained via email. After receiving the survey results, appointments were made for the interviews in accordance with the interview procedures, which stated that the interviewee's identity would remain confidential. When starting the interviews, the purpose and importance of the research were shared with the teachers to be interviewed. Then, with the teachers' permission, the audio recording was made, and one-to-one interviews were conducted. After the interviews were completed, all interviews were transcribed one by one using the voice recordings.

Table 5

### *Cronbach Alpha Values of the Subscales*

	Cronbach Alpha
General_Knowledge	0.86
Symptom_Diagnosis	0.73
Treatment	0.79
Overall KADDS	0.92



Cronbach Alpha values were calculated to find out the scale's findings. Results in **Table 5** indicated that General Knowledge's alpha score was 0.86, Symptom/Diagnosis' alpha score was 0.73, Treatment's alpha score was 0.79 and finally, overall KADDS' alpha score was 0.92. Therefore, it can be implied that the scale is reliable.

## **2.6. Data Analysis**

This section contains the explanation of data analysis procedure of the survey and the interview. Teachers' demographic characteristics, knowledge of ADHD symptoms, causes, and treatment were analyzed by using descriptive and inferential statistics. In order to reveal the link between the demographic characteristics of the participants and their knowledge level about ADHD, independent samples t-tests and one-way analysis of variance (ANOVA) were carried out by using SPSS. As stated before, the minimum, maximum, and average values were obtained by considering the knowledge of teachers examined under three headings by using descriptive statistics.

An interview can be explained as a two-person discussion conducted by the interviewee with the explicit intention of acquiring research-relevant information and based on content defined by formal overview, forecast, or clarification research objectives (Channel and Kahn, 1968). In this study, interviews with university EFL teachers were recorded. Then it was transcribed and passed over as much as necessary to reach a more significant amount of information about the subject and the teacher's attitude towards the subject (Neuman, 2007). The comments were developed by examining the data in detail. The coding step was started with the first interpretations. The participants' significant words, and even sentences that could be considered keywords for research were marked. At times, the theme used to describe the concepts related to the subject were used to delve deeper into the words, phrases, and sentences chosen from the transcription (Richards, 2005). Using these key points, the data was divided into categories, themes, and subthemes. Elaboration action has been initiated to approach general information that can be accessed through the themes derived from the data. The process was terminated with the last interpretations. The elaboration of the themes was examined to reach the truth, then interpreted for the last time, and finally, the last control was applied (Terre Blanche and Durrheim, 1999).

### **3. RESULTS**

#### **Introduction**

This chapter provides the analyses of data obtained by the KADDS. KADDS is used to analyze participants' knowledge of ADHD applying distance education due to the pandemic. KADDS consists of 34 items in total. There are three subscales in the questionnaire, namely, General Knowledge, Symptoms/Diagnosis and Treatment. The distribution of data was checked in the SPSS. Normal distribution of the data was found, and parametric analysis was utilized. Data was recoded for the accurate analysis of the results. The participants of this study were 153 teachers from various university in Turkey. Quantitative analysis methods including descriptive statistics, independent t-test, one-way ANOVA, and Pearson correlation were used for the analyses. Post hoc analysis was also used for ANOVA results. In addition, qualitative analysis method is Content Analysis.

#### **Quantitative Results of this Study**

##### **Results for Research Question 1**

The participants' knowledge on ADHD were investigated, and descriptive statistics were used for the first research question. Participants' answers were recoded for the analysis. Each true answer was recoded as 1 and both false answers and do not know answers were recoded as 0. The mean and standard deviation of participants' scores for each item was analyzed within the subscales of the KADDS. There were three dimensions in the KADDS, namely General Knowledge, Symptom/Diagnosis and Treatment. In addition to dimensions of the KADDS, overall KADDS was added as a dependent variable. In the scale, participants could get maximum 15 points in General Knowledge subscale. Also, they could get maximum 9 points in Symptom/Diagnosis subscale and they could get maximum 10 points in Treatment Subscale. Finally, participants could get maximum 34 points in the KADDS.

Table 6  
*Descriptive Statistics for Subscales of the KADDS*

	N	Minimum	Maximum	Mean	Std. Deviation
General_Knowledge	153	1.00	10.00	4.56	2.20
Symptom_Diagnosis	153	0.00	7.00	3.49	1.64
Treatment	153	0.00	9.00	4.44	2.12
KADDS	153	2.00	24.00	12.50	5.08

According to **Table 6**, participants KADDS knowledge were high. The mean scores of General Knowledge are (M=4.56, SD = 2.20), the mean scores of Treatment are (M=4.44, SD=2.12), and the mean scores of KADDS are (M=12.50, SD=5.08). Moreover, the mean scores of Symptom/Diagnosis are (M=3.49, SD=1.64). Results in **Table 6** indicated that in General Knowledge subscale, participants' maximum score was 10 out of 15. Also, according to the results, participants' maximum score was 7 out of 9 in Symptom Diagnosis subscale. Furthermore, participants' maximum score was 9 out of 10 in Treatment subscale. It can be implied that each subscales' maximum scores are different and results illustrated that participants knowledge of Symptom Diagnosis knowledge was lower compared to other subscales. Furthermore, participants' knowledge of General Knowledge and Treatment were higher compared to other subscales. Thus, it can be implied that participants knowledge of General Knowledge, Symptom Diagnosis, Treatment and overall KADDS were moderate.

Table 7  
*Results of General Knowledge Subscale*

Items	CA		True	False	Don't Know
1. According to statistics. ADHD is diagnosed in approximately 15% of school-age children	F	<i>f</i>	55 35.9	2 1.3	96 62.7
4. Children with ADHD are typically more compliant with their fathers than with their mothers.	T	<i>f</i>	12 7.8	39 25.5	102 66.7
6. ADHD is more common in the 1st degree biological relatives (i.e. mother. father) of children with ADHD than in the general population	T	<i>f</i>	50 32.7	8 5.2	95 62.1
13. Children with ADHD often have a history of stealing or destroying other people's things.	T	<i>f</i>	23 15.0	51 33.3	79 51.6
17. Individual psychotherapy is usually sufficient for the treatment of most children with ADHD.	T	<i>f</i>	23 19.0	43 28.1	81 52.9
19. In severe cases of ADHD. medication is often used before other behavior modification techniques are attempted.	F	<i>f</i>	43 28.1	26 17.0	84 54.9
22. Reducing dietary intake of sugar or food additives is generally effective in reducing the symptoms of ADHD.	F	<i>f</i>	70 45.8	7 4.6	76 49.7
24. Stimulant drugs are the most common type of drug used to treat children with ADHD.	F	<i>f</i>	42 27.5	16 10.5	95 62.1
27. There are specific physical features which can be identified by medical doctors (e.g.. pediatrician) in making a definitive diagnosis of ADHD.	F	<i>f</i>	42 27.5	22 14.4	89 58.2
28. In school age children. the prevalence of ADHD in males and females is equivalent.	F	<i>f</i>	11 7.2	43 28.1	99 64.7
29. In very young children (less than 4 years old). the problem behaviors of ADHD children (e.g. hyperactivity. inattention) are distinctly different from age-appropriate behaviors of children without ADHD.	F	<i>f</i>	59 38.6	23 15.0	71 46.4
30. Children with ADHD are more distinguishable from children without ADHD in a classroom setting than in a free play situation.	F	<i>f</i>	97 63.4	7 4.6	49 32.0
31. The majority of children with ADHD evidence some degree of poor school performance in the elementary school years.	T	<i>f</i>	80 52.3	6 3.9	67 43.8
32. Symptoms of ADHD are often seen in children without ADHD who come from inadequate and chaotic home environments.	T	<i>f</i>	52 34.0	10 6.5	91 59.5
33. Behavioral/Psychological interventions for children with ADHD focus primarily on the child's problems with inattention.	T	<i>f</i>	56 36.6	7 4.6	90 58.8

Note. N=153, CA= Correct Answer

According to **Table 7**, there are seven true statements (Items 4,6,13,17,29,31,32,33) and eight false statements (Items 1,19,22,24,27,28,29,30). Participants rated the items, namely true, false, and do not know. According to the results, all true statements except for Item 31, "The majority of children with ADHD evidence some degree of poor school performance in the elementary school years," incorrectly answered by the majority of participants. Also, all false statements have the incorrectly answered by the majority of participants. Furthermore, most of the participants rated Items 30 "Children with ADHD are more distinguishable from children without ADHD in a classroom setting than in a free play situation", 31 "The majority of children with ADHD evidence some degree of poor school performance in the elementary school years." and 22 "Reducing dietary intake of sugar or food additives is generally effective in reducing the symptoms of ADHD." as true. Finally, most of the participants rated Item 4 (Children with ADHD are typically more compliant with their fathers than with their mothers.), Item 28 (In school age children, the prevalence of ADHD in males and females is equivalent.), Item 1 (According to statistics, ADHD is diagnosed in approximately 15% of school-age children) and Item 24 (Stimulant drugs are the most common type of drug used to treat children with ADHD.) as do not know. Therefore, it can be said that most of the participants' General Knowledge of ADHD is low/moderate.

Table 8  
*Results of Symptoms / Diagnosis Subscale*

Items	CA				
			True	False	Don't Know
3. Children with ADHD are easily affected and distracted by external stimuli.	T	<i>f</i> 144 <i>%</i> 94.1	1 0.7	8 5.2	
5. In order to make a diagnosis of ADHD, the symptoms must have been present before age seven.	T	<i>f</i> 29 <i>%</i> 19.0	24 15.7	100 65.4	
7. One symptom of children with ADHD is that they have been physically cruel to other people.	F	<i>f</i> 20 <i>%</i> 13.1	52 34.0	81 52.9	
9. Parent and teacher training in managing a child with ADHD are generally effective when combined with medication treatment.	T	<i>f</i> 95 <i>%</i> 62.1	8 5.2	50 32.7	
11. When treatment of a child with ADHD is terminated, it is rare for the child's symptoms to return.	F	<i>f</i> 18 <i>%</i> 11.8	26 17.0	109 71.2	
14. Side effects of stimulant drugs used for treatment of ADHD may include mild insomnia and appetite reduction.	F	<i>f</i> 66 <i>%</i> 45.1	6 3.9	78 51.0	
16. Symptoms of depression are found more frequently in children with ADHD than in children without ADHD.	T	<i>f</i> 62 <i>%</i> 40.5	6 3.9	85 55.6	
21. If a child with ADHD is able to demonstrate sustained attention to video games or 1V for over an hour, that child is also able to sustain attention for at least an hour of class or homework.	F	<i>f</i> 29 <i>%</i> 19.0	50 32.7	74 48.4	
26. Children with ADHD generally experience more problems in novel situations than in familiar situations.	T	<i>f</i> 91 <i>%</i> 59.5	1 0.7	61 39.9	

*Note.* N=153, CA= Correct Answer

Participants' Symptom/Diagnosis Knowledge on ADHD is given in **Table 8**. **Table 7** shows six true statements (Items 3, 5, 9, 16, 26) and four false statements (Items 7, 11, 14, 21). Participants rated the items, namely true, false, and do not know. According to the results, Item 3 "Children with ADHD are easily affected and distracted by external stimuli," Item 7 "One symptom of children with ADHD is that they have been physically cruel to other people, Item 9 "Parent and teacher training in managing a child with ADHD are generally effective when combined with medication treatment," Item 21 "If a child with ADHD is able to demonstrate sustained attention to video games or 1V for over an hour, that child is also able to sustain attention for at least an hour of class or homework" and Item 26 "Children with ADHD generally experience more problems in novel situations than in familiar situations" are correctly answered by the majority of participants. Furthermore, most of the participants rated Item 11 "When treatment of a child with ADHD is terminated, it is rare for the child's symptoms to return." and Item 16 "Symptoms of depression are found more frequently in children with ADHD than in children without ADHD" as do not know so it can be said that participants had moderate Symptoms/Diagnosis knowledge of ADHD.

Table 9  
*Results of Treatment Subscale*

Items	CA	True	False	Don't Know
2. Present studies suggest that ADHD in children is largely the result of unsuccessful parenting.	F	<i>f</i> 19 % 12.4	66 43.1	68 44.4
8. Children with ADHD often fidget or squirm in their seats.	T	<i>f</i> 125 % 81.7	10 6.5	18 11.8
10. It is common for children with ADHD to have an inflated sense of self-esteem or grandiosity.	T	<i>f</i> 18 % 11.8	48 31.4	87 56.9
12. It is possible for an adult to be diagnosed with ADHD.	F	<i>f</i> 97 % 63.4	10 6.5	46 30.1
15. There are two clusters of ADHD symptoms: (a) inattention; and (b) hyperactivity/impulsivity.	T	<i>f</i> 110 % 71.9	3 2.0	40 26.1
18. Most children with ADHD "outgrow" their symptoms by the onset of puberty and subsequently function normally in adulthood.	F	<i>f</i> 37 % 24.2	33 21.6	83 54.2
20. In order to be diagnosed as ADHD, a child must exhibit relevant symptoms in two or more settings	T	<i>f</i> 83 % 54.2	5 3.3	65 42.5
23. A diagnosis of ADHD by itself makes a child eligible for placement in special education.	F	<i>f</i> 21 % 13.7	46 30.1	89 56.2
25. Children with ADHD often have difficulties organizing tasks and activities.	T	<i>f</i> 100 % 65.4	11 7.2	42 27.5
34. Treatments for ADHD which focus primarily on punishment have been found to be the most effective in reducing the symptoms of ADHD.	F	<i>f</i> 12 % 7.8	89 58.2	52 34.0

*Note.* N=153, CA= Correct Answer



Participants' Treatment Knowledge on ADHD is given in **Table 9**. According to **Table 8**, there are five true statements (Items 8, 10, 15, 20, 25) and five false statements (Items 1, 12, 18, 23, 34). According to the results, Item 2 "Present studies suggest that ADHD in children is largely the result of unsuccessful parenting", Item 8 "8. Children with ADHD often fidget or squirm in their seats", Item 15 " There are two clusters of ADHD symptoms: (a) inattention; and (b) hyperactivity/impulsivity", Item 20 "In order to be diagnosed as ADHD, a child must exhibit relevant symptoms in two or more settings", Item 25 "25. Children with ADHD often have difficulties organizing tasks and activities" and Item 34 "Treatments for ADHD which focus primarily on punishment have been found to be the most effective in reducing the symptoms of ADHD" are correctly answered by the majority of participants. Furthermore, most of the participants rated Item 34 (Treatments for ADHD which focus primarily on punishment have been found to be the most effective in reducing the symptoms of ADHD.) and Item 2 (Present studies suggest that ADHD in children is largely the result of unsuccessful parenting) as false. Finally, most of the participants rated Item 23 (A diagnosis of ADHD by itself makes a child eligible for placement in special education.), Item 10 (It is common for children with ADHD to have an inflated sense of self-esteem or grandiosity.) and Item 18 (Most children with ADHD "outgrow" their symptoms by the onset of puberty and subsequently function normally in adulthood) as don't know, so, it can be said that participants had moderate Treatment knowledge on ADHD.

### **Results for Research Question 2**

In order to answer the second research question, independent t-test, one-way ANOVA, and Post hoc were used to find out whether there is a relationship between subscales of the KADDS and demographic information such as degree, age, teaching experience etc. In order to analyze the true and false statements, answers were recoded into same variable and their scores were calculated via using sum of the all scores. (1 is used for true answers, 0 is used for false and do not know answers)

Table 10

*Independent Sample T-test results for Gender and KADDS*

	Gender	N	M	SD	T	p
General Knowledge	Female	116	4.66	2.14	0.77	0.44
	Male	37	4.32	2.41		
Symptom Diagnosis	Female	116	3.51	1.57	0.35	0.72
	Male	37	3.40	1.87		
Treatment	Female	116	4.50	2.16	0.66	0.50
	Male	37	4.24	2.00		

An independent t-test was used to determine whether participants' knowledge of ADHD differs according to gender. **Table 10** shows that there was no significant difference between participants' knowledge of ADHD with regard to General Knowledge ( $t=0.77$ ,  $p=0.44$ ), Symptom/Diagnosis ( $t=0.35$ ,  $p=0.72$ ) and Treatment ( $t=0.66$ ,  $p=0.50$ ). Thus, it can be observed that KADDS knowledge did not differ according to gender.

Table 11

*ANOVA Results for Age and KADDS*

	Age	N	M	SD	f	p
General Knowledge	21-30	36	5.05	2.37	2.49	0.08
	31-40	53	4.05	2.21		
	41 and 64 above		4.71	2.05		
Symptom Diagnosis	21-30	36	3.94	1.35	5.00	0.008*
	31-40	53	2.94	1.87		
	41 and 64 above		3.68	1.48		
Treatment	21-30	36	5.16	1.85	9.81	0.000*
	31-40	53	3.47	2.17		
	41 and 64 above		4.84	1.94		

Note: \* $p < .05$

ANOVA was performed to determine whether participants' knowledge of ADHD differs according to their age. Results shown in **Table 11** indicate that there was a significant difference between the Symptom Diagnosis subscale and participants' age. Participants aged between 21 and 30 tend to have more knowledge than other age groups on Symptom Diagnosis ( $p=0.008$ ,  $p < 0.05$ ). Also, there was a significant difference between the Treatment subscale and participants' age. Participants aged between 21 and 30 have more knowledge than other age groups on treatment ( $p=0.000$ ,  $p < 0.05$ ). To support this, Tukey HSD Posthoc analysis was also conducted to see the source of the differences. According to Tukey HSD Posthoc results, there is a significant difference between 21-30 age group and 31-40 and 41+ age groups.

Table 12  
*ANOVA Results for Participants' Degree and KADDS*

	Degree	N	M	SD	F	p
General Knowledge	Bachelor	79	4.48	2.12	0.14	0.86
	Master	60	4.68	2.51		
	Phd	14	4.57	1.08		
Symptom Diagnosis	Bachelor	79	3.60	1.45	0.56	0.56
	Master	60	3.41	2.01		
	Phd	14	3.14	0.66		
Treatment	Bachelor	79	4.60	2.02	2.22	0.11
	Master	60	4.05	2.23		
	Phd	14	5.21	1.92		

Also, ANOVA was performed to determine whether participants' knowledge of ADHD differs according to their degree. Results shown in **Table 12** indicate that there was no significant difference between knowledge on ADHD and participants' degree so, it can be concluded that participants' level of knowledge did not differ according to their degree. ( $p=0.86$ ,  $p=0.56$ ,  $p=0.11$ ).

Table 13

*ANOVA Results for Participants' Experience and KADDS*

	Experience	N	M	SD	f	p
General Knowledge	1-5	37	4.70	2.20	0.80	0.49
	6-10	32	4.59	2.44		
	11-20	42	4.14	2.15		
	21+	42	4.85	2.07		
Symptom Diagnosis	1-5	37	3.59	1.30	1.14	0.33
	6-10	32	3.50	1.95		
	11-20	42	3.11	1.64		
	21+	42	3.76	1.66		
Treatment	1-5	37	4.45	1.59	1.31	0.27
	6-10	32	4.34	2.86		
	11-20	42	4.02	1.85		
	21+	42	4.92	2.08		

Moreover, ANOVA was performed to determine whether participants' knowledge of ADHD differs according to their experience. Results shown in **Table 13** indicate that there was no significant difference between knowledge on ADHD and participants' experience. Therefore, the results indicated that participants' level of knowledge on ADHD did not differ according to their years of experience. ( $p=0.49$ ,  $p=0.33$ ,  $p=0.27$ ).

Table 14

*ANOVA Results for Participants' Teacher Training in ADHD and KADDS*

		N	Mean	SD	f	p-value
General	No	127	4.33	2.00	5.50	0.005*
Knowledge	Yes, I was taught briefly in class	24	5.50	2.84		
	Yes, I took an entire semester course on ADHD	2	8.00	-		
Symptom	No	127	3.32	1.60	5.28	0.006*
Diagnosis	Yes, I was taught briefly in class	24	4.16	1.60		
	Yes, I took an entire semester course on ADHD	2	6.00	-		
Treatment	No	127	4.25	2.19	3.20	0.04*
	Yes, I was taught briefly in class	24	5.41	1.47		
	Yes, I took an entire semester course on ADHD	2	5.00	-		

Note: \*p<.05

ANOVA was also performed to determine whether participants' knowledge of ADHD differs according to their attendance to teacher training on ADHD. **Table 14** shows that there was a significant difference between participants' teaching training and their knowledge of ADHD. ( $f=5,50$ ,  $p=0,005$ ,  $p <0.05$ ). It can be implied that participants who took an entire semester course on ADHD have more general knowledge compared to other participants on ADHD. Moreover, in terms of symptoms/diagnosis, there is a significant difference among groups ( $f=5,28$ ,  $p=0,006$ ,  $p <0.05$ ). Therefore, it can be inferred that participants who took an entire semester course on ADHD have more knowledge about symptoms/diagnosis compared to other participants on ADHD. Also, results indicated that there was a significant difference between groups in terms of Treatment ( $f=3,20$ ,  $p=0,04$ ,  $p <0.05$ ). Finally, the results show that participants who took an entire semester course on ADHD have more knowledge compared to other participants on ADHD. To support this, Tukey HSD Posthoc analysis was also conducted to see the source of the differences. According to Tukey HSD Posthoc results, there is a significant difference between those who said no and those who said "Yes, I was taught briefly in class" and "Yes, I took an entire semester course on ADHD."

Table 15

*ANOVA Results for the number of Students Diagnosed with ADHD and KADDS*

		N	M	SD	F	p-value
General Knowledge	0	90	4.14	1.95	3.50	0.01*
	1-2	40	5.35	2.52		
	3-5	17	5.17	2.48		
	6 or 6		4.00	1.09		
	more					
Symptom Diagnosis	0	90	3.16	1.60	4.08	0.008*
	1-2	40	4.10	1.62		
	3-5	17	4.00	1.45		
	6 or 6		2.83	1.60		
	more					
Treatment	0	90	4.11	2.13	4.26	0.006*
	1-2	40	5.40	1.91		
	3-5	17	4.35	2.02		
	6 or 6		3.33	1.63		
	more					

Note: \* $p < .05$

Furthermore, ANOVA was performed to determine whether participants' knowledge of ADHD differs according to the number of diagnosed students they taught. Results shown in **Table 15** reveal that there was a significant difference between participants' having students diagnosed with ADHD and their knowledge of ADHD. Results indicated that there was a significant difference between groups in term of General Knowledge. ( $f=3.50$ ,  $p=0.01$ ,  $p < 0.05$ ), Symptom Diagnosis ( $f=4.08$ ,  $p=0.008$ ,  $p < 0.05$ ) and Treatment ( $f=4.26$ ,  $p=0.006$ ,  $p < 0.05$ ). According to the post hoc results, there is a significant difference between having 0 students and having 1-2 students.

Table 16

*ANOVA Results for Contacting with Physician/Psychologists and KADDS*

		N	M	SD	F	P-value
General Knowledge	No	132	4.34	2.11	5.03	0.008*
	Yes, once or twice	18	5.94	2.46		
	Yes, many times	3	6.00	1.73		
		153	4.56	2.20		
Symptom Diagnosis	No	132	3.44	1.68	1.10	0.33
	Yes, once or twice	18	3.94	1.43		
	Yes, many times	3	2.66	0.57		
		153	3.49	1.64		
Treatment	Yes, once or twice	132	4.43	2.17	0.01	0.99
	Yes, many times	18	4.50	1.91		
	No	3	4.33	0.57		
	Yes, once or twice	153	4.44	2.12		

Note: \* $p < .05$

Moreover, ANOVA was performed to determine whether participants' knowledge of ADHD differs according to their contact with students' physicians and psychologists. Results shown in **Table 16** reveal that there was a significant difference between participants' who have contacted with physician/psychologists of the students and their knowledge on ADHD regarding General Knowledge. ( $f=5,03$ ,  $p=0,008$ ,  $p < 0.05$ ). On the contrary, there was no significant difference between participants' who have contacted with physician/psychologists of the students with regard to Symptom/Diagnosis and Treatment subscales.

Table 17

*Independent t-test results regarding attendance to In-Service Presentation on ADHD*

		N	M	SD	t	P-value
General Knowledge	No	146	4.48	2.15	-2.13	0.35
	Yes	7	6.28	2.81		
Symptom Diagnosis	No	146	3.49	1.65	0.10	0.92
	Yes	7	3.42	1.61		
Treatment	No	146	4.43	2.13	-0.16	0.87
	Yes	7	4.57	2.07		

An independent t-test was used to determine whether participants' knowledge of ADHD differs according to their attendance to in-service presentation on ADHD. Results shown in **Table 17** reveal that there was no significant difference between participants' in-service training attendance on ADHD and their knowledge of ADHD. Therefore, it can be said that participants' attendance to in-service presentation on ADHD did not differ in terms of General Knowledge, Symptom /Diagnosis and Treatment. ( $p=0.35$ ,  $p=0.92$ ,  $p=0.87$ ).



Table 18

*Independent t-test results for reading books on ADHD and KADDS*

		N	M	SD	t	P-value
General Knowledge	No	121	4.51	2.28	-0.61	0.54
	Yes	32	4.78	1.91		
Symptom Diagnosis	No	121	3.48	1.66	-0.38	0.97
	Yes	32	3.50	1.58		
Treatment	No	121	4.54	2.16	1.14	0.25
	Yes	32	4.06	1.93		

Independent t-test was used to determine whether participants' knowledge of ADHD differ according to the books they have read on ADHD. **Table 18** shows that there was no significant difference between participants' reading books on ADHD and their knowledge of ADHD. Therefore, it can be said that participants' reading books on ADHD did not differ in terms of General Knowledge, Symptom/Diagnosis and Treatment ( $p=0.54$ ,  $p=0.97$ ,  $p=0.25$ ).

Table 19

*Independent t-test results for reading articles on ADHD and KADDS*

		N	M	SD	t	P-value
General Knowledge	No	69	4.31	2.11	-1.27	0.20
	Yes	84	4.77	2.27		
Symptom Diagnosis	No	69	3.39	1.64	-0.67	0.50
	Yes	84	3.57	1.65		
Treatment	No	69	3.85	2.00	-3.20	0.002*
	Yes	84	4.92	2.10		

*Note:* \* $p<.05$

An independent t-test was used to determine whether participants' knowledge of ADHD differs according to the articles they read on ADHD. **Table 19** shows that there was a significant difference between participants' self-study articles on ADHD and their answers for the Treatment subscale ( $t=-3.20$ ,  $p=0.002$ ). Nevertheless, results indicated there was no significant difference among the teachers' answers regarding General Knowledge and Symptom/Diagnosis.

Table 20

*Independent t-test results for Reading Pamphlets / Handouts on ADHD and KADDS*

		N	M	SD	t	P-value
General Knowledge	No	130	4.70	2.29	2.54	0.01*
	Yes	23	3.78	1.44		
Symptom Diagnosis	No	130	3.55	1.68	1.13	0.25
	Yes	23	3.13	1.42		
Treatment	No	130	4.47	2.12	0.44	0.65
	Yes	23	4.26	2.13		

Note: \* $p < .05$

An independent t-test was used to determine whether participants' replies differ according to the Pamphlets / Handouts they read on ADHD. Results shown in **Table 20** reveal that there was a significant difference between participants' scores who have read pamphlets and handouts on ADHD and those who have not read regarding general knowledge ( $t=2.54$ ,  $p=0.01$ ). However, there was no significant difference between Treatment, Symptom/Diagnosis, and participants' replies related to reading articles on ADHD.

Table 21

*Independent t-test results for watching TV Programs on ADHD and KADDS*

		N	M	SD	t	P-value
General Knowledge	No	62	4.62	1.95	0.27	0.78
	Yes	91	4.52	2.37		
Symptom Diagnosis	No	62	3.64	1.68	0.96	0.33
	Yes	91	3.38	1.61		
Treatment	No	62	3.98	2.13	-2.46	0.02*
	Yes	91	4.75	2.06		

Note: \* $p < .05$

An independent t-test was used to determine whether participants' knowledge of ADHD differs according to the TV programs they watched on ADHD. **Table 21** shows a significant difference between the replies of teachers in treatment subscale and the television programs they watched on ADHD. ( $t=-2.46$ ,  $p=0.02$ ). On the contrary, there was no significant difference between participants' reading articles on ADHD and their General Knowledge, Symptom/Diagnosis knowledge.

Table 22

*Independent t-test results for the Internet Search on ADHD and KADDS*

		N	M	SD	t	P-value
General Knowledge	No	59	4.33	2.07	-1.01	0.31
	Yes	94	4.71	2.28		
Symptom Diagnosis	No	59	3.10	1.67	-2.34	0.02*
	Yes	94	3.73	1.58		
Treatment	No	59	3.69	2.22	-3.59	0.000*
	Yes	94	4.91	1.92		

An independent t-test was used to determine whether participants' knowledge of ADHD differs according to their search on the Internet for ADHD. **Table 22** shows that there was a significant difference between participants' Internet search for ADHD and their replies regarding Symptom/Diagnosis ( $t=-2.34$ ,  $p=0.02$ ). Also, there was a significant difference in participants' knowledge in terms of internet search on ADHD in Treatment subscale ( $t=-3.59$ ,  $p=0.000$ ). However, results indicated that there was no significance between General Knowledge and participants' search for ADHD on the Internet.

## Qualitative Findings

### Findings for Research Question 3

Interviews were conducted with 8 EFL teachers working at universities in different regions of Turkey. The primary purpose of the interview was to reveal the views of English teachers about teaching students with ADHD. In addition, it is aimed to focus on whether there are significant differences in ADHD awareness according to teachers' awareness levels of ADHD and their demographic information. In this section, the data obtained from the interviews are presented.

**Theme 1: Teachers' noticed knowledge of ADHD***Table 23**Teachers' noticed knowledge of ADHD*

	Number of teachers	The reason
Sufficient	2	Experience Self-study
Insufficient	6	Lack of experience Lack of special training

Eight university EFL teachers who participated in the interview were asked to what extent they considered themselves knowledgeable about Attention Deficit Hyperactivity Disorder. 6 of the teachers stated that they only had some hearsay information about this disorder. Stating that they did not have enough experience teaching English to a student with ADHD, these teachers added that they were not exposed to any special education that would enable them to develop themselves on this discomfort in their education and/or business life. Some of the teachers, who emphasized that they acquired their current knowledge by developing themselves personally, stated that the disturbance started to attract their attention after reading articles on ADHD. T1 said that after reading an article about the disorder, he had gained some information about ADHD and started to evaluate the students with extreme movements differently in the light of the information. As a result, he became more understanding by considering them as learners who might have discomfort rather than rebellious human beings. Another participant, T3 supported the situation with her following words; "Students I suspected of having ADHD were unable to answer when asked, even when they seemed to be listening to the lecture. They seemed unable to even focus on the words I told a few seconds ago".

Only 2 of the teachers claimed that they felt sufficient about ADHD and added that their beliefs were generally related to the experience in this matter. They said that since they had some students with ADHD in the past, they conducted comprehensive research on many issues related to the disorder, such as symptoms, treatment, how to approach these students in the classroom, how to optimize English teaching for

individuals with ADHD. One of these two teachers stated that she saw herself as an advanced educator in dealing with the students with ADHD, while the other said that experience alone and the years of experience spent were not sufficient to cope with the effects of this disorder, so special education had better be indispensable.

**Theme 2:** The source of university EFL teachers' knowledge about ADHD

Table 24

*The source of university EFL teachers' knowledge on ADHD*

	Personal	Environmental	Professional	Experiential
Teacher 1	✓			
Teacher 2		✓	✓	✓
Teacher 3	✓		✓	
Teacher 4	✓	✓	✓	
Teacher 5	✓	✓	✓	
Teacher 6	✓	✓	✓	
Teacher 7		✓	✓	✓
Teacher 8	✓		✓	

As shown in **Table 24** above, participating teachers benefited from different sources while obtaining their knowledge about ADHD. Teachers' exposure to students with ADHD in their professional lives is one of the sources of obtaining information about ADHD. According to the table, the weakest source for teachers to learn about ADHD is experience. Environmental resources can also be instrumental in learning about this trouble, such as families, friends, colleagues, etc. As shown in the table, the more vital link in gaining information on this subject than the previous one is environmental resources. Teachers can learn about ADHD by attending training seminars, reading books, focusing on articles, etc. The second most valid topic of teachers' knowledge of this disorder is personal resources. Personal resources can be expressed as some self-study activities such as books, articles, tv programs, pamphlets/handouts, and the internet. Finally, the most effective source of information on the subject is professional resources. In other words, psychologists, psychiatrists, counselors, and support units are the most potent sources.

**Theme 3: ADHD exposure**

Table 25

*ADHD Exposure*

		Total Number of Teachers
Experienced	T2, T7	2
Inexperienced	T1, T3, T4, T5, T6, T8	6

Only 2 of the teachers stated that they had students with ADHD in the past. The other six teachers stated that they did not have any students diagnosed with ADHD, but they had some students suspected of having this condition. T2 pointed out that she had several students suspected of having ADHD in his 16-year-long teaching life and struggled not to misjudge their actions. T8 said, "I did not know how to treat my student with extreme movements. Because he was a college student, an adult, and his inappropriate actions could be part of his character."

**Theme 4: Problems encountered while teaching English to a student with ADHD**

Based on the answers given by eight teachers, it was understood that the problems encountered while teaching English to the students with ADHD were wide-ranging, and the answers were divided into three sub-themes: *lack of attention, need for responsibility, and need for movement*.

Table 26

*Problems on teaching English to the students with ADHD*

	Subthemes
Problems	Lack of attention
	Need for responsibility
	Need for movement

### Subtheme 1: Lack of attention

The teachers mentioned the different movements that the students put into action in the lesson and emphasized that they had an attention deficit problem. For example, T7 said, "I was asking questions to get the attention of my student who was diagnosed with ADHD, but I could not get a proper answer from her because the medications she took for treatment made her even more distracted." T4 added:

In order to attract the attention of students who are suspected of having ADHD, it is necessary to awaken them by using various visual aids during the lesson. In addition, it is necessary to present the information to the students again and again and in different ways.

### Subtheme 2: The need for responsibility

4 out of 8 teachers said that giving responsibility to the learners with ADHD and/or students suspected of having ADHD is beneficial for their integration with the lesson. T6 said, "The responsibilities that occupy ADHD students ensure their smoother participation in the lesson." The teacher added that giving the students with ADHD responsibilities such as airing the classroom, collecting homework, and timing classmates' presentations created positive results in making him a class member.

### Subtheme 3: The need for movement

Some teachers complained that they could not get students to sit quietly and listen to the lesson. T3 stated:

Students with ADHD change positions during class, change where they sit, do gestures to distract their classmates, ask for permission to go to the toilet, or get water. They need to move, and perhaps it might be better if the teacher determines what these moves might be.

## **Theme 5: Teachers' perspectives on the challenges of the students with ADHD**

According to teachers' views, various factors may prevent students with ADHD from learning English. When these factors are evaluated as a group, there are three subthemes; cognitive inability, social inability, inability in using the language.

Table 27

*Teachers' views on challenges of the students with ADHD*

	Subthemes
Challenges	Cognitive inability Social inability Inability in using the language

Subtheme 1: Cognitive Inability

Cognitive dysfunction occurs when a person struggles to recall, read, focus, or decide about matters that affect their daily life (Herbert et al., 2003). By focusing on the expressions of the teachers who participated in the interview, it can be said that students with ADHD have cognitive inability problems. For example, T1 expressed, "Attention of these students can be so scattered that they generally cannot focus on the lesson. Maybe they cannot even hear the subject they would learn very well if they could listen". T7 added, "I realized that my students with ADHD are brilliant individuals. Actually, they learn very quickly but have difficulty in passive behaviors like listening to a lecture for minutes". T4, on the other hand, stated that she was aware that her students had cognitive difficulties, but fewer problems were experienced when the lesson was taught actively.

Subtheme 2: Social inability

According to teachers' views, life for individuals with ADHD is complicated when they exist in a social environment. T1 said, "There are rules that everyone must follow in the classroom, but students with ADHD cannot enforce them even though they are adults. For instance, they can usually interrupt the students who speak". T8 added, "I prepare a presentation list of the students, and they present accordingly. However, people with ADHD almost always refused to follow the list. They wished to present whenever they wanted".

Subtheme 3: Inability in using the language

The teachers, who stated they noticed that the students they suspected of having ADHD had problems using the language, realized that this problem was reflected both in their native language and English as the target language. T5 claimed, "It can be understood from their movements that such students have trouble focusing. Maybe that



is why they cannot follow the lesson. So when they understand detail about the topic, they interrupt the lesson by starting to talk”. T7 added:

I have experienced that students with ADHD use both languages untimely when addressing topics related to themselves or the lesson. By raising their voices too much, they can make sentences that are unrelated to the current topic. This may be because they are able to concentrate late.

**Theme 6:** Teaching English to students with ADHD efficiency

Teachers were asked how knowledgeable they felt about teaching English to students with ADHD.

	Efficiency Level	Justification
T1	Incompetent	Lack of experience
T2	Competent	attracting attention more frequent
T3	Incompetent	repeating more often but not being rewarded
T4	Incompetent	Lack of experience
T5	Incompetent	Lack of diagnosis and treatment
T6	Incompetent	Lack of group work
T7	Incompetent	Lack of self study
T8	Incompetent	Lack of experience

As can be seen from the table, only 1 of the teachers stated that they considered themselves successful in this field. T2 noticed, “These students' attention span is pretty low. Moreover, students without ADHD also need stimulants to keep their attention. I give these stimulants more often”. T3 added, “I repeat my lectures frequently so that they learn better, but I still cannot receive a recompense for my work.” The remaining

seven teachers attributed their inadequacy to teaching English to the student with ADHD for various reasons, such as inexperience, lack of education, the learners' not being diagnosed with ADHD, and lack of collaboration system. T5 stated, "The fact that individuals are adults makes diagnosis and treatment difficult. Unless students with ADHD are diagnosed or treated, the teacher feels increasingly incapable of teaching English in the classroom". T6 added:

Dealing with the student with ADHD is collaborative work. It requires professional support as well as the encouragement of the teacher and family. It is very troublesome to meet all these conditions, especially if the person in question is an adult.

**Theme 7: Professional support**

Figure 3 indicates the distribution of the number of teachers who receive professional support.



*Figure 3.* Professional support rate teachers receive on ADHD

As shown in the above **Figure 3**, only 1 of the participating teachers did not use professionals to deal with ADHD-based problems. The remaining 7 of the teachers chose to seek professional support. T7 points out, "I consulted with the Psychological Counseling and Guidance Center to learn how to treat students I suspect of having ADHD. While I kept gaining knowledge and experience on the subject, I also received advice from my psychologist". T4 said:

In my teaching background, I also taught English to middle school students. Among them, there were young people that I thought were ADHD, and in time, their process developed positively. However, everything changes when it comes to adult individuals. Even if the teacher consults a professional, s/he cannot interfere with the adult student. So, the person suspected of having ADHD has to stay alone with herself and fight her situation on her own.

T1 added:

Adults with ADHD are able to cope with their own situation up to a point. Moreover, their condition is not clearly understood, so diagnosis is difficult. I never had a student who was definitely diagnosed with the disorder. Therefore, I did not choose to get help from professionals.

#### **Theme 8:** Advice for EFL Teachers

Participating teachers made various suggestions for their colleagues. Teachers focused on the importance of receiving professional training on ADHD, repeating lecture topics for students with ADHD frequently, using visual aids during the teaching and learning process, and increasing learners' motivation.

Table 28

#### *Advice for EFL Teachers*

Advice	Professional training
	Visual aids
	Repeating the topics
	Increasing the motivation

Two of the teachers mentioned that it is essential to get professional training in the field of ADHD. T2 stated:

I think that many colleagues experience this situation today. In fact, there may be many people with ADHD in every part of our lives, in addition to our students. We need to contact counseling services or psychologists to be more valuable individuals for them. Getting professional training is the essential method I would recommend to overcome this problem.

T8 added, “We should attend various courses, seminars, and so on to gain knowledge on the subject, and we had better approach students with ADHD more consciously. Only then can we help them with both their disorder and their English learning”.

T1 suggested that teachers need to repeat every subject they taught to interest the students. He claimed, “Students' attention can be too distracted by ADHD, which might cause them to learn the lecture late. So the more often teacher repeats, the sooner students with ADHD learn the subjects”.

Three teachers emphasized the importance of teaching English using visual aids. T4 said:

It is not easy for learners with ADHD to practice passive activities. Actions that lead a person to overthink or fixate a topic are not suitable for ADHD. Instead, a teacher should choose the teaching style to be applied while providing the flow of the lesson considering this.

T5 added, “Teachers had better draw the students' attention to the maximum, and audio-visual materials can produce a fruitful result in this regard.” Moreover, T6 said, “Students with ADHD can be affected quickly by environmental factors. So they get distracted quickly and also forget quickly so the most appropriate English teaching style to reach them may be how visual materials are used frequently.

Two teachers mentioned the importance of motivation. T3 said, “Creating a sincere bond with the learner with ADHD will be strongly effective in motivating him or her. Guiding an adult is more difficult than guiding a child, and sincerity is the key to this lock”. T7 added:

The student's family, social circle, school, and counseling service are like parts of a chain. If all these people take care to empathize with the individual with ADHD, the students' motivation will increase, and this motivation will make them experience fewer negative effects of this disorder and increase their level of success.

In this chapter, the data obtained from the questionnaire and interview are presented. In the next section, the results of the research are discussed and the section concludes by stating the implications and recommendations.

## **4. DISCUSSION**

### **Introduction**

In this section, critical analysis is carried out focusing on university EFL teachers' knowledge of Attention Deficit and Hyperactivity Disorder (ADHD) and the link between teachers' demographics and their knowledge of ADHD. The section is completed by making suggestions for future research on the subject.

### **Discussion of the Results**

#### **Discussion of the First Research Question**

The first research question aimed to investigate the ADHD awareness level of EFL teachers who work at universities. Mean scores are very close to each other. The results reveal that teachers' knowledge in these subscales is low moderate when these three subscales are taken into account. The results of the semi-structured interview also support this finding. This research is consistent with several studies stating that teachers cannot be regarded as knowledgeable about ADHD (Sciutto et al., 2000; Kos et al., 2004; Snider et al., 2003; West et al., 2005). The low moderate level is not sufficient for university-level when it comes to ADHD knowledge.

It can be said that the average level of ADHD knowledge of the teachers participating in the KADDS is compatible with the low-medium knowledge levels of the teachers participating in the interview. The results show that general knowledge is higher than symptom/diagnosis and treatment. This is because teachers acquire their existing knowledge through some self-study activities, such as the internet, television programs, and articles, which are the top 3 activities they refer to. In short, it is therefore natural that they are more knowledgeable about theory. It was determined that the theoretical knowledge of the teachers was higher. However, their treatment knowledge, which requires practical knowledge, is higher than their level of symptom/diagnosis knowledge that requires theoretical knowledge. There may be a reason for this. Some classroom strategies used to guide students with ADHD are already taught to undergraduate teachers. This may have made teachers feel more confident when dealing with ADHD, but symptoms/diagnosis knowledge is not a type of self-study knowledge to be encountered unless an expert is provided or specifically investigated. Moreover, since ADHD symptoms cannot be observed clearly in

university-level students, teachers may not need to sufficiently obtain information about the subject. After all, knowledge arises out of need. One other reason for this may be that symptom/diagnosis is lower than treatment. Focusing on the KADDS results, the majority of teachers have never had a student with ADHD.

Some characteristics of students with ADHD, such as attention deficit, mobility, are features that can also be encountered at a certain level in students without ADHD. A student without ADHD can come to the classroom with these features as their characteristic. As a pedagogical knowledge, the teacher already knows what strategies to apply in dealing with mobile and attention-deficient students. Information about the subject that the counseling unit or a psychiatrist can enlighten can only be learned through expert support or self-study. Thus, the source of treatment knowledge can be pedagogical gains and/or self-study activities.

### **Discussion of the Second Research Question**

According to the results, it has been observed that gender, educational background, years of teaching experience, having students diagnosed with ADHD, expert support, and in-service training factors do not affect teachers' knowledge level on ADHD. Likewise, the results indicate that ADHD training course, number of students with ADHD, articles, TV programs and the internet have an impact on teachers' ADHD knowledge.

### **Educational Background**

Among these factors, it is an unexpected result that teachers' educational backgrounds -in other words, the highest degrees they completed- do not affect teachers' knowledge level on ADHD. With the degrees completed, the teacher becomes a more knowledgeable and experienced trainer. Hence, the higher the degree, the higher the information density is expected. By focusing on this result, it can be concluded that methods of dealing with students with ADHD and such disorders are not adequately addressed in undergraduate, graduate, and doctoral programs.

### **Years of Teaching**

Another unexpected result is that the teachers' years of teaching experience did not affect their knowledge level on ADHD. Again, the findings are inconsistent with the study of Sciutto et al. (2000) and Jerome et al. (1994). In those studies, teachers having

greater years of teaching experience were detected to have more knowledge of ADHD when compared to the teachers who have fewer years of teaching experience.

The findings are consistent with some other studies that reveal that years of teaching experience have no effect on the knowledge level on ADHD (Castenova, 2008; Jerome et al., 1994; Kos et al., 2004 Piccolo-Torsky, and Waishwell, 1998). As people gain experience in a subject, they have a solid grasp of that subject. To this respect, under normal circumstances, years of teaching experience are expected to affect the knowledge level. However, the results of this study turned out to be in the opposite direction may be that the teacher's level of knowledge depends on the intensity of knowledge they chose to acquire in those years rather than the length of their years while acquiring information.

### **Quality and the Quantity of the Experience**

The process of acquiring knowledge is, in a way, related to inner motivation. The person can be exposed to the same information for years. Even if learning occurs, an acquisition may not come into existence as long as he refuses to acquire it. The important thing here is whether the teacher wants to learn about a topic or not. This is why a teacher who has been exposed to students with ADHD for years but did not strive to gain further knowledge may have more limited knowledge than a teacher with short-term teaching experience and a few ADHD students. This situation may be that a teacher can learn much more profound and further information with self-studies, starting from even a single student. As a matter of fact, we can come across this in the KADDS results. The youngest group teachers' knowledge level on ADHD were higher than the older two groups. In addition, teachers with 1-2 students with ADHD had the highest level of knowledge on ADHD, while teachers who had 6 or more ADHD students were the lowest.

### **The Effect of Expert Support on ADHD**

Another unexpected KADDS result is that expert support did not affect teachers' knowledge level on ADHD. Although their level of knowledge is expected to increase with the help of expert support, the study shows consistency in itself. In order to create a difference in knowledge level on ADHD, teachers receiving expert support at regular intervals consistently may positively affect their knowledge level. However, it is not known how often teachers receive expert support, and this result may be due to instability in receiving expert support.

### **In-service Training Involvement**

According to the results, most of the teachers participating in KADDS did not receive in-service training. The results show that in-service training does not affect knowledge level on ADHD. These results are Castenova (2008), Jerome et al. (1994), and Small (2003) are inconsistent with the results of their studies. These studies indicate that in-service training is the primary source of increasing ADHD knowledge, but the adverse results and low participation in in-service training can be attributed to the weaknesses in education. The reason for this weakness can be shown as the basis of the country and financial problems rather than teachers (Öztürk & Sancak, 2007).

### **Self-study Activities**

Teachers' self-study activities affect their knowledge level on ADHD. KADDS results showed that among these activities, the ones that most affected the knowledge level on ADHD are internet use, TV programs, and articles. Interview findings also support the KADDS results. The findings of the study are consistent with the findings of the studies conducted by Castenova (2008), Jerome et al. (1994), and Small (2003), which prove the necessity of self-study activities in improving the knowledge level of ADHD. Teachers chose self-studies as a source to get information about ADHD because they have not received in-service training in Turkey, could not attend any course due to financial difficulties, and had no time to participate in any training due to long working hours.

### **The Effect of Age Factor on ADHD**

The results show that the age factor affects teachers' knowledge level on ADHD. The group with the lowest age range (21-30) was determined to be the group with the highest level of ADHD knowledge. This may be due to advances in technology. Technology can be seen as a tool that accelerates access to information. Hence, younger-aged teachers are more likely to be technology savvy than older teachers so that they can have access to a broader range of more up-to-date information. This can naturally make this age group more knowledgeable about ADHD. Besides, the positive developments seen in the education system have caused younger aged teachers to more master such subjects over the years.



### **Attending an ADHD Course**

According to the results, those who have received an entire semester course on ADHD have higher ADHD knowledge than those who have never taken a course or get minimal information in the classroom. This result is consistent with the findings of the studies that show that the courses on ADHD significantly impact the knowledge development of ADHD (Jerome et al., 1994; Piccolo-Torsky and Waishwell, 1998; Sciutto et al., 2000; Vereb and DiPerna, 2004).

### **The Number of Adult ADHD Students**

The results show that the number of students with ADHD that teachers are exposed to affects their level of ADHD knowledge. However, the unexpected result in the study is that the knowledge level of teachers with 1-2 students with ADHD is higher than those with six or more students with ADHD. The results of this study are different from the results of the studies conducted by Sciutto et al. (2000) and Small (2003). According to the studies of these researchers, the number of students with ADHD positively affects teachers' knowledge level on ADHD, which is the expected result. The reason for the opposite result in the present study may be related to the personal orientation of the teachers. The level of knowledge on a subject is related to how the subject is approached individually rather than how much the subject is exposed. The teacher who has never had a student with ADHD or had few students with this disorder can develop themselves professionally in this area. However, a teacher who has many students with this disorder may choose not to focus on this topic. In other words, personal preferences can also guide the level of knowledge.

### **Discussion of the Third Research Question**

As stated by the teachers who participated in the interview, university students are adults, which causes problems in identifying the root cause of their excessive behavior. Students' excessive behavior may be caused by ADHD or displayed simply because it is part of their character. Naturally, even the diagnosis of this ailment, which seems to have been frayed with age, becomes extremely difficult. As a matter of fact, 2 out of 8 teachers felt themselves knowledgeable about ADHD, while the rest stated that they had a low level of knowledge about the subject, albeit hearsay, but still felt insufficient.

The teacher who has not encountered any students with the disorder may not have felt the need to do adequate research on diagnosis/symptoms. So there must be some reasons why the treatment knowledge is slightly higher. Together with researching, when it comes to experience, the quality of the experience is much more essential than the quantity of the experience. The interview findings support this view in that a participant who perceives herself competent in managing with students with ADHD stated that the years spent in professional life has nothing to do with success as she believes the way someone develops herself by self-study activities, that most teachers see as the source of ADHD knowledge, professional support and so on is much more critical during this process.

Both qualitative and quantitative results reveal that expert support does not contribute to the knowledge level on ADHD. This may be; the learning process is active, it is a product, and it needs persistence (Claxton, 1999; Robinson, 2011). A large proportion of teachers did not receive expert support, which may be one reason for their lack of knowledge. The situation is similar for in-service training. Six of the eight teachers stated that they were not exposed to any in-service training that would enable them to develop themselves on this disorder in their education or business life. In Turkey, in-service training is mainly carried out for senior executives, and therefore the remaining employees overcome their lack of knowledge on a subject with their own means. Realizing this is not possible due to financial difficulties (Taymaz et al., 1997). Moreover, there may be factors such as ADHD's not being adequately addressed in the curriculum of instructional programs. The interview findings of the study also enhance KADDS findings.

### **Implications and Suggestions**

In this study, it was unmasked that the teachers' knowledge level on ADHD is low moderate, and their theoretical knowledge is higher than their practical acquisition. First of all, teachers' awareness of this issue should be increased. One of the methods that can be applied to increase the level of knowledge on the subject may be to improve the practice. Furthermore, teachers who have students with ADHD and teachers who do not have a student with this disorder can improve themselves in this area by consulting experts frequently. It may be recommended that the curriculum prepared for the future teachers be arranged to make it more useful and the educational content can be enriched. In-service training activities that teachers of all ages can benefit from can be applied periodically.

### **Recommendations for Further Research**

Future research on teachers' ADHD knowledge is significant as it is highly likely that an EFL teacher can have at least one student with ADHD during their teaching life. There are many studies on teachers' knowledge of ADHD. However, when focusing on university EFL teachers' knowledge of teaching English to adult students with ADHD, the number of studies available is somewhat limited. In order to change this situation positively, university EFL teachers must first become aware of ADHD. If it is more widely known by teachers that ADHD is a disorder that can continue into adulthood, it is quite possible for them to improve themselves on this subject by getting help from different sources. The more resources available to university students with ADHD on teaching English, the more teachers can improve in this area. Gaining awareness is a phenomenon that can be realized step by step, and collaborative work is important to make this process more efficient. All sources of information, whether in service training, professional support or self-study, must do their part. Universities can carry out activities that might inform teachers about this issue and even enable them to gain experience. Teachers need to develop themselves on the learners with ADHD and on teaching English to them by making use of technology when appropriate. Experienced colleagues who have students with this disorder, may act in a way that informs each other. With a collaborative approach, points such as ADHD is also an adult problem and how to deal with this disorder can find true north.

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## APPENDICES

## Appendix A. Ethics Committee Approval

T.C.	
ÇAĞ ÜNİVERSİTESİ	
SOSYAL BİLİMLER ENSTİTÜSÜ	
TEZ / ARAŞTIRMA / ANKET / ÇALIŞMA İZİNİ / ETİK KURULU İZİNİ TALEP FORMU VE ONAY TUTANAK FORMU	
<b>ÖĞRENCİ BİLGİLERİ</b>	
T.C. NOSU	
ADI VE SOYADI	Sümeyye Safa Tohma
ÖĞRENCİ NO	20198022
TEL. NO.	
E - MAİL	
ANA BİLİM DALI	İngiliz Dili Eğitimi
HANGİ AŞAMADA OLDUGU (DERS / TEZ)	Tez
İSTEKDE BULUNDUĞU DÖNEME AİT DÖNEMLİK KAYDININ YAPILIP-YAPILMADIĞI	2020 / 2021 - GÜZ DÖNEMİ KAYDINI YENİLEDİM.
<b>ARAŞTIRMA/ANKET/ÇALIŞMA TALEBİ İLE İLGİLİ BİLGİLER</b>	
TEZİN KONUSU	Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi
TEZİN AMACI	Tezin amacı, üniversite İngilizce Öğretmenlerinin dikkat eksikliği hiperaktivite bozukluğuna (DEHB) dair bilgi birikimlerine dikkat çekmek ve ders sırasında kullandıkları müdahale stratejilerine odaklanmaktır. Ek olarak, öğretim görevlerinin demografik özellikleri ile DEHB hakkındaki bilgi düzeyleri arasındaki fark incelenmiştir.
TEZİN TÜRKÇE ÖZETİ	Tezde Üniversite İngilizce Öğretmenlerinin DEHB ve DEHB'li öğrencilere İngilizce öğretimi konusundaki bilgileri incelenecektir. Ayrıca öğretmenlerin sınıfta yararlandıkları eğitimsel müdahalelerden de bahsedilecektir. Tezin hem nitel hem de nicel bir çalışma olduğuna inanılmaktadır. Çalışmanın veri toplama araçları; dikkat eksikliği bozuklukları ölçeği (KADDS), demografik anket ve görüşmedir. Veri analizi, istatistikler ile gerçekleştirilecektir. Güvenilirlik test edilecek ve değerlendirilecektir. Hesaplamalar IBM SPSS kullanılarak yapılacaktır. Görüşmelerin analizi için ise içerik analizi tercih edilecektir.
ARAŞTIRMA YAPILACAK OLAN SEKTÖRLER/ KURUMLARIN ADLARI	Kadir Has Üniversitesi Bahçeşehir Üniversitesi Aydın Adnan Menderes Üniversitesi Dokuz Eylül Üniversitesi Çağ Üniversitesi Mustafa Kemal Üniversitesi Bartın Üniversitesi Bolu Abant İzzet Baysal Üniversitesi Çankaya Üniversitesi Atılım Üniversitesi Van Yüzüncü Yıl Üniversitesi Hasan Kalyoncu Üniversitesi
İZİN ALINACAK OLAN KURUMA AİT BİLGİLER (KURUMUN ADI-ŞUBESİ/ MÜDÜRLÜĞÜ/ İLİ - İLÇESİ)	Kadir Has Üniversitesi – Selimpaşa Merkez, Silivri/İstanbul Bahçeşehir Üniversitesi – Yıldız, Beşiktaş/İstanbul Aydın Adnan Menderes Üniversitesi – Zafer, Efeler/Aydın Dokuz Eylül Üniversitesi – Alsancak / İZMİR Çağ Üniversitesi – Yenice, Tarsus/Mersin Mustafa Kemal Üniversitesi – Alahan, Antakya/Hatay Bartın Üniversitesi – Ağdacı, Merkez/Bartın Bolu Abant İzzet Baysal Üniversitesi – BAİBÜ Gökkyöy, Merkez/Bolu Çankaya Üniversitesi – Etimesgut/ANKARA Atılım Üniversitesi – İncek, Gölbaşı/Ankara Van Yüzüncü Yıl Üniversitesi – Bardakçı, Tuşba/Van Hasan Kalyoncu Üniversitesi – Yeşilkent, Oğuzeli/Gaziantep
YAPILMAK İSTENEN ÇALIŞMANIN İZİN ALINMAK İSTENEN KURUMUN HANGİ İLÇELERİNE/ HANGİ KURUMUNA/ HANGİ BÖLÜMÜNDE/ HANGİ ALANINA/ HANGİ KONULARDA/ HANGİ GRUBA/ KİMLERE/ NE UYGULANACAĞI GİBİ AYRINTILI BİLGİLER	Kadir Has, Bahçeşehir, Aydın Adnan Menderes, Dokuz Eylül, Çağ, Mustafa Kemal, Bartın, Bolu Abant İzzet Baysal, Çankaya, Atılım, Van Yüzüncü Yıl ve Hasan Kalyoncu Üniversitelerinde İngilizce dersi veren öğretim görevlilerine, dikkat eksikliği hiperaktivite bozukluğuna ve bu rahatsızlığa sahip olan öğrencilere İngilizce öğretimine dair bilgi düzeylerini ölçmek üzere 2000 yılında Sciutto, Terjesen ve Bender Frank tarafından geliştirilen KADDS ölçeği, Google Forms aracılığıyla hazırlanıp online olarak uygulanacaktır. Görüşmeler, Zoom görüşme programı kullanılarak 15 ila 30 dakika sürecek şekilde gerçekleştirilecektir.
UYGULANACAK OLAN ÇALIŞMAYA AİT ANKETLERİN/ ÖLÇEKLERİN BAŞLIKLARI/ HANGİ ANKETLERİN - ÖLÇELERİN UYGULANACAĞI	Sciutto, Terjesen ve Bender Frank (2000) tarafından geliştirilen ve uyaralanan dikkat eksikliği bozuklukları ölçeği (KADDS), demografik anket ve görüşme uygulanacaktır.
EKLER (ANKETLER, ÖLÇEKLER, FORMLAR, .... V.B. GİBİ EVRAKLARIN İSİMLERİYLE BİRLİKTE KAÇ ADET/SAYFA OLDUKLARINA AİT BİLGİLER İLE AYRINTILI YAZILACAKTIR)	1) Dikkat Eksikliği Hiperaktivite Bozukluğu Ölçeği (KADDS: Knowledge of Attention Deficit Hyperactivity Disorder Scale) - 9 Sayfa (Demografik sorular ile birlikte)

ÖĞRENCİNİN ADI - SOYADI: Sümeyye Safa Tohma		ÖĞRENCİNİN İMZASI:		TARİH: 10 / 12 / 2020	
<b>TEZ/ ARAŞTIRMA/ANKET/ÇALIŞMA TALEBİ İLE İLGİLİ DEĞERLENDİRME SONUCU</b>					
1. Seçilen konu Bilim ve İş Dünyasına katkı sağlayabilecektir.					
2. Anılan konu İngiliz Dili Eğitimi faaliyet alanı içerisine girmektedir.					
<b>1.TEZ DANIŞMANININ ONAYI</b>	<b>2.TEZ DANIŞMANININ ONAYI (VARSA)</b>	<b>SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRÜNÜN ONAYI</b>	<b>A.B.D. BAŞKANININ ONAYI</b>		
Adı - Soyadı: Aysun Yurdaisık Dağtaş	Adı - Soyadı: .....	Adı - Soyadı: Murat Koç	Adı - Soyadı: Şehnaz Şahinkarakaş		
Unvanı : Dr. Öğr. Üyesi	Unvanı: .....	Unvanı: Doç. Dr.	Unvanı: Prof. Dr.		
İmzası : Evrak onayı e-posta ile alınmıştır.	İmzası: .....	İmzası: Evrak onayı e-posta ile alınmıştır.	İmzası: Evrak onayı e-posta ile alınmıştır.		
... / ... / 20....	... / ... / 20....	... / ... / 20....	... / ... / 20....		
<b>ETİK KURULU ASIL ÜYELERİNE AİT BİLGİLER</b>					
Adı - Soyadı: <b>Mustafa BAŞARAN</b>	Adı - Soyadı: <b>Yücel ERTEKİN (y. Dr. Öğr. Üyesi Sami</b>	Adı - Soyadı: <b>Deniz Aynur GÜLER</b>	Adı - Soyadı: <b>Ali Engin OBA</b>	Adı - Soyadı: <b>Mustafa Tefvik ODMAN</b>	Adı - Soyadı: .....
Unvanı : Prof. Dr.	Unvanı : Prof. Dr.	Unvanı: Prof. Dr.	Unvanı : Prof. Dr.	Unvanı: Prof. Dr.	Unvanı : .....
İmzası : Evrak onayı e-posta ile alınmıştır.	İmzası : Evrak onayı e-posta ile	İmzası : Evrak onayı e-posta ile	İmzası : .....	İmzası : .....	İmzası : .....
... / ... / 20....	... / ... / 20....	... / ... / 20....	... / ... / 20....	... / ... / 20....	... / ... / 20....
Etik Kurulu Jüri Başkanı - Asıl Üye	Etik Kurulu Jüri Asıl Üyesi	Etik Kurulu Jüri Asıl Üyesi	Etik Kurulu Jüri Asıl Üyesi	Etik Kurulu Jüri Asıl Üyesi	Etik Kurulu Jüri Yedek Üyesi
<b>OY BİRLİĞİ İLE</b>		Çalışma yapılacak olan tez için uygulayacak olduğu Anketleri/Formları/Ölçekleri Çağ Üniversitesi Etik Kurulu Asıl Jüri Üyelerince İncelenmiş olup, 15 / 12 / 2020 - 30 / 01 / 2021 tarihleri arasında uygulanmak üzere gerekli iznin verilmesi taraflarımızca uygundur.			
<b>OY ÇOKLUĞU İLE</b>	<b>X</b>				
<b>AÇIKLAMA: BU FORM ÖĞRENCİLER TARAFINDAN HAZIRLANDIKTAN SONRA ENSTİTÜ MÜDÜRÜNE ONAYLATILARAK ENSTİTÜ SEKRETERLİĞİNE TESLİM EDİLECEKTİR. AYRICA YAZININ PUNTOSU İSE 12 (ON İKİ) PUNTO OLACAK ŞEKİLDE YAZILARAK ÇIKTI ALINACAKTIR.</b>					

## Appendix B. KADDS Scale

### Demographic Questions

Please answer the following questions by writing or circling your responses.

1. Age \_\_\_\_\_
2. Gender
  - a. Male
  - b. Female
3. Highest degree completed
  - a. Bachelor's
  - b. Master's
  - c. Master's + PhD
4. Grade level(s) you currently teach? \_\_\_\_\_
5. Years of teaching experience? \_\_\_\_\_
6. Have you ever taken a course in attention deficit hyperactivity disorder (ADHD) during your teaching training?
  - a. No
  - b. Yes, I was taught briefly in class
  - c. Yes, I took an entire semester course on ADHD
7. How many students diagnosed with ADHD have you taught?
  - a. 0
  - b. 1 or 2
  - c. 3- 5
  - d. 6 or more
8. If you have had students diagnosed with ADHD in your classroom, have you ever tried to get in contact with their physicians or psychologists?
  - a. No
  - b. Yes, once or twice
  - c. Yes, many times
9. Have you ever attended an in-service presentation on ADHD?
  - a. No.
  - b. Yes
10. Have you ever read any books on ADHD?
  - a. No.

b. Yes

**11.** Have you ever read any articles on ADHD?

a. No.

b. Yes

**12.** Have you ever read any pamphlets/handouts on ADHD?

a. No.

b. Yes

**13.** Have you watched any television programs on ADHD?

a. No.

b. Yes

**14.** Have you ever searched the internet for information on ADHD?

a. No.

b. Yes

### **Knowledge of Attention Deficit Disorders Scale (KADDS)**

Please reply your response to the following questions concerning attention deficit hyperactivity disorder (ADHD). In the situation of being unsure, chose the Donk Know (DK) option.

True (T), False (F), or Don't Know (DK)

**1.** According to statistics, ADHD is diagnosed in approximately 15% of school age children

T

F

DK

**2.** Present studies suggest that ADHD in children is largely the result of unsuccessful parenting.

T

F

DK

**3.** Children with ADHD easily affected and distracted by external stimuli.

T

F

DK

**4.** Children with ADHD are typically more compliant with their fathers than with their

mothers.

T

F

DK

**5.** In order to make a diagnosis of ADHD, the symptoms must have been present before age seven.

T

F

DK

**6.** ADHD is more common in the 1st degree biological relatives (i.e. mother, father) of children with ADHD than in the general population.

T

F

DK

**7.** One symptom of children with ADHD is that they have been physically cruel to other people.

T

F

DK

**8.** Children with ADHD often fidget or squirm in their seats.

T

F

DK

**9.** Parent and teacher training in managing a child with ADHD are generally effective when combined with medication treatment.

T

F

DK

**10.** It is common for children with ADHD to have an inflated sense of self-esteem or grandiosity.

T

F

DK

**11.** When treatment of a child with ADHD is terminated, it is rare for the child's

symptoms to return.

T

F

DK

**12.** It is possible for an adult to be diagnosed with ADHD.

T

F

DK

**13.** Children with ADHD often have a history of stealing or destroying other people's things.

T

F

DK

**14.** Side effects of stimulant drugs used for treatment of ADHD may include mild insomnia and appetite reduction.

T

F

DK

**15.** There are two clusters of ADHD symptoms: (a) inattention; and (b) hyperactivity/impulsivity.

T

F

DK

**16.** Symptoms of depression are found more frequently in children with ADHD than in children without ADHD.

T

F

DK

**17.** Individual psychotherapy is usually sufficient for the treatment of most children with ADHD.

T

F

DK

**18.** Most children with ADHD "outgrow" their symptoms by the onset of puberty and

subsequently function normally in adulthood.

T

F

DK

**19.** In severe cases of ADHD, medication is often used before other behavior modification techniques are attempted.

T

F

DK

**20.** In order to be diagnosed as ADHD, a child must exhibit relevant symptoms in two or more settings (e.g., home, school).

T

F

DK

**21.** If a child with ADHD is able to demonstrate sustained attention to video games or TV for over an hour, that child is also able to sustain attention for at least an hour of class or homework.

T

F

DK

**22.** Reducing dietary intake of sugar or food additives is generally effective in reducing the symptoms of ADHD.

T

F

DK

**23.** A diagnosis of ADHD by itself makes a child eligible for placement in special education.

T

F

DK

**24.** Stimulant drugs are the most common type of drug used to treat children with ADHD

T

F



DK

**25.** Children with ADHD often have difficulties organizing tasks and activities.

T

F

DK

**26.** Children with ADHD generally experience more problems in novel situations than in familiar situations.

T

F

DK

**27.** There are specific physical features which can be identified by medical doctors (e.g., pediatrician) in making a definitive diagnosis of ADHD.

T

F

DK

**28.** In school age children, the prevalence of ADHD in males and females is equivalent.

T

F

DK

**29.** In very young children (less than 4 years old), the problem behaviors of ADHD children (e.g. hyperactivity, inattention) are distinctly different from age-appropriate behaviors of children without ADHD.

T

F

DK

**30.** Children with ADHD are more distinguishable from children without ADHD in a classroom setting than in a free play situation.

T

F

DK

**31.** The majority of children with ADHD evidence some degree of poor school performance in the elementary school years.

T

F

DK

**32.** Symptoms of ADHD are often seen in children without ADHD who come from inadequate and chaotic home environments.

T

F

DK

**33.** Behavioral/Psychological interventions for children with ADHD focus primarily on the child's problems with inattention.

T

F

DK

**34.** Treatments for ADHD which focus primarily on punishment have been found to be the most effective in reducing the symptoms of ADHD.

T

F

DK

**Appendix C. Interview Questions (Turkish Form)**

I. Dikkat eksikliği ve Hiperaktivite Bozukluđuna (DEHB) dair sahip olduđunuz bilgi birikiminden bahsedebilir misiniz?

II. DEHB konusundaki mevcut bilgi birikiminizin kaynađı nelerdir? (Örneđin; Meslektařlar, psikiyatrist, psikolog, rehber öđretmen, kitaplar, tv programları, kurslar ve diđerleri)

III. Dikkat Eksikliği ve Hiperaktivite Bozukluđuna sahip öđrencileriniz oldu mu?

IV. Olduysa eđer söz konusu öđrencilere İngilizce öđretirken hangi zorlukları yařadınız?

V. Yorumunuza göre, DEHB'li öđrenciler İngilizce öđrenirken hangi zorlukları yařadılar?

VI. DEHB'li öđrencilere İngilizce öđretimine dair kendinizi hangi oranda yeterli hissediyorsunuz?

VII. İngilizce öđretimi sırasında DEHB temelli ortaya çıkan sorunların üstesinden gelebilmek için uzman yardımına bařvurdunuz mu? (Rehber öđretmen, psikolog, psikiyatrist ve diđerleri)

VIII. DEHB'li öđrenciye İngilizce öđretimi konusunda deneyimsiz olan meslektařlarınıza en yüksek verimi edinebilmeleri için nasıl davranmalarını tavsiye edersiniz?

**Appendix D. Interview Questions (English Form)**

- I. Could you mention about your knowledge of Attention Deficit Hyperactivity Disorder (ADHD)?
- II. What are the sources of your current knowledge on ADHD? (For example; Colleagues, psychiatrist, psychologist, counselor, books, TV shows, courses and others)
- III. Have you had students with Attention Deficit Hyperactivity Disorder?
- IV. If yes, what difficulties did you experience while teaching English to these students?
- V. According to your comment, what difficulties did students with ADHD experience while learning English?
- VI. To what extent do you feel competent about teaching English to students with ADHD?
- VII. Have you taken expert help to overcome ADHD-based problems while teaching English? (Guide teacher, psychologist, psychiatrist and others)
- VIII. How would you advise colleagues who are inexperienced in teaching English to a student with ADHD to behave in order to achieve the highest efficiency?

## Appendix E. Permission Forms of Universities

Evrak Tarih ve Sayısı: 17.01.2021-E.591



**HİZMETE ÖZEL**  
T.C.  
BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜ

Sayı :E-20021704-044-591  
Konu :Anket Uygulama İzni (Sümeyye Safa TOHMA)

### DAĞITIM YERLERİNE

İlgi : 01.01.2021 tarihli ve 23867972-044-E.2000004568 sayılı yazınız

İlgi yazı gereği; Üniversiteniz Lisansüstü Eğitim Enstitüsü 20198022 numaralı İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi Sümeyye Safa TOHMA'nın, Dr. Öğr. Üyesi Aysun YURDAIŞIK DAĞTAŞ'ın danışmanlığında "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" adlı tez çalışması kapsamında Üniversitemiz Yabancı Diller Yüksekokulunda anket çalışması yapması Rektörlüğümüze uygun görülmüştür.

Bilgilerinize arz ve rica ederim.

Prof.Dr. Ahmet BEŞKESE  
Rektör a.  
Rektör Yardımcısı

Dağıtım:  
Gereği:  
ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE

Bilgi:  
MYO VE YÜKSEKOKULLAR  
(Yabancı Diller Yüksekokulu Müdürlüğü)

*Bu belge, güvenli elektronik imza ile imzalanmıştır.*

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Belge Takip Adresi : <http://belge.bau.edu.tr/en/Vision-Sorgula/belgeDogrulama.aspx>

Bilgi için: Eda ALBAYRAK  
DEMİRTÜRK  
Uzman Yardımcısı



**HİZMETE ÖZEL**

Evrak Tarih ve Sayısı: 10.01.2021-E.378



T.C.  
BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Yabancı Diller Yüksekokulu Müdürlüğü

Sayı :E-51693344-044-378  
Konu :Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni Hakkında

BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜNE

İlgi : 01.01.2021 tarihli ve 23867972-044-E.2000004568 sayılı yazınız

İlgi yazıya istinaden; İngiliz Dili Eğitimi Tezli Yüksek Lisans Programında 20198022 numaralı öğrencisi Sümeyye Safa TOHMA, "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez çalışmasını uygulaması tarafımızca uygun görülmüştür.

Gereği için bilgilerinize sunulur.

Öğr.Gör. Mehmet ATASAGUN  
Yüksekokul Müdürü

BESU4AEPÜ

Belge Takip Adresi : <http://belge.bau.edu.tr/es/Vision-Sorgula/belgeDogrulama.aspx>

Cırağan Caddesi, Osunmıpaşa Mektebi Sokak, No: 4-6 34353- Beşiktaş -İstanbul  
Faks No:3810700  
İnternet Adresi: [www.bahcesehir.edu.tr](http://www.bahcesehir.edu.tr)  
Kep Adresi:bahcesehiruniversitesi@hs01.kep.tr

Bilgi için: Hilal BENHUR DİNÇER  
Yüksekokul Sekreteri Vekili  
Telefon No: 3810722





T.C.  
BOLU ABANT İZZET BAYSAL ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Genel Sekreterlik

Sayı : E-40220967-044  
Konu : Tez Anket İzni (Sümeyye Safa  
TOHMA)

ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE

İlgi : Çağ Üniversitesi Rektörlüğünün (Sosyal Bilimler Enstitüsü Müdürlüğü) 15.12.2020 tarihli ve 4568 sayılı yazısı.

Üniversiteniz Sosyal Bilimler Enstitüsü İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı 20198022 numaralı öğrencisi Sümeyye Safa TOHMA'nın "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez çalışmasını Üniversitemiz Yabancı Diller Yüksekokulu Müdürlüğünde yapma talebi uygun görülmüştür.

Bilgilerinizi ve gereğini arz ederim.

Prof. Dr. Samettin GÜNDÜZ  
Rektör a.  
Rektör Yardımcısı

Belge Doğrulama Kodu: FUPTP4A

Belge Takip Adresi: <http://abys.ibu.edu.tr/ERM5/Record/Confirmatic>

Adres: İzzet Baysal Kampüsü 14030 Gölköy / Bolu

Telefon No: (0 374) 2541000 - 8852

e-Posta:

Kap Adresi: [abys@ibu.tr](mailto:abys@ibu.tr)

Faks No:

İnternet Adresi:

Bilgi için :

Telefon No:

Hülya DEMİR

Bilgiye İşletmeni

(0 374) 2541000 - 8852





T.C.  
ÇAĞ ÜNİVERSİTESİ  
İktisadi ve İdari Bilimler Fakültesi

Sayı : 88998576-044-E.2000004650  
Konu : Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni Hk.

21.12.2020

#### DAĞITIM YERLERİNE

İlgi : Çağ Üniversitesi Sosyal Bilimler Enstitüsü Müdürlüğü'nün 15.12.2020 tarihli ve 23867972-044-E.2000004566sayılı yazısı.

İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı, 20198022 numaralı öğrencisi Sümeyye Safa TOHMA'nın "*Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi*" konulu tez anket çalışmasını yapması Fakültemiz Dekanlığınca uygun bulunmuştur.

Gereği için bilgilerinizi rica ederim.

Prof. Dr. Mustafa BAŞARAN  
İktisadi ve İdari Bilimler Fakültesi Dekanı

Ek :  
1 - Öğrenciye ait tez anket çalışması  
2 - Tez Etik Kurul Onay Formu

Dağıtım:  
Gereği:  
Sosyal Bilimler Enstitüsü Müdürlüğüne

Bilgi:  
Rektörlük Makamına







T.C.  
ÇAĞ ÜNİVERSİTESİ  
Meslek Yüksek Okulu

Sayı : 98052352-044-E.2000004785

29.12.2020

Konu : Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni Hakkında

#### DAĞITIM YERLERİNE

İlgi : 15.12.2020 tarihli ve 23867972-044-E.2000004566 sayılı belge.

Sosyal Bilimler Enstitüsü'nün ilgi yazısında konu edilen İngiliz Dili Eğitimi Tezli Yüksek Lisans öğrencisi (20198022 numaralı) Sümeyye Safa TOHMA, "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez anket çalışmasının Yüksekokulumuzda görevli İngilizce dersini vermekte olan öğretim görevlilerine uygulanması Müdürlüğümüzde uygun bulunmuştur.

Gereği için bilgilerinize rica ederim.

Prof. Dr. İlhan ÖZTÜRK  
Meslek Yüksekokulu Müdürü

Dağıtım:

Gereği:  
Sosyal Bilimler Enstitüsü Müdürlüğüne

Bilgi:  
Rektörlük Makamına

E-Posta: albayrak@cag.edu.tr

Evaluatör  
Versiyon



Bu belge 5070 sayılı elektronik imza kanununa göre güvenli elektronik imza ile imzalanmıştır.

Doğrulama adresi: <https://ubs.cag.edu.tr/BelgeDogrulama> - Doğrulama kodu: 685DEA6



T.C.  
DOKUZ EYLÜL ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Personel Daire Başkanlığı

Sayı :38137489.903.07.02/  
Konu :Tez Anket İzni (Sümeyye Safa TOHMA)

27.01.2021•001147

ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE

İlgi :a)15/12/2020 tarihli ve 23867972-044-E.2000004568 sayılı yazınız.  
b)Üniversitemiz Buca Eğitim Fakültesi Dekanlığının, 20/01/2021 tarihli ve 10042736-903.07.02-6589 sayılı yazısı.

Üniversiteniz Fen Edebiyat Fakültesi Öğretim Üyesi Dr.Öğr.Üyesi Aysun YURDAIŞIK DAĞTAŞ'ın, danışman olduğu, İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi Sümeyye Safa TOHMA'nın, "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez çalışma talebinin Öğretim Elemanlarının Fakültede bulunduğu zamanlarda ve derslerine engel olunmaması şartıyla uygun görüldüğü ilgi (b) yazı ile bildirilmektedir.  
Bilgilerini ve gereğini arz ederim.

Prof.Dr.Nükhet HOTAR  
Rektör

Ek :İlgi (b) yazı örneği (1 sayfa)



T.C.  
DOKUZ EYLÜL ÜNİVERSİTESİ  
Buca Eğitim Fakültesi Dekanlığı



Sayı : E-10042736-903.07.02-6589  
Konu : Tez Anket İzni (Sümeyye Safa  
TOHMA)

20/01/2021

PERSONEL DAİRE BAŞKANLIĞINA

İlgi : 08.01.2021 tarih ve 38137489-903.07.02-2650 sayılı yazınız.

Çağ Üniversitesi Fen Edebiyat Fakültesi Öğretim Üyesi Dr.Öğr.Üyesi Aysun YURDAIŞIK DAĞTAŞ'ın danışman olduğu İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi Sümeyye Safa TOHMA'nın, "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez çalışma kapsamında Fakültemiz Yabancı Diller Eğitimi Bölümü İngiliz Dili Eğitimi Anabilim Dalında görevli öğretim elemanlarımıza anket uygulaması talebi öğretim elemanlarının Fakültede bulunduğu zamanlarda ve derslerine engel olunmaması şartıyla uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Prof.Dr. Esra BUKOVA GÜZEL  
Dekan

Ek Listesi :  
1- Bölüm Bşk.Yazıtı  
2- Anabilim Dalı Bşk.Yazıtı (1 Sayfa)

Bu belge 5070 sayılı e-İmza Kanununa göre Prof.Dr. Esra BUKOVA GÜZEL tarafından 20.01.2021 tarihinde e-imzalanmıştır.  
Evrakın <http://dogrulama.deu.edu.tr> linkinden 18C2C8C9X2 kodu ile doğrulayabilirsiniz.

Dokuz Eylül Üniversitesi – Buca Eğitim Fakültesi  
Adres: Uğur Mumcu Cad. 135. Sk. No:5 35150 Buca-EZMİR  
Tel: 0 232 420 48 82 Elektronik Ağı: <http://bef.deu.edu.tr>  
Kep Adresi: dokuzeyluniversitesi@hs01.kep.tr

Bilgi için İrtibat:  
Umaran ÖZTÜRK  
Dahili:  
E-Posta: [umaran.ozturk@deu.edu.tr](mailto:umaran.ozturk@deu.edu.tr)





T.C.  
HATAY MUSTAFA KEMAL ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Genel Sekreterlik

Sayı : E-39281331-044-2021  
Konu : Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni

ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE  
(Sosyal Bilimler Enstitüsü)

İlgi : 01/01/2021 tarihli ve 2000004568 sayılı yazınız.

Üniversiteniz Fen-Edebiyat Fakültesi öğretim üyesi Dr.Öğr. Üyesi Aysun YURDAIŞIK DAĞTAŞ danışmanlığında yürütülen İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi Sümeyye Safa TOHMA'nın "**Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi**" konulu tez çalışmasını hakkındaki ilgi yazınızda, Etik Kurul izni konusunda herhangi bir veri bulunmadığından Üniversitemiz personeline duyuru **yapılamamıştır**.

Bilgilerinize arz ederim.

Prof.Dr. Hasan KAYA  
Rektör

*Bu belge, güvenli elektronik imza ile imzalanmıştır.*

Belge Doğrulama Kodu :BEL00K00C Pta Kodu :61171

Adres:Genel Sekreterlik  
Telefon:03262213317 Faks:03262213320  
e-Posta:rektorkuyazisleri@mku.edu.tr Web:www.mku.edu.tr  
Kep Adresi:mku@hs01.kep.tr

Belge Takip Adresi : <http://kicogrula.mku.edu.tr/en/Vision-Singulabelgedogrulama.aspx?V=BELM00000>

Bilgi için: Saniye Selçuk  
Unvanı: Veri Hazırlama ve Kontrol  
İşletmeni  
Tel No: 03262213317





T.C.  
VAN YÜZÜNCÜ YIL ÜNİVERSİTESİ REKTÖRLÜĞÜ

Sayı : E-75548883-044-1577  
Konu : Sümeyya Safa TOHMA'nın Tez Anket  
İzni

ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE  
(Sosyal Bilimler Enstitüsü)

Üniversiteniz Sosyal Bilimler Enstitüsü İngiliz Dili ve Edebiyatı Anabilim Dalı Dr. Öğr. Üyesi Ülkü Aysun YURDAIŞIK DAĞTAŞ'ın danışmanlığını yürüttüğü yüksek lisans öğrencisi Sümeyya Safa TOHMA'nın "**Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi**" konulu tez çalışmasına ilişkin Üniversitemiz Eğitim Fakültesi Yabancı Diller Eğitimi Bölümü öğretim üyelerine anket uygulama isteği uygun görülmüştür.

Bilgilerini ve gereğini arz ederim.

Prof. Dr. Murat KAYRI  
Rektör a.  
Rektör Yardımcısı

Ek: Anket Uygulaması (3 sayfa)

*Bu belge, güvenli elektronik imza ile imzalanmıştır.*

Belge Doğrulama Kodu :BEKALNSEK Pin Kodu :71412

Belge Takip Adresi : <https://www.turkiye.gov.tr/yyu-ebys>

Adres:Van Yüzüncü Yıl Üniversitesi Rektörlüğün Zeve Kampüsü 65080 Tuşba / Van

Bilgi için: Nesip TEKİN

Unvanı: Bilgisayar İşletmeni

Telefon No:+90 432 2251701-04 / +90 4445065 Faks No:+90 432 4865413  
e-Posta:rektorfuk@yyu.edu.tr İnternet Adresi: <http://www.yyu.edu.tr>



Tel No: 22077

Evrak Tarih ve Sayısı: 06.01.2021-1329



T.C.  
VAN YÜZÜNCÜ YIL ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Eğitim Fakültesi Dekanlığı



Sayı : E-99229657-044-1329  
Konu : Anket Uygulaması

## REKTÖRLÜK MAKAMINA

İlgi : Bila tarih ve sayılı yazınız.

İlgi yazı gereği, Çağ Üniversitesi Sosyal Bilimler Enstitüsü İngiliz Dili ve Edebiyatı Anabilim Dalı öğretim üyesi Dr.Öğr. Üyesi Ülkü Aysun YURDAIŞIK DAĞTAŞ'ın danışmanlığını yürüttüğü yüksek lisans öğrencisi Sümeyye Safa TOHMA'nın "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez çalışması kapsamında Fakültemiz Yabancı Diller Eğitimi Bölümü öğretim üyelerine anket uygulama isteği Dekanlığımızca uygun görülmüştür.

Bilgilerinizi ve gereğini arz ederim.

Prof. Dr. Zihni MEREY  
Dekan V.

Ek: Sümeyye Safa TOHMA'ya Ait Tez Anket İzni Hakkında (2 sayfa)

*Bu belge, güvenli elektronik imza ile imzalanmıştır.*

Belge Doğrulama Kodu :BEKRLN46D Pin Kodu :13222

Belge Takip Adresi : <https://www.turkiye.gov.tr/vny-ehys>

Adres:Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dekanlığı Zeve Kampüsü  
65080 Tuşba / Van  
Telefon No:444 50 65-21701 Faks No:+90 432 2251368  
e-Posta:egitim@yyu.edu.tr İnternet Adresi:egitim.yyu.edu.tr

Bilgi için: Canset TOKUŞ  
Uzman: Bilgisayar İşletmeni



Tel No: 1707



T.C.  
ATILIM ÜNİVERSİTESİ REKTÖRLÜĞÜ

Sayı : E-59394181-044-1954  
Konu : Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni Hakkında

ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE  
Sosyal Bilimler Enstitüsü

Üniversiteniz İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi Sümeyye Safa TOHMA'nın hazırlamakta olduğu "Dikkat Eksikliği Hiperaktivite Bozukluğuna Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tezi kapsamında yapmayı planladığı anket çalışması ilgili birimimize yönlendirilmiş olup çalışmaya katılmaya istekli Öğretim Görevlilerimiz tarafından katılım sağlanabilecektir.

Saygılarımla,

Prof.Dr. M. Yıldırım ÜÇTUĞ  
Rektör



Evrak Tarihi ve Sayı: 17.01.2021-E.591



**HİZMETE ÖZEL**  
T.C.  
BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜ

Sayı :E-20021704-044-591  
Konu :Anket Uygulama İzni (Sümeyye Safa TOHMA)

**DAĞITIM YERLERİNE**

İlgi : 01.01.2021 tarihli ve 23867972-044-E.2000004568 sayılı yazınız

İlgi yazı gereği; Üniversiteniz Lisansüstü Eğitim Enstitüsü 20198022 numaralı İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi Sümeyye Safa TOHMA'nın, Dr. Öğr. Üyesi Aysun YURDAIŞIK DAĞTAŞ'ın danışmanlığında "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" adlı tez çalışması kapsamında Üniversitemiz Yabancı Diller Yüksekokulunda anket çalışması yapması Rektörlüğümüze uygun görülmüştür.

Bilgilerinize arz ve rica ederim.

Prof.Dr. Ahmet BEŞKESE  
Rektör a.  
Rektör Yardımcısı

Dağıtım:  
Gereği:  
ÇAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜNE

Bilgi:  
MYO VE YÜKSEKOKULLAR  
(Yabancı Diller Yüksekokulu Müdürlüğü)

*Bu belge, güvenli elektronik imza ile imzalanmıştır.*

Belge Doğrulama Kodu :BELM4A7JT  
İnternet Adresi: www.bahcesehir.edu.tr  
Kep Adresi:bahcesehiruniversitesi@hs01.kep.tr

Belge Takip Adresi : <http://belge.bau.edu.tr/en/Vision-Sorgula/belgeDogrulama.aspx>

Bilgi için: Eda ALBAYRAK  
DEMİRTÜRK  
Uzman Yardımcısı



Bu belge 5070 sayılı Elektronik İmza Kanununun 5. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır.  
Evrak sorgulaması: <http://belge.bau.edu.tr/en/Vision-Sorgula/belgeDogrulama.aspx?V=BE6E4AHZP> adresinden yapılabilir. (PIN:84722)



Evrak Tarih ve Sayısı: 10.01.2021-E.378



T.C.  
BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Yabancı Diller Yüksekokulu Müdürlüğü

Sayı :E-51693344-044-378  
Konu :Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni Hakkında

BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜNE

İlgi : 01.01.2021 tarihli ve 23867972-044-E.2000004568 sayılı yazınız

İlgi yazıya istinaden; İngiliz Dili Eğitimi Tezli Yüksek Lisans Programında 20198022 numaralı öğrencisi Sümeyye Safa TOHMA, "Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi" konulu tez çalışmasını uygulaması tarafımızca uygun görülmüştür.

Gereği için bilgilerinize sunulur.

Öğr.Gör. Mehmet ATASAGUN  
Yüksekokul Müdürü

BE5U4AEPJ

Belge Takip Adresi : <http://belge.bau.edu.tr/es/Vision-Sorgula/belgeDogrulama.aspx>

Cırağan Caddesi, Osunpaşa Mektebi Sokak, No: 4-6 34353- Beşiktaş -İstanbul  
Faks No:3810700  
İnternet Adresi: [www.bahcesehir.edu.tr](http://www.bahcesehir.edu.tr)  
Kep Adresi:bahcesehiruniversitesi@hs01.kep.tr

Bilgi için: Hilal BENHUR DİNÇER  
Yüksekokul Sekreteri Vekili  
Telefon No: 3810722



Bu belge 5070 sayılı Elektronik İmza Kanununun 5. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır.  
Evrak sorgulaması: <http://belge.bau.edu.tr/en/Vision-Sorgula/belgeDogrulama.aspx?V=BE6E4AHZP> adresinden yapılabilir. (PIN:84722)

## Appendix F. Permission Request Form of Çağ University



T.C.  
ÇAĞ ÜNİVERSİTESİ  
Sosyal Bilimler Enstitüsü

Sayı : 23867972-044-E.2000004568

15.12.2020

Konu : Sümeyye Safa TOHMA'ya Ait Tez  
Anket İzni Hakkında

### DAĞITIM YERLERİNE

İngiliz Dili Eğitimi Tezli Yüksek Lisans Programında 20198022 numaralı öğrencimiz olan Sümeyye Safa TOHMA, “**Dikkat Eksikliği Hiperaktivite Bozukluğu Olan Yetişkin Öğrencilere İngilizce Öğretimine Dair Üniversite İngilizce Öğretmenlerinin Bilgisi**” konulu tez çalışmasını Üniversitemiz Fen-Edebiyat Fakültesi öğretim üyesi **Dr.Öğr. Üyesi Aysun YURDAIŞIK DAĞTAŞ** danışmanlığında halen yürütmektedir. Adı geçen öğrencinin tez çalışması kapsamında **Üniversitenize bağlı programlarınızda halen İngilizce dersini vermekte olan öğretim görevlilerini** kapsamak üzere kopyası Ek’lerde sunulan bir anket uygulamasını yapmayı planlamaktadır.Gerekli iznin verilmesini arz ederim.

Prof. Dr. Ünal AY  
Rektör

Ek : 1 sayfa tez etik kurul izin formu, 9 sayfa Sorular, 6 sayfa tez etik kurul izin onay e-postaları.

E-Posta: aycankol@cag.edu.tr

Evaluation  
Version



1 / 1

Bu belge 5070 sayılı elektronik imza kanununa göre güvenli elektronik imza ile imzalanmıştır.

DoÄYrulama adresi: <https://ubss.cag.edu.tr/BelegDogrulama> - DoÄYrulama kodu: E9B20DB

Dağıtım:

Gereği:

Atılım Üniversitesi Rektörlüğüne  
Aydın Adnan Menderes Üniversitesi Rektörlüğüne  
Bahçeşehir Üniversitesi Rektörlüğüne  
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