BAHCESEHIR UNIVERSITY
GRADUATE SCHOOL OF EDUCATION
THE DEPARTMENT OF ENGLISH LANGUAGE TEACHING

THE ROLE OF STUDENT ENGAGEMENT, FOREIGN LANGUAGE MOTIVATION, AND FOREIGN LANGUAGE ANXIETY ON FOREIGN LANGUAGE ACHIEVEMENT IN ONLINE AND HYBRID EDUCATION SYSTEMS

DOCTORAL DISSERTATION

MİNE GÜNDÜZ KARTAL

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MİNE GÜNDÜZ KARTAL

THESIS ADVISOR

PROF. DERİN ATAY

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Name Surname	Mine Gündüz Kartal
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PhD Thesis Defense Jury			
Thesis Defense Jury	**Title - Name / Surname**	**Institution**	**Signature**
Thesis Advisor	Prof. Derin ATAY	Bahçeşehir University	
Member of Thesis Monitoring Committee	Assist. Prof. Gürsu AŞIK	Bahçeşehir University	
Member of Thesis Monitoring Committee (outside institution)	Assist. Prof. Özlem KAŞLIOĞLU	Marmara University	
Member	Assist. Prof. Serkan UYGUN	Bahçeşehir University	
Member (outside institution)	Assist. Prof. Dilek İNAL	İstanbul Cerrahpaşa University	

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Name, Surname : Mine GÜNDÜZ KARTAL

Signature :

ABSTRACT

THE ROLE OF STUDENT ENGAGEMENT, FOREIGN LANGUAGE MOTIVATION, AND FOREIGN LANGUAGE ANXIETY ON FOREIGN LANGUAGE ACHIEVEMENT IN ONLINE AND HYBRID EDUCATION SYSTEMS

Gündüz Kartal, Mine

Doctoral Dissertation, Doctor of Philosophy Program in English Language Education

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The purpose of this study is to explore student engagement, foreign language motivation, and foreign language anxiety levels of EFL learners who studied in *online* and *hybrid* education systems in EFL classrooms during the pandemic. The study also aims to identify the significant differences in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type. Additionally, it aims to explain the causal relationship between foreign language achievement and the research variables. Finally, it aims to gain a deeper understanding of student engagement, foreign language motivation, and foreign language anxiety by gathering the opinions of both the EFL instructors and the EFL learners who experienced these two education modes, *online* and *hybrid*, during the pandemic. The quantitative data were collected through a questionnaire consisting of three scales, and the qualitative data were gathered through in-person interviews, open-ended questionnaires, and focus group interviews. In total, 489 participants (469 EFL learners and 20 EFL instructors) took part in this study. The quantitative findings of this study revealed that foreign language anxiety was a strong and negative predictor of foreign

language achievement in online and hybrid education periods. The qualitative findings obtained from the opinions of EFL instructors and EFL learners regarding student engagement, foreign language motivation and foreign language anxiety were compared and contrasted with the findings gained from the quantitative data of this study.

Keywords: Student Engagement, Foreign Language Motivation, Foreign Language Anxiety, Online Education, Hybrid Education

ÖZ

ÇEVRİMİÇİ VE HARMANLANMIŞ EĞİTİM SİSTEMLERİİNDE ÖĞRENCİ BAĞLILIĞI, YABANCI DİL MOTİVASYONU VE YABANCI DİL KAYGISININ YABANCI DİL BAŞARISI ÜZERİNDEKİ ROLÜ

Gündüz Kartal, Mine

Doktora Tezi, İngiliz Dili Eğitimi Doktora Programı

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Tezin amacı, pandemi döneminde çevrimiçi ve harmanlanmış (hibrit) eğitim sistemlerinde üniversitelerin hazırlık programında İngilizce dil eğitimi alan öğrencilerin öğrenci bağlılığını, yabancı dil motivasyonunu ve yabancı dil kaygı düzeylerini araştırmaktır. Çalışma ayrıca, öğrenci bağlılığı, yabancı dil motivasyonu ve yabancı dil kaygısı düzeylerindeki önemli farklılıkları eğitim modu, cinsiyet ve üniversite türüne göre belirlemeyi amaçlamaktadır. Bunun yanı sıra, bu çalışma yabancı dil başarısı ile araştırma değişkenleri arasındaki nedensel ilişkiyi açıklamayı hedeflemektedir. Ek olarak, çalışma pandemi sırasında hem çevrimiçi hem de hibrit olmak üzere bu iki eğitim modunu deneyimleyen İngilizce öğretim görevlilerinin ve de İngilizce eğitimi alan öğrencilerin görüşlerini toplayarak öğrenci bağlılığı, yabancı dil motivasyonu ve yabancı dil kaygısı hakkında daha derin bir anlayış kazanmayı amaçlamaktadır. Nicel veriler üç ölçekten oluşan bir anket aracılığıyla, nitel veriler ise yüz yüze görüşmeler, açık uçlu anketler ve odak grup görüşmeleri yoluyla toplanmıştır. Toplamda 489 katılımcı (469 öğrenci ve 20 öğretim görevlisi) bu çalışmada yer almıştır. Bu çalışmanın nicel bulguları, çevrimiçi ve hibrit eğitim dönemlerinde, yabancı dil kaygısının yabancı dil başarısını etkileyen güçlü ve olumsuz bir yordayıcı olduğunu ortaya koymuştur. Öğretim görevlileri ve öğrencilerin öğrenci bağlılığı, yabancı dil motivasyonu ve yabancı dil kaygısına dair görüşlerinden elde edilen nitel verilerin sonuçları, çalışmanın nicel veri sonuçları ile karşılşatırılmıştır.

Anahtar Kelimeler: Öğrenci Bağlılığı, Yabancı Dil Motivasyonu, Yabancı Dil Kaygısı, Çevrimiçi Eğitim, Harmanlanmış (Hibrit) Eğitim

To all students and teachers

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Introduction

This chapter starts with the statement of the problem and continues with the purpose of the study, research questions, significance of the study, and definitions of the terms used in this study.

1.1 Statement of the Problem

The last type of coronavirus (COVID-19), which started to spread from Wuhan city in the Hubei province of China in the last month of 2019, was acknowledged as a pandemic by the World Health Organization (WHO) on March 11, 2020 (WHO,2020). Only in a month (from March to April 2020), the number of people infected with the coronavirus reached over one million, and deaths surpassed two hundred twenty in the world (Onyema et al., 2020). As the COVID-19 pandemic crossed the borders in a short time and spread from person to person easily, severe restrictions such as total lockdowns, quarantine regulations, and school closures were implemented by nearly all governments. While most countries were trying to have their citizens accustomed to these strict regulations, these countries were also forced to adapt their existing political, economic, social, and educational systems to the new normal, which had to be designed according to the principle of keeping the social distance as primary. In other words, billions of people all over the globe began to carry out their businesses and studies from their homes to protect themselves from the contagiousness of this deadly and fast-spreading virus.

The outbreak of COVID-19 primarily affected the health sector; however, education was another field that was affected drastically (Telli and Altun, 2020) and underwent severe changes in a rapid time. Upon the declaration of the pandemic by WHO, schools were closed in 165 countries as of March 27, 2020, and more than 1.5 billion students with 63 million teachers shifted from face-to-face education to online (distance) education swiftly (UNESCO, 2020).

Turkey is one of these countries which adopted distance learning to maintain education at all levels (from preschool to tertiary). After the first COVID-19 case announcement on March 11, all schools were immediately shut down and suspended for a week. As of March 23, as a decision of the Ministry of Health (MoH) and Ministry of National Education (MoNE), all of the school courses started to be delivered through the online education platform EBA (Educational Information Network), through which eighteen million students (from kindergarten to high school) could reach various lesson materials (live lessons, videos, e-books, tests) and continue their education from their homes (Özer, 2020).

As for the higher education institutions (HEIs) in Turkey, most, if not all, switched to distance education after the decision of the MoH and the Council of Higher Education (CoHE) on the same date. According to a report by CoHE, on March 23, 2020, the number of HEIs began to deliver their courses online was 121 (64%), while 41 (21.6%) of the universities started on March 30, 2020, and 25 (13.2%) of them on April 6, 2020 (CoHE Evaluation Report, 2020). Another report by CoHE stated that the total number of university students that had to receive their courses online due to the pandemic was around 8 million in the spring semester of the 2019-2020 academic year (CoHE, Information Management System, 2021). The undergraduate students constituted more than half (4,5 million) of this population. The rest were vocational, master, and doctorate students studying at Turkish state and foundation universities.

Initially, the coronavirus pandemic was quite unpredictable for all the policymakers in Turkey and in the world; therefore, the decision to deliver the courses online was given for an uncertain period. The more threat the pandemic posed, the more the authorities adhered to the precautions. One of these was maintaining distance education at all levels to prevent the mobility of such a high number of students. Thus, all the courses were offered online during the spring semester of the 2019-2020 academic year. Yet, the distance education period in Turkey was extended to the 2020-2021 academic year. Because to be able to return to the status quo in education and all aspects of life, there was only one condition: developing reliable vaccines against the coronavirus and vaccinating 60%-70% of the population in each country to acquire herd immunity.

In the first months of 2020, some countries, such as China, the USA, the UK, and Germany, immediately started vaccine studies for COVID-19. As these countries have advanced vaccine improvement technologies, their studies started to give promising results within the same year. After the legal approvals, vaccinations began to be applied in various countries (Yavuz, 2020). In Turkey, the first vaccination was done on January 13, 2021, but the number of vaccines in the country was limited. Therefore, MoH adopted a vaccination system prioritizing healthcare professionals, the elderly, and disabled people (Gürbüz et al., 2021). Vaccinating people who are 18 and over 18 years was only possible at the end of June 2021. As a result, higher education institutions had to continue to offer their courses online for one and a half years.

As the vaccination rates increased and new regulations like controlling people's health status through digital applications, especially in closed areas, were implemented in the second half of 2021, people began to return to normal in their social, economic, and educational lives. However, since the pandemic was not entirely under control, all the systems needed robust adaptations for possible COVID-19-driven disruptions. As this was the case, before the new academic year (2021-2022) started, CoHE announced that instead of abandoning online education altogether, a hybrid model of instruction (integration of face-to-face and online classes) would be utilized in higher education (CoHE, Guidance for Education and Teaching Processes During Global Pandemic, 2021). Then, university students started to take some courses online and some courses face-to-face in physical classes on their campuses.

By and large, all these crises, transitions, and adaptations in education happened in two years, which is relatively short for such significant changes under normal circumstances. While all these decisions were being taken, importance was mainly given to the education continuum. However, behind the scenes, both students and educators struggled a lot. The former tried to improve their academic skills through diverse channels and formats that most were hardly used to; the latter put endless efforts into learning and using technology-based teaching techniques to engage their learners in the midst of shifting pedagogies.

Research investigating the challenges, effects, and implications of these new modes of instruction (online and hybrid) in higher education has been under the scope, and some studies regarding *online education* (Chakraborty et al., 2021; Coman et al., 2020; Grunt, Belyaeva & Lissitsa, 2020; Mishra, Gupta & Shree, 2020; Noori, 2021) and *hybrid education* (Carius, 2020; Guppy, Verpoorten, Boud, Tai, Bartolic, 2022; Masalimova, Ryazanova, Tararina, Sokolova, Ikrennikova, Efimushkina & Shulga, 2021; Singh, Steele & Singh, 2021) have already been published. Yet, as this phenomenon is considerably new, all educational fields will continuously be conducting research to provide deeper insights into the experiences of all parties (students, educators, stakeholders) and contribute to the relevant literature.

English language education, offered as a compulsory preparatory program at English-medium universities, is one of the educational fields that encountered challenges due to the pandemic, and therefore it had to be adapted. Before the pandemic, face-to-face English language classrooms at universities had dynamic, hectic, and lively teaching and learning atmospheres. English language classrooms, especially the preparatory programs, are where students generally study in collaboration, prepare task-based projects, present them to their classmates, discuss contemporary academic topics in pairs and groups, and constantly interact with each other to improve their language skills. Briefly, English language classrooms are the learning areas where most students are highly engaged with learning activities.

However, during the COVID-19 outbreak, online English language classes lacked many dynamic classroom activities despite the abundant technological opportunities. Students and instructors met with each other and conducted all the lessons through online platforms such as Zoom, MS Teams, or their universities' Language Management Systems (LMS) where teachers can upload lesson materials, videos, ans students can upload their assignments. Although students had the opportunity to see each other’s faces and hear each other’s voices thanks to the technological applications, the collaborative and interactive nature of the language classes became rather individualistic as students studied in their home environments rather than on their campuses and in their actual classes. Additionally, it is noteworthy that this learning mode lasted relatively long, for one and a half years, making three semesters. With the academic year of 2021-2022, the hybrid

model of education has been in practice, and different from the complete online education model, students could meet with their classmates and instructors in person; also, they could study in their classes and spend time on their campuses while at the same time, they take some of their lessons online.

English language education has been delivered through these two different modes of instruction to large student populations during the pandemic, and these modes of education undoubtedly have been and will be investigated from different perspectives and with other purposes to gain a better understanding of the pandemic-reasoned impacts on students, instructors, and language education itself. Investigating the fundamental constructs affecting foreign language learning is a prerequisite for reaching this understanding. In this study, three fundamental constructs are under investigation: *student engagement*, *foreign language motivation*, and *foreign language anxiety*. Student engagement is an overarching and multidimensional construct that gives information on how much a student is involved in learning activities, how they build relationships with the educational environments (e.g., peers, instructors), and what strategies they use to deal with challenging tasks. Specific to language education, student engagement is mainly about 'how learners get involved in opportunities for language learning and use' (Hiver et al., 2020, p.1). The second multifaceted construct, foreign language motivation, is about learners' desires and efforts to achieve predetermined goals during the language learning process. While learners who are skilled but lack enough motivation cannot perform foreign language learning successfully, those with high motivation levels can accomplish it even in poor learning conditions (Dörnyei, 1998). Yet, it is meaningful to state that even though some foreign language learners are highly motivated, they may not perform well, potentially because of the final multidimensional construct, foreign language anxiety. When language learners are anxious, they exhibit apprehensive attitudes like worry and dread, and they tend to avoid using the foreign language, missing classes, and delaying assignments (Horwitz et al., 1986). These behaviours may easily be interpreted as a lack of motivation or disengagement.

Considering *online* and *hybrid* instruction delivery modes in foreign language education during the pandemic, questions regarding the *students' engagement* (e.g.,

whether they were engaged with their lessons, how effectively they were engaged, what factors affected their engagement), *foreign language motivation* (e.g., whether these new delivery modes influenced students' motivation, how much they were motivated during online and hybrid education periods), *foreign language anxiety* (e.g., whether students were anxious due to these unprecedented changes in the education, in what ways they were anxious) and the roles of these constructs on students' foreign language achievement need to be explored and explained to gain a better understanding about these two education modes. Through this knowledge, necessary parties, including educators, curriculum designers, assessment specialists, and administrators, may act accordingly to improve a robust foreign language education at the tertiary level.

1.2 Purpose of the Study

The purpose of this study is multi-fold. Firstly, it aims to explore the student engagement, foreign language motivation, and foreign language anxiety levels of EFL learners who studied in *online* and *hybrid* education periods separately. The second purpose is to identify the possible significant differences in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type. Thirdly, it aims to explain the causal relationship, if any, between foreign language achievement and the research variables, i.e., student engagement, motivation, and anxiety. The final aim is to gain a deeper understanding of student engagement, foreign language motivation, and foreign language anxiety by gathering the opinions of both the EFL instructors and the EFL learners who experienced these two education modes, *online* and *hybrid*, during the pandemic.

1.3 Research Questions

1. What are the EFL learners' levels of
    a. student engagement,
    b. foreign language motivation, and
    c. foreign language anxiety during *online* and *hybrid* education periods?
2. Is there a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type?
3. If there are any relations, to what extent do student engagement, foreign language motivation, and foreign language anxiety have an influence on foreign language achievement during *online* and *hybrid* education periods?
4. What are the opinions of EFL instructors on
    a. student engagement,
    b. foreign language motivation, and
    c. foreign language anxiety during *online* and *hybrid* education periods?
5. What are the opinions of EFL learners on
    a. student engagement,
    b. foreign language motivation, and
    c. foreign language anxiety during *online* and *hybrid* education periods?

1.4 Significance of the Study

At the time of the COVID-19 pandemic, foreign language education at the tertiary level faced both *online* and *hybrid* teaching and learning modes. The transitions and the adaptations to these systems were considerably rapid. A study exploring these two educational modes and comparing them to gain a better understanding is more than a necessity. Besides, to the best knowledge, there is a lack in the foreign language education literature investigating causal relationships between student engagement, foreign language motivation, and foreign language anxiety through a foreign language achievement model. In response to these needs, this study aims to fill these gaps by gathering data from two different EFL learner groups who received their education in

online and hybrid modes and two groups of EFL instructors who delivered courses in these two different education periods. In this study, EFL learners' engagement, motivation, anxiety levels, differences among these variables, and the relationships that affect foreign language achievement are explored via a regression model to offer more concrete results and provide a better understanding of English language education which was carried out during both *online* and *hybrid* education periods at a tertiary level. Besides, the opinions of EFL learners and instructors who experienced these two education modes were explored to gain a deeper insight into the research variables.

1.5 Definitions

Student Engagement: It refers to how involved or interested students appear in their learning and how connected they are to their classes, institutions, and each other (Axelson & Flick, 2010).

Foreign Language Motivation: It refers to "the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes towards learning the language" (Gardner, 1985, p. 10).

Foreign Language Anxiety: It refers to "a distinct complex construct of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning processes" (Horwitz, Horwitz, & Cope, 1986, p. 128). (In this study, foreign language classroom anxiety and foreign language anxiety are used interchangeably).

Online Education: It is also known as 'distance education', which refers to "teaching and learning online with the aid of technological tools and platforms" (Onyema et al., 2020).

Hybrid Education: It is also known as 'blended education' and refers to "the thoughtful integration of classroom face-to-face learning experiences with online learning experiences" (Garrison & Kanuka, 2004, p. 96).

Synchronous Learning: It refers to "online learning which is based on real-time interactions between students and learning facilitators or instructors" (Bryson & Andres, 2020, p.3).

Asynchronous Learning: It means that it is a type of "learning occurs through online platforms without real-time interactions" (Bryson & Andres, 2020, p.3).

Chapter 2

Literature Review

2.1 Introduction

This chapter consists of three parts. The first part begins with the first construct of this research study, *student engagement*. The beginning of this part presents the theoretical framework of student engagement with its definition and sub-dimensions. Later, it continues with the strategies to increase student engagement and the factors affecting it. This part ends with the research studies conducted on student engagement. The second part of this chapter continues with this research's second construct, *foreign language motivation*, whose theoretical framework is given in the first place. Afterward, the definition of foreign language motivation with its sub-dimensions and studies on foreign language motivation are documented. In the final part of this chapter, *foreign language anxiety*, the third construct in this study, takes place. The theoretical framework of foreign language anxiety, its definition with its sub-dimensions, and the research conducted on this construct are presented one after another in this section.

2.2 Student Engagement

Most educators worldwide would agree that if a student is engaged with school and lessons with a high level of attention, interest, curiosity, optimism, and passion when they are learning or being taught, that student is more likely to exhibit better academic achievement. This relationship is also supported by many scholars that there is a positive correlation between student engagement and improved learning outcomes encompassing not only academic achievement but also cognitive development, self-esteem, psychological development, and student satisfaction (Carini, Kuh, & Klein, 2006; Fredricks, Blumenfeld, & Paris, 2004; Heddy & Sinatra, 2013; Johnson & Sinatra, 2012; Kuh, Curce, Shoup, Kinzie, & Gonyea, 2008; Lam, Wong, Yang, & Liu, 2012; Pascarella, Seifert, & Blaich, 2010). As student engagement has been linked to such essential learning

outcomes, no wonder it has been accepted as "the holy grail of learning" (Sinatra, Heddy, & Lombardi, 2015, p. 1) in education at all levels.

However, despite its positive correlations with learning, and academic performance, student engagement is also a concern for many educators and academicians in higher education across many countries. Especially when online and hybrid learning modes have been adopted at universities due to the COVID-19 pandemic, student engagement has become challenging since both teaching modes require a change and adaptation of traditional face-to-face teaching methods (Gamage, Gamage, Dehideniya, 2022). Taking its relationship with positive learning outcomes and being an indicator that carries importance in every mode of teaching and learning, student engagement was considered a significant variable to study, and therefore, it was adopted as the first variable in this research.

2.2.1 The theoretical framework of student engagement. Student engagement is a concept dating back to a study carried out in the 1930s by educational psychologist Ralph Tyler who researched how much time university students spent on their work and its impacts on learning. Then, in the 1960s, C. Robert Pace did research on the quality of effort resulting in the development of the College Student Experiences Questionnaire (CSEQ), and through its administration in 1979, student engagement at a university level was accepted as a more meaningful and valid indicator of institutional excellence (Axelson & Flick, 2010). However, many scholars who studied this concept would agree that modern student engagement research takes its roots from the *'student involvement theory'* proposed by Astin in 1984 after his study (1975) on preventing undergraduate students from dropping out in the USA. According to Astin, student involvement theory means "the amount of physical and psychological energy that the student devotes to the academic experience" (1984, p. 518). By this definition, he mainly stresses the importance of "what the individual does, how he or she behaves" rather than "what the individual thinks or feels" (p. 519). In other words, in this theory, student engagement is viewed as a single-dimensional construct, which is behavioural engagement. According to student involvement theory, when students invest their "physical and psychological energy" in

educationally oriented activities, this results in student involvement and various positive outcomes such as persistence, satisfaction, achievement, and academic success.

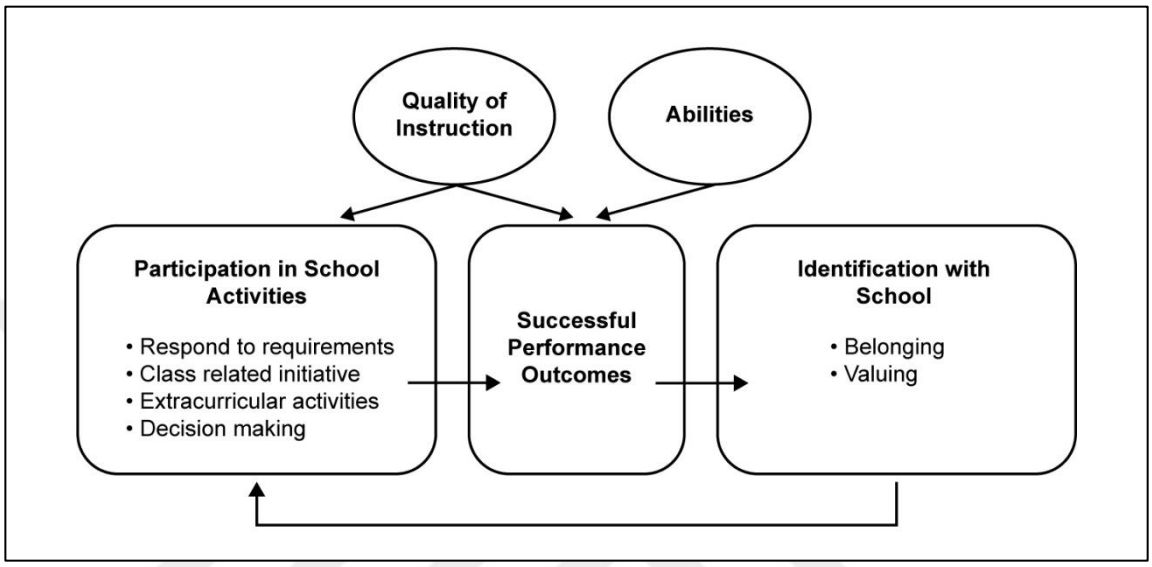

Figure 1. The participation-identification model (Finn, 1989).

Finn, in 1989, with a similar reason, aiming to recommend some solutions to the issue of school dropout in the USA, proposed a model named "the participation-identification model" (Figure 1), which focused on how *behaviour* and *affect* have interaction and the effects of this interaction on academic performance of students. Different from the "student involvement theory" (Astin, 1984), this model included both the 'behavioural' component and the 'affect' component. The first component, behavioural engagement, also named *participation*, involves four different activities which show that students are engaged when they are in the classroom and school. These activities are composed of a) basic learning behaviours (e.g., paying attention to the teacher, responding to teacher's questions, completing assignments), b) initiative-taking behaviours (e.g., engaging in help-seeking activities, doing more than the minimally required work, suggesting new ways to look at material being taught, c) taking part in academic extracurricular activities, and d) participating in social tasks of school (e.g., attending classes and school, following classroom rules, interacting positively and appropriately with teachers and peers, and not disrupting the class (Finn, 1989). The second component, affective engagement, termed

identification, was identified through the students' feelings of belonging (attachment) and valuing. The first feeling, "belonging", refers to when students feel like an important member of the school community and feel sufficiently connected to their institution; they are believed to generate a sense of "belonging" which is also referred to by other researchers as "school membership," "bonding," "school connectedness," and "attachment". The second feeling, "valuing", refers to the fact that if students see their school as a place to improve themselves, their "valuing" feeling develops (Voelkl, 1997). The participation-identification model describes engagement as a cycle. This engagement cycle starts with a student's participation in school activities, which creates a bond with the school over time. In turn, the student continues to show engagement in school activities (Finn & Zimmer, 2012).

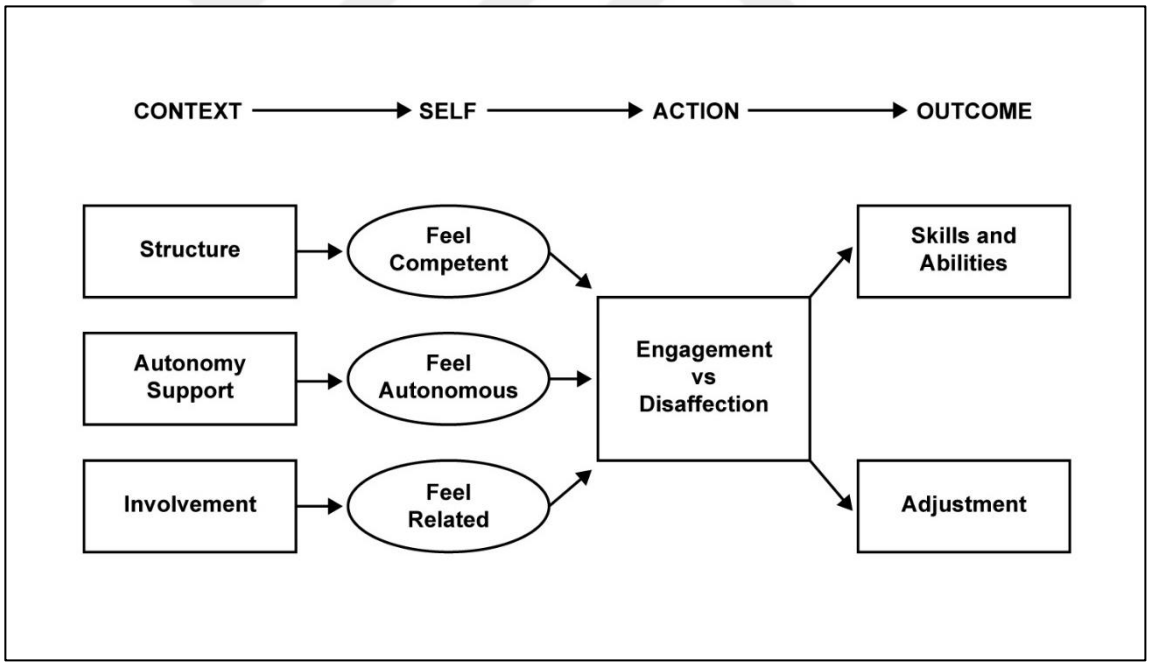

Figure 2. The self-system processes model (Connell & Wellborn, 1991).

Connell and Wellborn, in 1991, with a similar aim by Astin (1984) and Finn (1989), proposed a theoretical model named the "self-system process model" (Figure 2), which assumed that people have basic needs for competence, autonomy, and relatedness. According to this model, these basic human needs develop through self-system processes,

that is, assessments of the self in relation to ongoing activity, which are influenced by contexts and interactions with others. The action resulting from self-system processes may produce engagement or disaffection, and the outcome might be developed skills or adjustment. This model prioritizes student engagement's 'psychological' dimension different from the previously given models. That is to say, if schools aim to increase engagement and academic achievement, they should encourage students to feel competent, autonomous, and related. Put differently, if schools fulfil students' basic psychological needs, students exhibit engagement which, in turn, generates skills and abilities. If these needs are unmet, students show disaffection, which might be followed by internal adjustments (Connell & Wellborn, 1991).

Between 1995 and 2004, the other proposed engagement models had a similar aim: preventing dropout rates in schools by fostering the engagement of students who are "at risk". In 2004, the student engagement phenomenon was expanded to include all learners with the attempt of the National Council and Institute of Medicine (Reschly & Christenson, 2012), and then, student engagement was considered as a meta-construct, encompassing several dimensions in the field of education (Fredericks et al., 2004).

Fredericks and her colleagues, in 2004, stressed that student engagement is an antidote not only to decrease the dropout rates but also to mitigate the issues of low-level achievement, boredom, and disaffection among students across all levels. Therefore, the researchers categorized student engagement into three dimensions: behavioural, emotional, and cognitive, to reach "a richer characterization" of students rather than doing it through a single dimension (p. 61). In the earlier models, the 'cognitive engagement' dimension was slightly touched on or ignored; however, in the study by Fredericks and her colleagues, this dimension was clearly and specifically characterized.

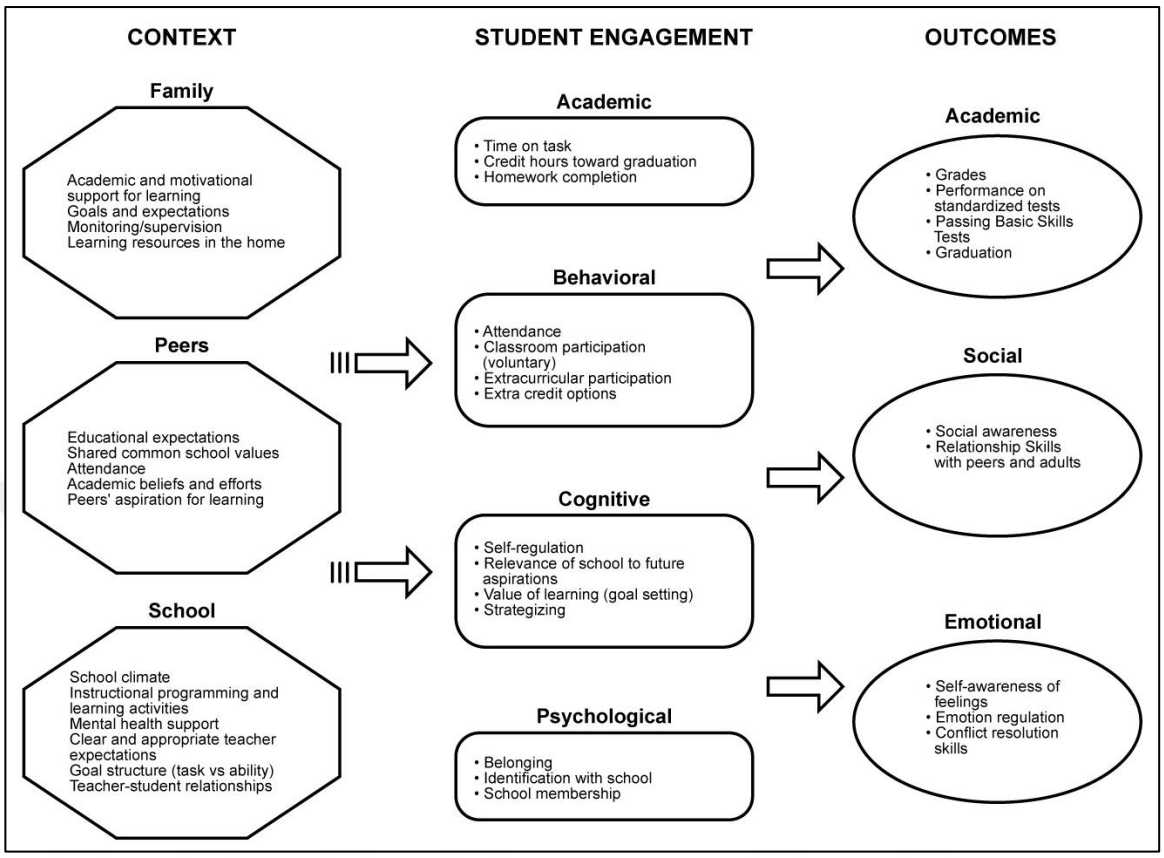

Figure 3. Student Engagement Model (Appleton et al., 2006).

In 2006, Appleton and his colleagues proposed a taxonomy mainly based on the theories by Finn (1989) and Connell and Wellborn (1991) to identify the levels of student engagement and understand the relationship between student engagement and the learning environment (Figure 3). According to this taxonomy, student engagement is in a relationship with diverse contexts (e.g., family, peers, and school) and a "multi-dimensional construct comprised of four sub-dimensions: academic, behavioural, cognitive, and psychological" (p. 429). Each dimension of this model has its own indicators. For example, academic engagement has indicators such as being on task, completing assignments, and earning credits toward graduation while attending classroom and extra-curricular activities voluntarily are seen as indicators of behavioural engagement. The researchers stated that, unlike academic and behavioural engagement, cognitive and psychological engagement dimensions are less observable, and they have more internal indicators such as being self-regulated, valuing learning and having personal

goals and autonomy (cognitive engagement), and having feelings of belonging, identification, and building relationships with teachers and peers (psychological engagement). As this model suggests, when students engage in school-related activities academically, behaviourally, emotionally, and psychologically, they generate academic (e.g., performance on standardized tests, graduation), social (e.g., relationship skills with peers and adults), emotional (e.g., self-awareness of feelings) outcomes (Appleton et al., 2006).

Since 2006, models regarding student engagement have continued to be proposed (Martin, 2007; Skinner et al., 2008; Skinner & Pitzer, 2012); however, these models focused on motivational development through student engagement rather than researching the construct of student engagement solely; therefore, they were not included in this section. The theories and models given above touched on the definition and sub-dimensions of student engagement by including *context* and *outcomes*. Yet, the literature merely providing the definition and sub-dimensions of student engagement is given below.

2.2.1.1 The definition and sub-dimensions of student engagement. Student engagement simply refers to the time and effort given to education-related activities by students to reach the desired outcomes (Hu and Kuh, 2002). A similar definition explains student engagement as a condition when students study or practice a school subject more, they are more inclined to learn about it (Kuh, 2003). Yet, these definitions underline that students might exhibit their degree of engagement only through their studying behaviours, which conceptualizes student engagement as a single-dimensional construct and undermines the value of less observable dimensions of engagement (Axelson & Flick, 2010). Some researchers (e.g., Fredricks, Blumenfeld & Paris, 2004) go beyond this type of student engagement conceptualization, and they mark it as a multifaceted concept including not only behavioural, but also emotional and psychological dimensions (Finn & Zimmer, 2012). The definition by Axelson and Fick (2010) touches upon student engagement's these dimensions and states that student engagement "has come to refer to how involved or interested students appear to be in their learning and how they are to their

classes, their institutions, and each other" (p. 38), which stresses that this construct is not simply a measure of how engaged students are in their learning, but also an indication of how engaged students are with other learning related components such as their schools, teachers, and peers.

Within the literature, there is a consensus that student engagement is a multifaceted construct; however, the dimensions of student engagement vary from scholar to scholar. Some researchers conceptualize student engagement as a two-dimensional construct, while others formulate it as a four-dimensional one. According to the two-dimensional model by Appleton, Christenson, and Furlong (2008), student engagement includes emotional engagement (e.g., interest, belonging, positive attitude towards learning) and behavioural engagement (e.g., participation, effort, task completion). Fredericks et al. (2004) add the cognitive engagement component (e.g., self-regulation, investment in learning), which makes the model tri-dimensional. Some researchers, for example, Reschly and Christenson (2006), proposed that student engagement has four components: academic engagement (e.g., time on task and assignment completion), cognitive engagement (e.g., self-regulation and autonomy), behavioural engagement (attendance and extracurricular participation), and psychological engagement (e.g., belonging and feelings of identification). Finn and Zimmer (2012) also conceptualized student engagement as a four-dimensional construct: academic engagement (e.g., attentiveness and task completion), cognitive engagement (e.g., reading more resources than assigned), social engagement (e.g., communication with teachers and peers), and affective engagement (e.g., the feeling of belongingness). Similarly, Reeve and Tseng (2011) characterized student engagement as a four-dimensional model which consisted of behavioural engagement (e.g., attentiveness in class), cognitive engagement (e.g., learning through personal experiences), emotional engagement (e.g., enjoying learning in class), and agentic engagement (e.g., asking questions in lessons).

Despite this disparity, most scholars agree on three major dimensions of student engagement: behavioural, emotional, and cognitive (Appleton, Christenson, Kim & Rechly, 2006; Fredricks, Blumenfeld & Paris, 2004; Gunuc & Kuzu, 2014; Moreira, Cunha & Inman, 2019; Wang & Eccles, 2013). As these three dimensions of student

engagement were utilized in this study through the student engagement scale by Gunuç and Kuzu (2017), the detailed definitions regarding each dimension are given below.

2.2.1.2 Behavioral engagement. Behavioural engagement refers to students' active participation in school-related actions and practices, such as completing tasks, asking and answering questions about school subjects, contributing to class discussions, and taking notes in lessons. In other words, it is the observable part of student involvement in academic tasks (Birch & Ladd, 1997; Connell, 1990; Finn, 1989; Finn, Pannozzo & Voelkl, 1995; Fredricks et al., 2004; Skinner & Belmont, 1993). In addition, behavioural engagement includes abiding by the rules, maintaining classroom norms, and refraining from disruptive actions such as skipping class and getting into trouble (Finn, 1993; Finn et al., 1995; Finn & Rock, 1997).

2.2.1.3 Emotional engagement. As a second dimension, emotional engagement means students' willingness, desires, and positive or negative reactions toward school activities (Connell & Wellborn, 1991; Fredricks et al., 2004; Skinner & Belmont, 1993). Emotional engagement also encompasses students' feelings of attachment to (or detachment from) their school, including how they feel about their current academic environment, the school's procedures, teachers, and the other students. This dimension of student engagement mostly focuses on students' inner lives that are not often overtly represented as observable behaviours (Johnson & Dean, 2011; Stipek, 2002; Voelkl, 1997).

2.2.1.4 Cognitive engagement. Cognitive engagement is defined as students' eager mental efforts to comprehend and master complex ideas, concepts, or challenging skills by using self-regulated strategies (Corno & Mansinach, 1983; Fredricks et al., 2004, Zimmerman, 1990). Likewise, Appleton et al. (2006) and Appleton et al. (2008) conceptualize cognitive engagement as a combination of some constructs such as "self-regulation, the relevance of schoolwork to future endeavours, the value of learning, and

personal goals and autonomy" (p. 429). Similar to emotional engagement, cognitive engagement is less observable compared to behavioural engagement.

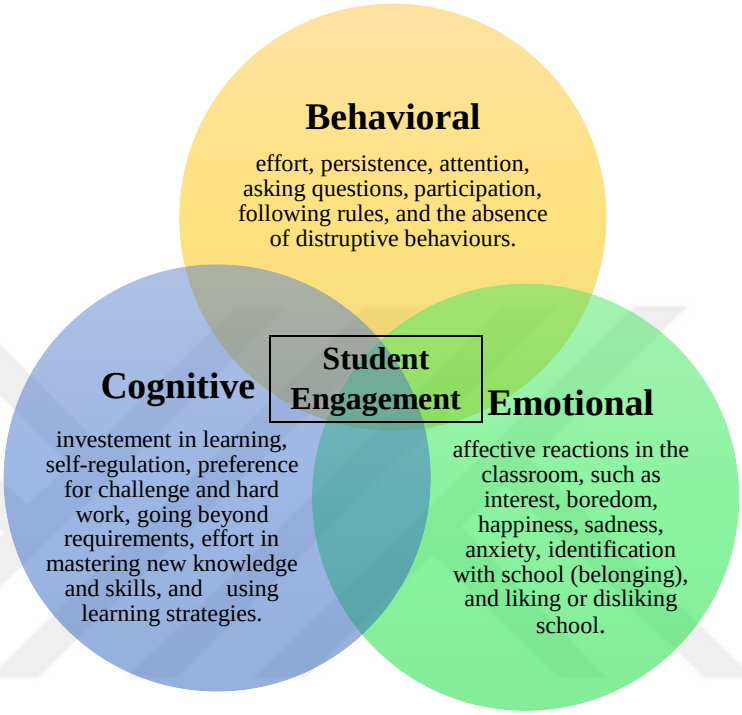

Figure 4. Dimensions of student engagement (Fredericks et al., 2004).

To summarize this section, student engagement is more than solely observable behaviours such as participating in class or submitting assignments on time. It also involves feelings and mental efforts, which are more internal (Harper & Quaye, 2009). Notwithstanding their differences, three dimensions of student engagement, as given in Figure 4, are intertwined (Skinner, Kindermann, Connell & Wellborn, 2009), and the differences between each dimension might be "actually quite subtle and … quite fuzzy" (Eccles, 2016, p.72). Although there is this "fuzziness", conceptualizing each dimension separately with its indicators is necessary to reach broader information about how each student *acts*, *feels*, and *thinks* in their learning processes (Wang & Peck, 2013).

2.2.2 Strategies to increase student engagement. In learning environments, the role and impact of teachers on engagement are indisputable as it is the teachers who have

myriad opportunities to foster their students' engagement (Collie, Martin, Papworth, & Ginns, 2016) and who can provide a caring, stimulating and inspiring classroom atmosphere to their learners (Shernoff, Kelly, Tonks, Anderson, Cavanagh, Sinha, Abdi, 2016). Teachers have the most control over learning environments, content, and pedagogy. As a result, teachers' decisions and choices regarding these factors have significant impacts on students' engagement and learning outcomes (Goldspink, Winter & Foster, 2008).

However, according to Goldspink et al. (2008), although teachers generally know what they can do to foster student engagement, they do not always apply effective strategies as pedagogical practices. The reasons behind this can be various, but a study by Harris (2008) stated that teachers' recognition of student engagement tends to differ. While some teachers defined it merely as observable traits (behavioural engagement), others included emotional and/or cognitive aspects in their definitions.

Considering the different conceptualizations of student engagement among teachers (Harris, 2008), research studies were reviewed to provide some strategies which might be useful in increasing student engagement. Pedler, Yeigh & Hudson (2020) proposed a model (Figure 5) recommending effective strategies to teachers to improve students' behavioural, emotional, and cognitive engagement.

To enhance *students' behavioral engagement*, teachers are recommended to set classroom rules and procedures, provide clear instruction, model appropriate behaviours, implement meaningful learning goals for learners, and plan for high levels of student participation. As for *emotional engagement*, teachers are advised to foster teacher-student relationships, incorporate humour into teaching and learning, promote students' sense of belonging towards their schools, give opportunities for students to experience success, and build learners' self-confidence. To improve *cognitive engagement*, the suggested strategies for teachers are providing opportunities for critical thinking and problem solving, challenging students through achievable tasks, giving task-focused and specific feedback, adjusting teaching methods and techniques to meet students' needs, and supporting students to ask questions.

Teacher		
Behavioural Engagement *Actions / Observable behaviours*	Emotional Engagement *Feelings / Internal emotions*	Cognitive Engagement *Thoughts / Internal cognitions*
• Establish classroom **routines and procedures** • Ensure **consistent** discipline practices and consequences • Be **fair** • Provide **help** to students who need it • Use specific and genuine **praise** • Provide strong guidance with clear purpose • Communicate **clear expectations** • Maintain **high expectations** of behaviour and learning • Explicitly state **learning goals** • Implement meaningful **learning goals** • Ensure **clarity** of instruction • Model **appropriate behaviour** • Plan **for high levels of student participation** • Use **non-controlling informational language**	• Foster high-quality, positive, supportive **teacher-student relationships** • Be **caring**, understanding and nurturing • Show **interest in students** as individuals • **Listen** to students' points of view • Promote **inclusion** by treating all students equitably • Be **respectful** to all students • Encourage students' **responsibility for their own learning** • Offer genuine **encouragement** • Incorporate **humour** into teaching and learning • Promote students' **sense of belonging** in the school • Provide opportunities for students to **experience success** • Be **empathetic** • Be **honest** • Ensure all students feel **emotional and physically safe** • Build students' **confidence**	• Make the subject **interesting** by using resources and activities that promote student interest • Provide opportunities for **deep understanding** critical thinking, analysis & problem solving • Provide **optimal challenge** tasks are challenging but achievable • Incorporate student **collaboration** in learning; active, hands-on, discussion group work • Incorporate authentic**, 'real-world'** instruction and activities • Ensure learning in **relevant** to students' lives and experiences • Support students' **personal goals, interests and preferences** • When possible, allow students to **choose** the content they learn and how to demonstrate their understanding • Provide prompt, task-focussed and specific **feedback** • Incorporate **fun** into learning • Display **enthusiasm** for the subject • **Adjust teaching** to meet students' needs • **Assess** students' understanding frequently and in different ways • Provide relevant **background knowledge** • Encourage students to **ask questions**

Figure 5. Proposed model of the teacher's role in promoting each dimension of student engagement (Pedler et al., 2020).

When the strategies given in the model by Pedler et al. (2020) (Figure 5), are analysed, it can be seen that all strategies are applicable in face-to-face, online, and hybrid education modes. However, when the dynamics of online and hybrid education modes are considered (e.g., the necessity to use technological tools and integrating technology-based interactive activities), more studies (Alabbasi, 2022; Albrahim, 2020; Atoum, 2017; Bailey & Card, 2009; Bangert, 2008; Bryant, & Bates, 2015; Garrison & Vaughan, 2008; Krause, 2007; Lo & Hew, 2020; Prasetya, 2021, Rose, 2018; Teng & Wang, 2021) were reviewed, and some other effective strategies, which can be used in *online* and *hybrid* teaching modes, were found in the literature and they are listed in Figure 6.

Teacher		
Behavioural Engagement *Actions / Observable behaviours*	Emotional Engagement *Feelings / Internal emotions*	Cognitive Engagement *Thoughts / Internal cognitions*
• Integrate **online games** into lessons (Lo & Hew, 2020) • Design **interactive/hands-on activities (**Alabbasi, 2022; Prasetya, 2021) • Use multiple **digital platforms/tools/formats** (Atoum, 2017, Teng & Wang, 2021) • Create **online forum discussions** (Krause, 2007) • Incorporate **online quizzes (**Prasetya, 2021) • Provide **effective** organization by using **online course management tools** (Bailey & Card, 2009) • Integrate **synchronous** and **asynchronous** modes thoughtfully (Garrison & Vaughan, 2008)	• Show active and strong **teacher presence** (Albrahim, 2020; Bangert, 2008; Paloff & Pratt, 2011) • Be **attentive** while **sending/responding to** student emails (Bailey & Card, 2009) • Create an **online community** of learners (Alabbasi, 2022; Bryant & Bates, 2015)	• Utilize **flipped classroom** approach (Lo & Hew, 2020) • Integrate **problem-based/project-based** learning (Bangert, 2008; Rose, 2018) • Provide **flexibility** for the deadlines (Bailey & Card, 2009)

Figure 6. Strategies to foster student engagement in online and hybrid teaching modes

As Figure 6 shows, the suggested strategies for online and hybrid teaching modes require teachers to gain Information and Communication Technology (ICT) skills to involve their students in learning better. For example, to increase behavioural engagement, teachers need to be equipped with technology-based information to use online platforms, organize their lessons and activities through digital tools, and even create and integrate these activities into their teaching methodologies. The strategies to foster emotional engagement generally revolve around showing a strong teacher presence which may bridge the distance between online learners and their instructors (Arbaugh & Hwang, 2006). One of the common strategies to increase cognitive engagement is flipping the classroom, which allows learners to study the lesson topics out-of-class through the Internet and practice with an instructor during online class time (Eppard & Rochdi, 2017). Another strategy to enhance cognitive engagement is employing problem-based/project-based learning. This type of learning is in contrast to lecture-based learning, in which online students may not show high engagement, as maintaining attention to the presented material can be a challenge for students during online lessons (Balan, Jacintos & Montemayor, 2020). However, when students are involved in lessons mostly through hands-on activities rather than passive activities, such as merely listening to lectures, they may exhibit high-level cognitive engagement in online or hybrid education modes.

2.2.3 Factors affecting student engagement. Beyond any doubt, students who receive their education in one of the three education modes (face-to-face, online, or hybrid) are affected by some factors that might influence their engagement with their schools, lessons, instructors, or peers. When the relevant literature is reviewed, it is seen that there are many studies conducted to investigate the *factors affecting student engagement* in different education modes, and some of these studies were summarized in chronological order in this section.

Zepke, Leach, and Butler (2010) reviewed the engagement literature and identified some factors influencing student engagement, which are: *motivation and agency* (students' intrinsic motivation), *transactional engagement* (students' engagement with their teachers and peers), *institutional support* (institutions' support for enabling

convenient learning environment), *active citizenship* (institutions' working together with students to overcome challenges) and *non-institutional support* (support by family members and friends). Afterwards, the researchers conducted a study to identify the strongest factor(s) on student engagement. The data of the study was collected through three different scales. The findings demonstrated that among the six factors, *engagement with teachers* and *motivation* (intrinsic and extrinsic) are the most effective factors having an impact on student engagement.

DeVito (2016) carried out a case study to find out the major factors affecting student engagement in the middle school context, and the study findings indicated five factors: "1) communication, collaboration, active involvement in learning activities, and enriching educational experiences; 2) interactions between students and teachers; 3) levels of academic challenge; 4) supporting classroom environment; and 5) supporting family environment" (p. 75). These factors were found as the most effective ones on students' willingness to attend class activities, their attitude toward education, and their eagerness to succeed academically.

Almarghani and Mijatovic (2017) conducted a study investigating the factors affecting higher education student engagement. They collected the data through a survey, and the study results showed that "availability and active usage of the university's ICT resources**,** the good reputation of the university**,** active teaching methods" (p. 950) are the most influential factors on students' engagement.

Barua, Zhou, Gururajan, and Chan (2018) reviewed the literature with the same purpose, determining the factors affecting student engagement in higher education, and they identified seven key factors: "1) educational resources, 2) social network, 3) material relevance, 4) learning styles, 5) material selection, 6) material usefulness, 7) preparation by educators" (p.1). In their study, the researchers classified these seven factors into two groups: direct and indirect. The direct factors refer to ones that enable learning as a result of the engagement, and they are: learning resources (preparation, selection, usefulness, and relevance), teaching competency, knowledge base, and learning style. The indirect factors are accepted as the ones which facilitate student engagement, and these factors are:

teaching context (institution and delivery mode), social network, and technology (LMS usage).

Lazareva (2018) carried out a case study to explore the factors affecting students' engagement in an online context. As a result of the study, the researcher identified four factors affecting online students' engagement: "1) the online course environment, 2) informal online groups established by students, 3) interactions with co-located peers, and 4) online group dynamics" (p. 349). Lazareva also underlined the importance of "scaffolding from an experienced peer and support from co-located classmates" (p. 349) as one of the main factors increasing student engagement in an online learning context.

Dwivedi, Dwivedi, Bobek, and Zabukovsek (2019) conducted an experimental study to find out the factors affecting students' engagement with online content in blended learning at the tertiary level. The researchers gathered both qualitative and quantitative data. Both the control and experimental group received face-to-face education; however, the experimental group also was required to use online content and attend online discussions on the institution's LMS system. According to the findings of the study, teachers' presence (promptness of instructor's response to online activities), quality of online content (e.g., interactive videos rather than text format material), and the relatedness of the online content to course syllabus are the factors that affect online students' engagement positively.

Alabbasi (2022) carried out a quantitative study to investigate the most significant factors influencing student engagement in online higher education. The data were collected from students and faculty members to reach a broader perspective. The findings of the study revealed that the most influential factors are: technology related issues (e.g., lack of internet connection and/or needed devices), learning experience design (e.g., receiving immediate feedback, using additional methods, using supportive multimedia during lessons), psychological factors (stress, mood, and mental well-being of students), behavioral factors (e.g., instructors' classroom management, greeting students). Among these four, behavioral and learning experience design related factors were found as the strongest ones affecting student engagement in online tertiary education.

Werang and Radja Leba (2022) researched the factors influencing student engagement in online learning in higher education. The data were gathered through interviews with lecturers who delivered online courses. The results of the study pointed out that students' lack of ICT skills, poor learning habits, and, most importantly, lack of access to technological devices and tools such as computers and internet connection are the factors affecting student engagement adversely in online education mode.

All in all, teacher presence (strong or weak), the quality of students' interaction and communication with peers and teachers, the motivation level of students (high or low), the learning atmosphere (supportive, active, or vice versa), the quality of educational resources (ICT resources, course content, materials), and the availability of technological tools (computer, internet connection) are among the most prominent factors affecting student engagement positively or negatively, particularly at tertiary level.

2.2.4 Research studies on student engagement. In this section, the studies that were conducted on student engagement are documented. As the main focus of this study is student engagement in *online* and *hybrid* education modes, the literature body was reviewed and composed considering these two education modes specifically. However, as online and hybrid education types have become more common worldwide after the COVID-19 outbreak, student engagement studies carried out in these education modes and aligned with the current research's scope are scarce. Therefore, this section also includes the studies conducted earlier than the outbreak. First of all, studies exploring the levels of student engagement are presented. Then, studies investigating student engagement based on demographics of students, such as gender and institution type, are given. In the third place, studies examining the correlation between student engagement and achievement are provided. Finally, studies exploring the role of student engagement in predicting achievement are documented.

A study by Robinson and Hullinger (2008) was conducted in a higher education context in the USA. Three different universities participated in the study. The number of participants was 201 (115 women, 86 men), enrolled in at least one online course at their universities. The participants were required to respond to a modified version of the

National Survey of Student Engagement (NSSE), which includes five benchmarks: "level of academic challenge, active and collaborative learning, student interaction with faculty members, enriching educational experience, and a supportive campus environment" (p. 102). The researchers converted the survey into a 10-point scale; the overall engagement result was 5.45, and the scores ranged from 5.13 to 5.87 across the benchmarks. The scores gained from this study were compared with the scores of another study carried out on-campus, and it was found that online students had higher levels of engagement than on-campus students. However, among five benchmarks, the online students' level of academic challenge (e.g., time and effort spent on reading, writing, and preparing for class) was lower than the on-campus students.

A similar study was carried out by Chen, Gonyea, and Kuh (2008) at the tertiary level in the USA. The researchers gathered the data through the NSSE survey, which was collected in 2006. The participants were first-year and senior students, and their number was 189,325. To identify the online learners, a question asking whether they take their courses completely online or not was added, and 3,894 students approved that they were taking their courses online. Then, the researchers compared the level of engagement between online learners and face-to-face learners. The study's findings showed that online learners had a higher level of student engagement than face-to-face learners. According to survey results, online learners had higher levels of academic challenge and reflective thinking (e.g., critical thinking). These learners also stated that they obtained more practical competence (e.g., career skills, technological proficiency), personal and social development (e.g., understanding people from diverse backgrounds), and positive educational experiences. However, according to the findings of this study, online learners were found to be less engaged in one of the five benchmarks, which was collaborative learning. The study's researchers stated that "the online environment provides students more opportunities to be involved in active learning as individuals, but limits students' ability to collaborate with each other" (p. 3).

After the COVID-19 outbreak, NSSE was applied to investigate the effects of the pandemic on student engagement and compare the collected data with the previous years' data. McCormick, Gonyea, Sarraf, Cole, and Kinzie (2021) published a report summarizing the impacts of the pandemic on student engagement. Three hundred fifty-

three higher education institutions with 890,000 first-year and senior students were invited to participate in the survey in the USA, Canada, and four other countries. The number of participants was 211.667. The results revealed that although it was not substantial, there was a decrease in collaborative learning, discussion with diverse others, and student-faculty interaction compared to the data gained in 2018/2019.

In the studies above, NSSE was used to assess student engagement levels. NSSE is a survey mostly applied in the USA yearly, and the participant students are only first-year and senior students at universities, which means the students' demographic information is limited. However, as Krause and Coates (2008) recommended, to improve education policies and practices, student engagement research must investigate how engagement changes based on various student demographics. Considering this, and the demographic information collected from the participants of this research, student engagement studies exploring the differences of gender and institution type (state or non-state) were also included and presented below.

One of the studies researching differences in student engagement based on demographics was conducted by Edgar in 2015. In the study, gender variation in student engagement was examined at one of the Australian Universities. The data were gathered through an engagement scale, and 152 female and 81 male students joined the study. After the analyses, the findings put forth a difference between female and male learners. According to the results, female students displayed a higher level of engagement than male students.

Similarly, Yin and Wang (2016) implemented a study at the tertiary level in China to determine whether student engagement changes across demographic groups and one of the demographics was gender. The data were collected through a survey, and 1131 (female=597, male=533) participants from different universities in China joined the study. The study results showed that female students had a higher level of engagement than male students.

In another study, Aktepe and İslamoğlu (2020) explored whether student engagement levels vary by gender at a tertiary level. The researchers collected the data through the student engagement scale developed by Günüç and Kuzu (2015). The number of

participants was 483 (female=301, male=182) joining from different universities in Turkey. The findings of the study pointed out that female learners' overall level of engagement was higher than male learners. Besides, the researchers analysed the scale's six sub-dimensions (valuing, sense of belonging, cognitive engagement, emotional engagement with peers, emotional engagement with faculty members, and behavioural engagement) to investigate further, and the results showed that female learners had higher levels of engagement in all sub-dimensions compared to their male counterparts.

Some other studies were carried out to determine student engagement differences between state and non-state universities, and one of them was conducted by Gamage, Gamage, and Dehideniya (2022) in a higher education context in Sri Lanka. The study aimed to explore the engagement, satisfaction, experience, and perception of students who transitioned to online and hybrid learning modes from face-to-face learning due to the COVID-19 outbreak. The data were collected through a student engagement survey from state (37%) and non-state (63%) university students, whose total number was 135. The study results revealed that learners studying at non-state universities had higher levels of student engagement than state university learners. In addition, the satisfaction level was higher among non-state university students. Despite these results, the experience and perception of students toward the online and hybrid modes of learning could not be defined as positive due to lack of educational resources, lack of communication with relevant parties, lack of internet connections, lack of interaction, and stress.

In another study by Glapaththi, Dissanayake, Welgama, Somachandara, and Sachinthana (2019), the main purpose was to find out whether any relationship between student engagement and academic achievement existed; however, the researchers also aimed to examine the data according to demographic information collected, and one of the demographics was institution type. One state and one non-state university joined the study, and the number of students was 318. The findings were in parallel with the study by Gamage et al. (2022). In other words, non-state university students had higher engagement levels. As for the findings of the main purpose of this study, the researchers reached the conclusion that there was a positive relationship between student engagement and academic achievement of the participant students.

The result gained by Glapaththi et al. (2019), the positive relationship between student engagement and academic achievement, was also found and well-documented by other scholars. In a meta-analysis by Lei, Cui, and Zhou (2018), sixty-nine independent studies were examined to display the relationship between student engagement and academic achievement, which was mostly determined by grades. For example, Zhu (2010) revealed a significant and strong correlation between student engagement and academic achievement. Some other scholars examined the relationship between the sub-dimensions of student engagement (behavioral, emotional, cognitive) and academic achievement. For example, the study by King (2015) showed that behavioral and emotional engagement were positively correlated with academic achievement. On the other hand, Pietarinen, Soini, and Pyhältö (2014) revealed in their study that cognitive engagement had a positive relationship with academic achievement.

However, the meta-analysis by Lei et al. (2018) includes some other studies which could not find a strong or any relationship between student engagement and academic achievement. For instance, the study by Shernoff and Schmidt (2008) showed that student engagement did not predict the achievement grade of African-American students (N=586) who joined the study from 13 different high schools. A similar result was gained through the study by Chen, Yang, Bear, and Zhen (2013), and the findings revealed that there was no significant correlation between student engagement and achievement grades. There are also studies carried out to find relationships between sub-dimensions of student engagement and achievement, which did not find positive or strong correlations. The findings of the study by Shernoff (2010) indicated that there was no correlation between students' emotional engagement levels and their Math and English achievement grades. The study by Appleton et al. (2006) displayed that the relationship between cognitive engagement and achievement scores was weak. In light of the findings of the studies in the meta-analysis by Lei et al. (2018), the relationship between student engagement and academic achievement remains inconclusive.

There are also some studies conducted with the aim of investigating the role of student engagement in predicting academic achievement. Martin, Martin, and Evans (2017) investigated whether student engagement, specifically behavioral engagement (class participation, homework completion, school absenteeism), predicted middle school

students' motivation and achievement. The authors collected data from 585 sixth- and ninth-grade students through a questionnaire. The structural equation modeling results showed that behavioral engagement significantly mediated the relationship between their motivation and academic achievement. In other words, student engagement contributed to the students' academic success.

Another research by Bonafini, Chae, Park, and Jablokow (2017) was implemented to find out the student engagement effect on the achievement of students who received their education through Massive Open Online Courses (MOOCs) in which discussion forums and visual materials, such as videos are used to engage learners. There were 222 participants who joined the study, and the data were collected via an online survey. The results revealed that students' engagement with online system materials increased the course achievement probability. That is to say, the more students were engaged with the course materials, the more they were successful in their studies.

To sum up, the abovementioned studies displayed that students' engagement level varies according to education mode, gender, and institution type. In addition, the studies conducted to investigate the relationship between student engagement and academic achievement showed that the scholars did not reach similar conclusions. However, the studies investigating student engagement's role in academic achievement revealed that student engagement contributed to learners' academic success.

2.3 Foreign Language Motivation

Motivation is one of the individual differences (learner characteristics) repeatedly studied and researched in the second-language and foreign-language education field since it has been labelled as one of the main predictors of language achievement (Brown, 2007; Dörnyei, 1998; Reid, 2007). For example, Guilloteaux and Dörnyei (2008) emphasized in their study that without adequate motivation, achieving long-term goals (e.g., academic achievement) is impossible, even if learners have notable abilities. As this is the case, language learners adopting low-level motivation might struggle during the learning process, which might lead them to fail. On the other hand, as Dörnyei (1998) stated, highly motivated learners can compensate for considerable language aptitude and learning

condition problems. Considering all of these, motivation has been considered by many researchers and educators as one of the main determinants of foreign language achievement (Gardner & Lampert, 1972; Oxford, 1996).

When determining the second variable of this study, motivation's being a strong predictor in language achievement was considered. However, the main reason for choosing foreign language motivation as the second variable was to contribute to the literature on foreign language motivation in online and hybrid modes of education, which is scarce. As scholars in this field stated, the motivation of learners who received their education in *online* (Hartnett, 2016; Li & Tsai, 2017; Özhan & Kocadere, 2020) and *hybrid* (Peng & Fu, 2021) modes needs to be investigated more. With this in mind, foreign language motivation was taken under scope in this study.

2.3.1 The theoretical framework of foreign language motivation. In the literature, there are several theories (e.g., L2 Motivation Self System Theory by Dörnyei, 2005, Self-Determination Theory by Deci and Ryan, 1985, 2000) regarding foreign language motivation. Considering the scale of the Attitude Motivation Test Battery (Gardner, 1985) used in this study to collect data on foreign language motivation, Gardner's *Socio-educational Model*, which is the first and the most influential theory of L2 motivation (Gu, 2009), was analysed and presented in this section.

The preliminary version of the socio-educational model was the socio-psychological model, which was developed by Gardner's thesis advisor Lambert (1967, as cited in Gardner, 2010b). In this initial version, Lambert proposed that aptitude, attitudes, orientation, and motivation enhance language development and affect self-identity. Then, in 1974, Gardner and Smythe, whose main purpose was to develop a questionnaire (AMTB) based on a theory, proposed the *Socio-educational Model* of SLA (as cited in Gardner, 2019). This model included most of the components of Lambert's socio-psychological model; however, the "self-identity" concept was not identified. Instead, "integrativeness", which refers to the willingness to identify with the other culture, was included in the model. Different from the model developed by Lambert, the socio-

educational model also addressed the difference between formal and informal learning contexts.

After this first version, the model was redefined several times (e.g., Gardner, 1979; Gardner, 1985; Gardner & MacIntyre, 1993; Gardner, 2000; Gardner, 2005; Gardner, 2006). Among many different versions, the socio-educational model developed and adapted in 1985 (Gardner), 2000 (Gardner), and 2005 (Gardner) were explained to show the amendments and adaptations carried out in those years.

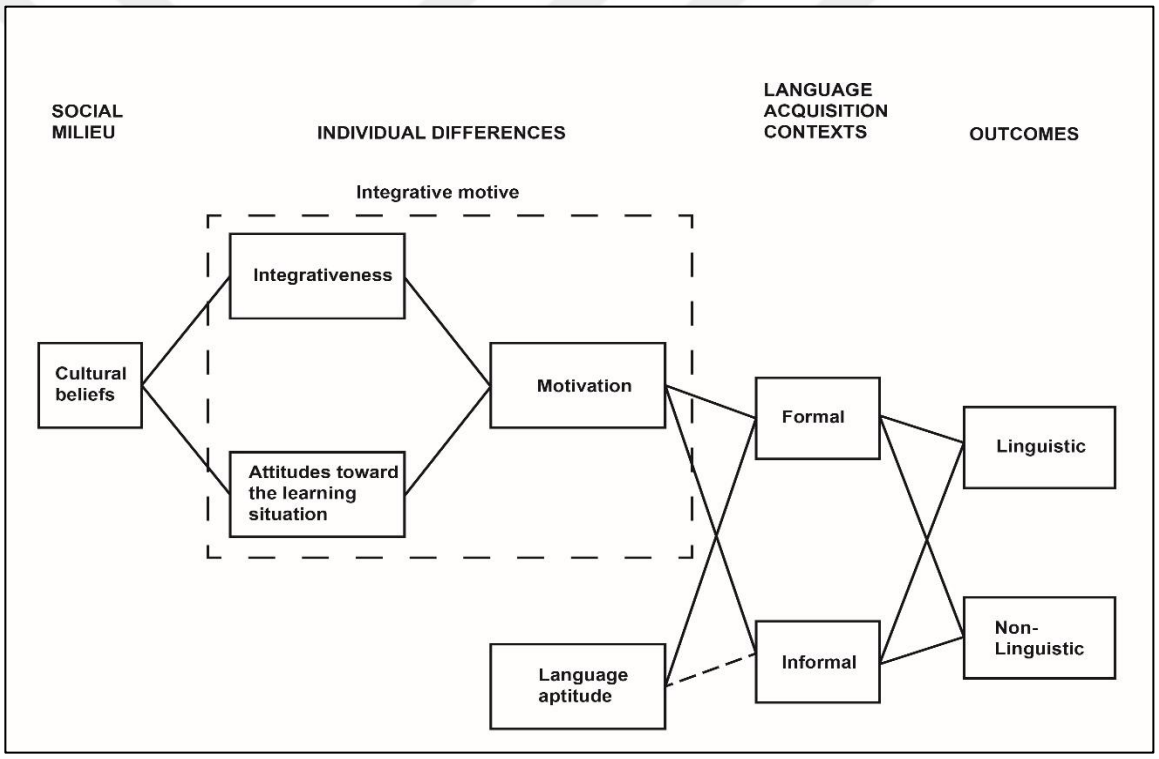

Figure 7. Gardner's socio-educational model (1985).

As Figure 7 illustrates, the socio-educational model adapted in 1985 included four components: 1) social milieu, 2) individual differences, 3) language acquisition contexts, and 4) outcomes. The first component is the *social milieu* which refers to an individual's culture and environment. The component of *individual differences* includes two variables: integrativeness and attitudes toward the learning situation. The former variable (integrative motivation, integrative motive, and integrative orientation) refers to learners'

openness and eagerness to adopt features of another community. The latter refers to learners' manners towards education-related factors such as school, teachers, curriculum, instructions, lesson plans, and evaluation processes (Gardner, 2005; Gardner 2010a). According to this model, these two variables directly contribute to the motivation of language learners who learn the language in formal or informal contexts, the third component, *language acquisition contexts*, in the model. However, as seen in Figure 7, the *outcomes* were conceptualized as linguistic and non-linguistic rather than 'language achievement'.

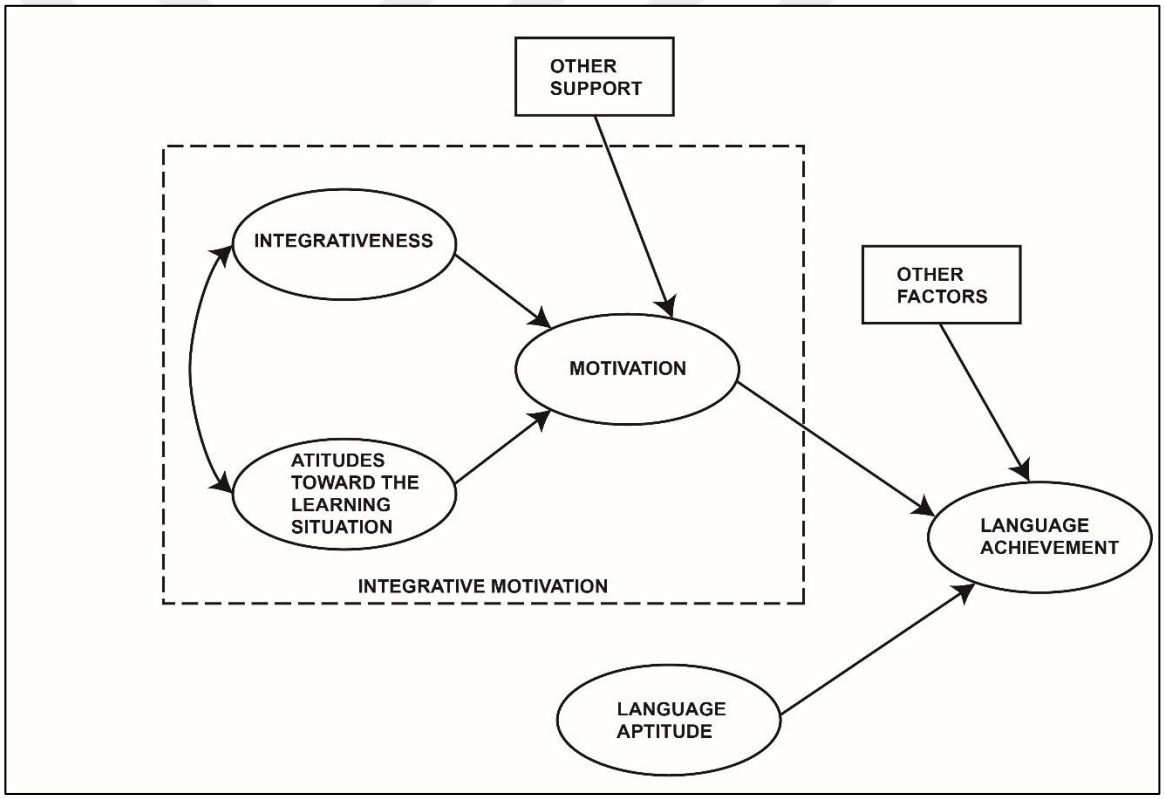

Figure 8. Gardner's socio-educational model (2000).

In the socio-educational model proposed by Gardner in 2000 (Figure 8), there are two correlating variables, integrativeness, and attitudes toward the learning situation, influencing the motivation to learn a second language. Also, according to this model, motivation, language aptitude, and other factors influence language learners' language

achievement. However, it is necessary to state that according to this model, a learner's motivation should include the variables of integrativeness and/or attitudes toward the learning situation to achieve language learning. In other words, if a language learner has a high level of integrativeness and/or attitudes toward the learning situation, and these two are linked to motivation to learn the language, this person may show language achievement. Otherwise, a learner who adopts a high level of motivation not linked to integrativeness and attitude toward the learning situation may not demonstrate consistency in motivation, which may lead to an unsuccessful outcome (language achievement). Integrative motivation, illustrated in the figure, represents a complex relationship among these three variables.

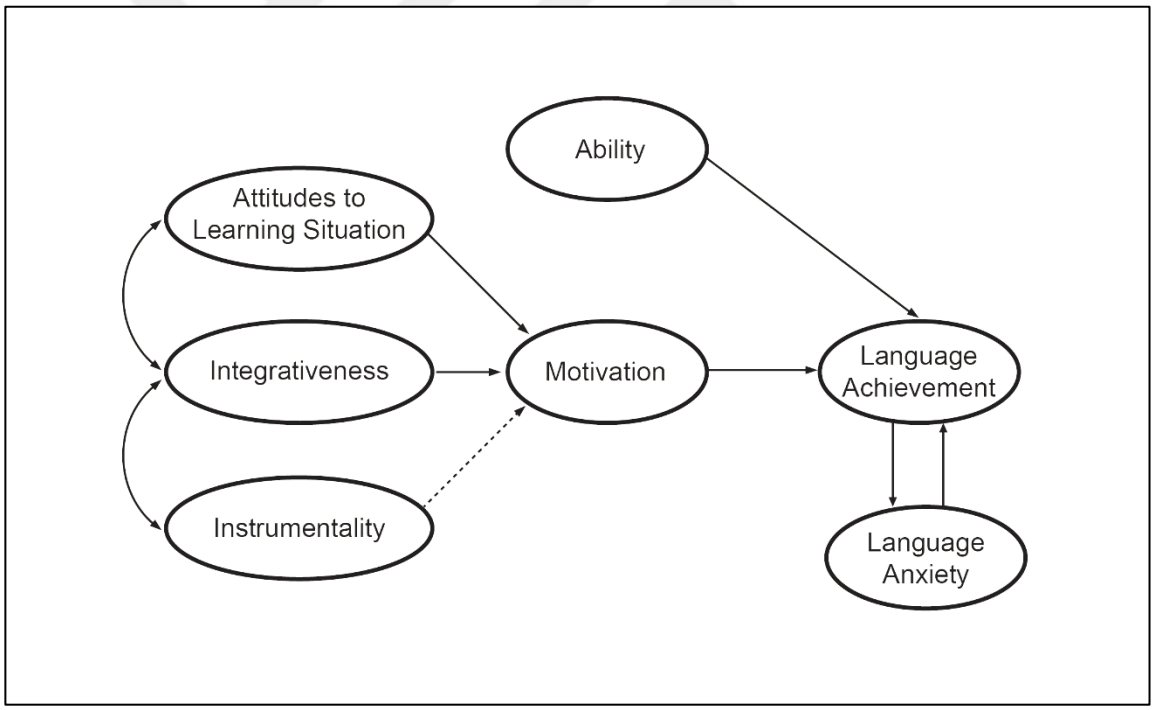

Figure 9. Gardner's socio-educational model (2005).

As Gardner's socio-educational model developed in 2005 suggests (Figure 9), two primary variables are linked to the achievement of foreign language learners. The first is "motivation", and the second is "ability", which includes intelligence and language aptitude. The variables that strongly affect motivation are "*attitudes to learning situation*"

and "*integrativeness*", which are also included in the previous models. Another variable that influences motivation is "*instrumentality",* which "refers to an interest in learning the language for pragmatic reasons that do not involve identification with the other language community" (Gardner, 2001b, p.8). The pragmatic reasons can be getting better jobs or education opportunities. According to Gardner (2005), integrativeness and instrumentality are mediated by motivation. Also, he added that these three dimensions of motivation (Attitudes to Learning Situation, Integrativeness, and Instrumentality) have positive correlations with one another, which means a learner who adopts a high level of integrativeness (i.e., willingness to take on another culture's characteristics) approaches learning situation positively and has a high level of instrumentality.

To sum up, out of these three models outlined above; specifically, the last two propose a correlation between foreign language motivation and language achievement, although there are other variables, such as language aptitude and ability influencing the outcome, which is the success of language learners. In this study, foreign language motivation was considered as a predictor of language achievement based on the theory of socio-educational model(s) developed and adapted by Gardner.

2.3.1.1 The definition and components of foreign language motivation. Dörnyei (1998), who developed the L2 Motivation Self System Theory, defined motivation as "the primary impetus to initiate foreign language learning and later the driving force to sustain the long and often tedious learning process" (p. 117). According to Dörnyei, motivation is a multidimensional construct which has three components:

1. 'Ideal L2 Self', referring to the L2-specific facet of one's 'ideal self' – if the person we would like to become speaks an L2, the ideal L2 self is a powerful motivator to learn the particular language because we would like to reduce the discrepancy between our actual and ideal selves.

2. 'Ought-to L2 Self', referring to the attributes that we believe we ought to possess to avoid possible negative outcomes – this motivational dimension may therefore bear little resemblance to our own desires or wishes.

3.‘L2 Learning Experience’, which concerns executive motives related to the immediate learning environment and experience [...].

(Dörnyei et al., 2006, p. 145)

Deci and Ryan (1985, 2000), who developed the Self-Determination Theory, stated that in order to achieve growth and to feel motivated, people have three universal and innate psychological needs: competence (feeling of being effective in an activity), autonomy (being in control of one’s life, behaviours) and relatedness (feeling connected to others). In this theory, motivation is conceptualized as a construct having many sub-dimensions; however, the most common three components are *amotivation* (lack of intention to act), *extrinsic motivation* (doing an activity for instrumental purposes), and *intrinsic motivation* (doing an activity for pleasure and joy). Although Self-Determination Theory focuses on human motivation rather than L2 motivation specifically, extrinsic motivation and intrinsic motivation are highly studied by researchers in the foreign language education field.

According to Tremblay and Gardner (1995), motivation is a complex construct that is affected by many variables. The scholars suggest that to understand the relationship between language achievement and motivation, the mediators affecting each other and motivation should be identified. By considering the other mediators, motivation is defined by Gardner (1985) as “the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes towards learning the language” (p. 10). That is, there are four elements that motivation encompasses: 1) goal, 2) desire (the willingness to achieve a goal), 3) positive attitudes (enjoying learning the language), 4) effort (the effort put in learning the language) (Gardner, 2001). As a result, motivation in the socio-educational model is conceptualized as a multifaceted construct including three components: *motivational intensity* (i.e., how much effort learners expend in learning the language), *desire to learn English* (i.e., how much personal investment in succeeding in the language learners claim for themselves), *attitudes toward learning English* (i.e., how much enjoyment learners feel while learning the language) (Gardner, 2010a). Apart from these three components, *instrumental orientation* (i.e., pragmatic reasons, such as getting

better jobs or education opportunities) was also included as the fourth component since it is one of the sub-scales of AMTB (Gardner, 1985) used in this study.

2.3.2 Research on foreign language motivation. This section includes the studies conducted to investigate foreign language motivation; however, due to the scarcity of foreign language motivation studies carried out in online and hybrid learning settings, studies investigating the 'motivation' construct in face-to-face, online, or hybrid learning settings were also included. The studies presented in this section focus on the motivation levels of learners, whether learners' motivation levels vary by their characteristic differences (i.e., gender, university type), the relationship between motivation and academic achievement, and the role of motivation in predicting academic achievement.

Gulten, Kulusakli, and Aydin (2016) implemented a study to investigate and compare the motivation levels of language learners who received their language education online (N=255) and face-to-face (N=195) in one of the state universities in Turkey. The data were collected through AMTB; however, only two sub-scales were used: motivational intensity and desire to learn the language. The findings indicated that both groups of students (online and face-to-face) had moderate motivation levels, and there was no statistically significant difference between the groups. In other words, different modes of education did not affect the learners' motivation level.

With a similar purpose, to compare the motivation levels of learners who took their courses on-campus and online, Pasion, Dias-Oliveira, Camacho, Morais, and Franco (2020) carried out a study in Portugal. There were two groups of participants, and their total number was 225. The first group (N= 126) took their education face-to-face in the 2018-2019 academic year, and the second group (N=99) transitioned to online education due to COVID-19 restrictions in the 2019-2020 academic year. The data were collected through a motivation scale, which was applied at the beginning and end of the semesters of two academic years. The study's findings revealed no statistically significant group differences between the pre-and post-tests of motivation. Put differently, online education due to the COVID-19 outbreak had no different effect (positive or negative) on the learners' academic motivation.

Bolatov, Gabbasova, Baikanova, Igenbayeya, and Pavalkis (2021) conducted a study comparing the motivation levels of students who received their courses in online and blended modes due to the COVID-19 pandemic. The study was implemented two times in two different semesters. The first study was applied in the semester of 2020, and the participants (N=273) received their education online. The second study was conducted in the semester of 2021, and 159 participants received their courses in blended mode (a combination of face-to-face and online learning). The data were collected through an academic motivation scale. The study's findings revealed that the motivation level of students who studied their courses in blended mode was higher than those who studied in complete online education mode. The study's authors stated that as the blended learning mode provided opportunities such as feeling college belongingness and having more satisfaction with academic life, the motivation level was higher in the blended education format.

To the best knowledge, the studies comparing the motivation levels of learners who studied their courses in online and hybrid (blended) modes are limited. As such, this section continues with the studies which aimed to investigate whether learner characteristic differences, such as gender and university type, affect motivation levels.

Al-Mubireek (2020) explored whether learners' characteristics have a role in the motivation levels of English preparatory school students in one of the Saudi universities. To collect the data, AMTB was administered to 403 students in the academic year of 2016-2017. One of the learner characteristics that was investigated was gender differences, and the participants comprised 49% female and 51% male students. The findings put forward that female students were more motivated to learn English than their male counterparts.

Another study aiming to investigate the gender differences regarding foreign language motivation of learners was conducted by Halimi, Daniel, and AlShammari (2020) in Kuwait. To collect the data, the authors used the AMTB consisting of eight sub-scales: integrative motivation, motivational intensity, desire to learn English, attitude toward learning English, English class anxiety, English use anxiety, instrumental orientation, and parental encouragement. The number of participants in this study was 203 (126 females, 107 males). According to the results, the female learners scored higher in

six sub-scales: integrative orientation, motivational intensity, desire to learn English, attitude toward learning English, instrumental orientation, and parental encouragement. The findings indicated that the female learners were more motivated to learn the English language than the male learners, who scored higher in English class anxiety and English use anxiety.

However, the study findings by Rahman, Jalaluddin, Mohd Kasim, and Darmi (2021) differed from the studies by Al-Mubireek (2020) and Halimi et al. (2020). The authors aimed to investigate the motivation levels of learners across student demographics, one of which was gender. The adapted version of the AMTB with its two sub-scales (instrumental and integrative motivation) was used to gather the data, and 300 participants (154 male and 146 female) joined the study. The findings demonstrated no statistically significant difference in the participants' motivation levels for learning English regarding gender. In other words, female and male learners had similar levels of English learning motivation. Besides, the results revealed that all students' instrumental motivation was higher than their integrative motivation.

The study by Bektaş-Çetinkaya and Oruç (2010) aimed to compare state and private university students' foreign language motivation levels. The study was conducted in Turkey, and 228 English preparatory students from one state (N=115) and one private (N=113) university joined the study. The data were collected through a questionnaire, and the findings showed that there was a significant difference between private and state university students' levels of foreign language motivation. In another saying, private university students had higher levels of foreign language motivation than state university students. Also, the authors found that the students' main motivation (reason) to learn English was instrumental. Most of the private and state university students indicated that they wanted to learn English for their future careers.

Apart from studies examining whether the motivation levels of learners vary across student demographics, the studies conducted with the purpose of exploring the relationship between foreign language motivation and academic achievement (language achievement) and the role of motivation in predicting foreign language achievement are also documented in this section.

Güneş and Alagözlü (2020) carried out a study to examine the relationship between foreign language motivation and academic success in Asynchronous Distance Learning (ADL) and Blended Learning modes. The participants (N=144) were freshmen students in one of the state universities in Turkey. The data tool was the adapted version of AMTB. One hundred thirteen students were in the ADL group, and English lessons were delivered through an online platform that included videos and materials to study for 15 weeks. The BL group consisted of 31 students who received some of their English lessons face-to-face and some through the same online platform. The results of the study revealed that there was a significant and positive relationship between BL students' motivation and academic success. However, there was no relationship between ADL students' motivation and academic success.

Another study aiming to investigate the relationship between learning outcomes and foreign language motivation in a blended learning environment was implemented in China by Peng and Fu (2021). The number of participants was 960 (499 females and 461 males), and they participated in the study from six different universities. As the students studied their English lessons in a blended fashion, they attended face-to-face classes twice a week and studied English through online platforms outside of the class. The authors collected the data through a motivation questionnaire and in-person interviews with ten students. According to the quantitative data findings, there was a significant correlation between motivation and learning outcomes. In addition to these findings, it was found from the student interviews that students' instrumental (extrinsic) motivation was higher than intrinsic motivation. Most students (7 out of 10) stated that their motivation to learn English was to pass the exams and find well-paying jobs.

The research by Khodadady and Khajavy (2013) investigated the role of motivation and anxiety in predicting the foreign language achievement of EFL Iranian learners. The researchers collected the data from 264 students through a foreign language motivation questionnaire and Foreign Language Classroom Anxiety Scale (FLCAS). The results of structural equation modeling demonstrated that both motivation and anxiety significantly predicted the English achievement of language learners. However, foreign language motivation was found as a stronger predictor of achievement.

In conclusion, research findings regarding motivation indicate that although the motivation levels of learners did not differ in face-to-face and online education modes, the blended (hybrid) mode of education positively affected students' motivation levels. Regarding motivation levels across learner characteristics, the studies point out a difference between female and male students, and the former was found to be more motivated than the latter. Although there is not a sufficient number of studies comparing state and foundation universities, the study by Bektaş-Çetinkaya and Oruç (2010) demonstrated that foundation university students have higher motivation levels than state university students. Additionally, the studies exploring the relationship between foreign language motivation and learning outcomes (achievement) addressed that significant and positive correlations exist. Finally, the study by Khodadady and Khajavy (2013) showed that foreign language motivation was a stronger predictor of foreign language achievement than foreign language anxiety, which is the last variable of this research and its literature body given below.

2.4 Foreign Language Anxiety

Anxiety, as a psychological construct, refers to "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system" (Spielberger, 1983, p.1), and it is one of the affective variables that has been overly studied in the SLA. According to scholars, there are three types of anxiety. The first one is the *trait anxiety* which is experienced in any context. The second is the *state anxiety* activated by the nervous system when an individual faces a threatening situation (Spielberger, 1983). A third type of anxiety is *situation-specific anxiety*, which occurs only when individuals feel in some specific situations but not in others (MacIntyre, 1999). Foreign language anxiety has been categorized as situation-specific anxiety and proved to be a significant variable that is negatively correlated with foreign language achievement (Botes, Dewaele, and Greiff, 2020; Gregersen, 2020; Gregersen & Horwitz, 2002; Horwitz et al., 1986; Young, 1986; Aida, 1994; Liu, 2006).

Considering the consistent research findings indicating the negative correlation between foreign language anxiety and language achievement, and the new learning modes

(online and hybrid) that might have caused some challenges to language learners, foreign language anxiety was acknowledged as a significant construct to be researched, and therefore it was determined as the third variable in this study.

2.4.1 The theoretical framework of foreign language anxiety. In the 1970s, the role of anxiety in foreign language learning was researched by many scholars. However, the findings of these studies were contradictory. While some scholars found that anxiety and foreign language achievement were negatively correlated (Tucker, Hamayan, & Genesee, 1976), some other researchers found a positive (Chastain, 1975) or no correlation (Young, 1986). One of the reasons behind these inconsistent results was that the anxiety was viewed from a more general perspective rather than specific to language learning. To put it differently, in that early studies state-trait anxiety viewpoint was adopted instead of situation-specific anxiety. According to Scovel (1978), the other reasons for the inconsistent results of early research were construct ambiguity, confusion in the definitions of anxiety, and lack of proper measures for language anxiety. Therefore, the author recommended that the researchers who study this construct need to be specific about the type of anxiety. Similarly, Gardner (1985) stated that the measures concerning foreign language anxiety rather than general anxiety measures were more proper for studies researching language anxiety. He also added that not all types of anxiety would have an effect on second or foreign language learning, but "a construct of anxiety which is not general but instead is specific to the language acquisition context is related to second language achievement" (p. 34). Other scholars also agreed that the anxiety which was explored in the previous studies was not specific to foreign language learning (MacIntyre, 1999; Young, 1994).

In 1986, Horwitz, Horwitz, and Cope developed a theory that accepted foreign language anxiety as a unique component. Then, these researchers developed the Foreign Language Classroom Anxiety Scale (FLCAS) as a research instrument to measure anxiety experienced in foreign language learning settings. Horwitz et al. (1986) conceptualized foreign language class anxiety as a multi-faceted construct having three components: communication apprehension, test anxiety, and fear of negative evaluation, and these components are also the sub-dimensions of FLCAS.

The theory of foreign language anxiety was approved by the scholars who used FLCAS in their studies and reached consistent findings indicating the negative correlation between anxiety and foreign language achievement and performance (Djigunovic, 2006; Horwitz, 1991; MacIntyre, 1988; MacIntyre & Gardner, 1989; Tallon, 2009). In this way, the uniqueness of foreign language anxiety and the reliability of the scale (FLCAS) was acknowledged in the SLA field.

2.4.1.1 The definition and components of foreign language classroom anxiety. Foreign language anxiety was defined by several scholars in the SLA field. According to Clement (1980), foreign language anxiety is a complex construct dealing with learners' feelings, self-esteem, and self-confidence. Young (1992) also stressed this construct's complexity and defined foreign language anxiety as a psychological phenomenon specific to language learning. MacIntyre and Gardner (1994b) conceptualized this complex construct more specifically, and they stated that foreign language anxiety refers to "the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning" (p. 284). Similarly, Zhang (2001) stated that foreign language anxiety is a psychological tension that learners experience while performing a learning task. All these conceptualizations were summed comprehensibly by Horwitz, Horwitz, and Cope (1986), who were the first scholars to define foreign language anxiety as a type of anxiety peculiar to foreign language learning, and they stated that foreign language anxiety is "a distinct complex of self-perceptions, beliefs, and behaviours related to classroom language learning that arise from the uniqueness of the foreign language learning process" (p. 128).

Additionally, as stated earlier, Horwitz et al. (1986) identified three components: communication apprehension, test anxiety, and fear of negative evaluation. These components are also the sub-dimensions of the Foreign Language Classroom Anxiety Scale (FLCAS) administered in this study. The definitions of the foreign language anxiety components are presented below.

2.4.1.2 Communication apprehension. According to Horwitz et al. (1986), communication apprehension refers to "a type of shyness characterized by fear of or anxiety about communicating with people" (p. 127). People who experience trouble speaking in groups or public or in listening to a spoken language have a higher possibility of experiencing difficulty speaking in a foreign language class in which learners' performance is generally monitored or evaluated. According to Horwitz et al. (1986), learners who experience communication apprehension may exhibit two types of behaviour: either they prefer to be silent or speak more, which makes them less anxious. Similarly, McCroskey (1984) stated that people experiencing communication apprehension might avoid, withdraw or disrupt communication.

2.4.1.3 Test anxiety. The second component of FLCAS, test anxiety, was defined by Gordon and Sarason (1955) as "a type of performance anxiety stemming from a fear of failure" (as cited in Horwitz et al., p. 127). Zeidner (1998) characterized test anxiety as "the set of psychological, behavioral responses that accompany concern about possible negative results or failure on an exam or similar evaluative situation" (p. 17). Both definitions underline the fact that test anxiety occurs mainly due to fear of failure in exams. Horwitz et al. (1986) explained that language learners who set high expectations for themselves generally experience this type of anxiety. The scholars also added that oral tests have the highest possibility of triggering test and oral communication anxiety simultaneously.

2.4.1.4 Fear of negative evaluation. The last component, fear of negative evaluation, was conceptualized by Watson and Friend (1969) as "apprehension about others' evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively" (p. 448). In foreign language classrooms, learners' performance is often evaluated by their teachers or peers, and therefore students feel anxious and uncomfortable, which influences their class performance and engagement in a negative way. Aida (1994) stated that learners who experience fear of negative evaluation "sit passively in the classroom, withdraw from classroom activities that could

otherwise enhance their improvement of the language skills" or even "cut class to avoid anxiety situations" (p. 157). Besides, according to Horwitz et al. (1986), it is necessary to differentiate test anxiety and fear of negative evaluation, which may seem similar. Fear of negative evaluation is a broader concept not experienced only in test-taking situations; it might be experienced in any social, evaluative situation, such as during a job interview.

2.4.2 Research on foreign language anxiety. This section includes studies investigating learners' foreign language anxiety levels, whether the level of anxiety changes across student demographics, the relationship between foreign language anxiety and foreign language achievement, and the role of foreign language anxiety in predicting language learners' achievement.

Jiang and Feng (2020) researched the anxiety levels of learners who studied their English courses online during the pandemic in China. Fifty-six (37 female and 19 male) first-year students participated in the study. The researchers collected both quantitative and qualitative data for this study. To collect the quantitative data, the FLCAS was used; however, the researchers refined the scale and analysed the findings in five categories: 1) negative attitude toward English learning, 2) speech anxiety (fear of speaking English), 3) test anxiety, 4) negative evaluation anxiety, and 5) fear of taking English classes. As for the qualitative data, semi-structured interviews were carried out. The quantitative data findings showed that students had a moderate level of anxiety. The results of each category demonstrated that students 1) had a slightly negative attitude towards English learning, 2) had a higher speaking anxiety score than the scores of the first category, 3) had lower test anxiety scores than the first and the second category results, 4) had a moderate level of negative evaluation scores, 5) had a low level of fear of taking English classes. The interview findings indicated that students found online classes less anxiety-provoking than face-to-face English classes; however, they shared that they felt nervous when speaking. In short, this study revealed that students had high speaking anxiety levels while receiving their English classes online.

Yaniafari and Rihardini (2021) conducted a study to explore and compare foreign language anxiety levels of learners who took English classes face-to-face (before the pandemic) and online (during the pandemic) at a tertiary level in Indonesia. The number

of participants was 120, who joined face-to-face speaking classes before the pandemic and online speaking classes when they transitioned to distance education in the 2019-2020 academic year. The data were collected through FLCAS, and the researchers included one open-ended question investigating the reason why students felt anxious. The findings showed that students felt more anxious when they had face-to-face speaking classes. The researchers analysed the open-ended question according to the three components of FLCAS (communication apprehension, test anxiety, and fear of negative evaluation), and the findings showed that fear of negative evaluation was the most influential factor. Most learners stated that they are afraid of being evaluated negatively by their teachers or peers when they make some mistakes. Therefore, they felt less anxious when attending online speaking classes. Considering the study's findings, the researchers suggested that speaking classes might be carried out online to improve foreign language learners' speaking skills as it provides learners with a more comfortable learning environment.

Prima, Riyanto, and Hartono (2022) carried out a similar study comparing anxiety levels in face-to-face and online modes in a private university in Indonesia. The researchers collected the data by using the FLCAS. The total number of participants was 145; sixty-seven students attended face-to-face classes, while 78 joined online classes. The findings revealed that both groups had moderate anxiety levels, and there was no significant difference between face-to-face and online students. When the components of FLCAS were analysed, fear of negative evaluation was found as the dominant factor that caused anxiety among both groups of participants.

The study by Sumarsono, Haryadi, and Bagis (2021) was conducted to research foreign language anxiety in a blended learning mode in one of the universities in Indonesia. The study aimed to determine the effect of blended learning on the learners' anxiety and explore the factors contributing to anxiety during speaking classes. The data were collected through FLCAS and interviews with 35 participants. The study's researchers analysed every item of the scale with 33 items. The scale results showed that students experienced anxiety, particularly in speaking classes in the blended learning mode. Also, the interviews revealed that the contributing factors were lack of confidence, fear of making mistakes, insufficient vocabulary knowledge, and low level of English proficiency.

The studies above revealed that learners' foreign language anxiety levels were generally moderate, and the most common type of anxiety experienced by learners was the fear of negative evaluation due to differing factors. The findings are inconclusive when comparing the anxiety studies' results in terms of education delivery mode. In other words, while some studies indicated that online education was less anxiety provoking than face-to-face education, others showed that the differences in anxiety levels between online and face-to-face education modes were insignificant. As for the hybrid (blended) mode of education, the findings of the anxiety levels of learners were similar to the online and face-to-face education modes. This section continues with studies investigating the role of gender in foreign language anxiety.

The research study by Park and French (2013) focused on the role of gender in foreign language anxiety in Korea at a higher education level. The data were gathered through the FLCAS, and 368 males and 580 females enrolled in an English course participated in the study. The researchers also aimed to find out the role of gender and anxiety in L2 achievement. The findings regarding the role of gender in foreign language anxiety showed that female learners had higher anxiety levels than their male counterparts. Also, the results of the study pointed out that female students with high anxiety had higher L2 grades than male students with low anxiety.

Similarly, Mohtasham and Farnia (2017) researched foreign language anxiety at one of the universities in İran. One of the foci of the researchers was to investigate the gender role in anxiety levels. The participant students were 175 EFL learners (125 females and 50 males). The data were collected via FLCAS, and the findings showed similarity with the study results by Park and French (2013). That is, it was found that the anxiety level of the female students was significantly higher than that of male students.

Another study by Elaldı (2016) was conducted at one university in Turkey to compare the levels of the students who participated in the study in two phases: the preparatory class and the fourth grade. Also, the researcher aimed to explore the role of gender differences in foreign language anxiety levels. Fifty-seven female and 41 male students took part in the study voluntarily. The data were obtained through FLCAS, and the results demonstrated that the students had a moderate level of anxiety in both phases; however, the level of anxiety was significantly higher when they were in fourth grade. The findings

regarding gender differences showed that male students experienced higher anxiety levels than female students.

In the foreign language anxiety literature, studies investigating gender differences have conflicting findings. While some other studies found that female learners have higher anxiety levels (Çakıcı, 2016; Koul, Roy, Kaewkuekool & Ploisawaschai, 2009), some others found that male learners have higher anxiety levels (Campbell & Shaw, 1994; Zhang, 2000). However, other study findings also indicated no gender differences among foreign language learners (MacIntyre, Baker, Clement & Donovan, 2002; Matsuda and Gobel, 2004). As Park and French (2013) stated, these contradictory findings might be due to socio-cultural views on anxiety.

This section also includes the studies conducted to find out the relationship between foreign language anxiety and L2 achievement, along with the studies researching the role of anxiety in predicting foreign language achievement.

As stated in the previous section, earlier studies conducted to find out the relationship between foreign language anxiety and L2 achievement had contradictory findings. After the theory of Foreign Language Classroom Anxiety and the instrument FLCAS by Horwitz et al. (1986), studies displayed more consistent findings indicating a negative correlation between foreign language anxiety and L2 achievement. Some current studies confirming this negative correlation in the literature are presented below.

One of the studies investigating the relationship between foreign language anxiety and L2 achievement was implemented by Doğan and Tuncer (2016). The researchers carried out their study with 683 preparatory school students in one of the universities in Turkey, and the data were collected through FLCAS. The findings of the study confirmed the previous studies by finding a negative correlation between foreign language anxiety and L2 achievement.

Another study by Subekti (2018) was carried out at a tertiary level in Indonesia. The researcher aimed to investigate the relationship between foreign language anxiety and the spoken performance of 202 non-English major university students. The data were collected via FLCAS, and the study results showed that the learners' oral performance was negatively correlated with their foreign language anxiety levels. The researcher also explored the relationship between three components of FLCAS (communication

apprehension, test anxiety, and fear of negative evaluation) and L2 speaking grades. The findings were similar, indicating all three components had a significant and negative correlation with L2 achievement.

Botes, Dewaele, and Greiff (2020) aimed to explore the relationship between five types of academic achievement (general academic achievement, reading-, writing-, listening-, and speaking academic achievement) and foreign language anxiety through a meta-analysis. The researchers reviewed 67 studies conducted between 1986 and 2018. FLCAS was used as a data collection instrument in these studies. The total number of participants was 14,128 across many countries. Most participants were English learners; however, there were other foreign language learners, such as Turkish, French, Arabic, and Spanish. The majority of the participants received their language education through a university course. The meta-analysis findings confirmed the negative relationship between foreign language anxiety and five types of academic achievement.

Another study by Tuncer and Doğan, which was carried out in 2015, aimed to identify the extent of foreign language anxiety in predicting L2 achievement. The researchers collected the data via FLCAS from 271 students in an English preparatory school at a state university in Turkey. The scale was applied two times: one at the beginning and the other at the end of the semester. According to the first applied survey results, anxiety was not a strong predictor at the beginning of the semester; however, the second survey results showed that students' anxiety levels evolved towards the end of the semester, making anxiety a powerful predictor of foreign language achievement.

Özer and Akçayoğlu (2021) conducted a study to determine the extent of three variables, which are foreign language self-efficacy, self-regulation, and foreign language anxiety, in predicting L2 achievement. The data were collected through three scales, and FLCAS was used for the foreign language anxiety data collection. The participants were 344 EFL students studying at one of the state universities in Turkey. According to research findings, FL self-efficacy was the strongest and positive predictor of L2 achievement among three variables. Foreign language anxiety was found as a negative predictor, although it was not as strong as FL self-efficacy.

In conclusion, the literature body showed that except for the relationship between foreign language anxiety and L2 achievement, which is consistently negatively correlated,

studies investigating anxiety levels in different education modes (face-to-face, online, hybrid), comparing genders, exploring the role of anxiety in predicting L2 achievement need to be researched more to reach more consistent findings.

Chapter 3

Methodology

3.1 Introduction

This chapter begins with presenting the research design of this study, and it proceeds with the research settings and the participants. Then, it continues with the procedures and data collection instruments. In the final part, the limitations of this study are given.

3.2 Research Design

The research design of this study is a mixed-method design, as both quantitative and qualitative approaches were applied throughout it. The mixed-method design is a research design in which both forms of data (quantitative and qualitative) are gathered and used to gain a better and deeper understanding of the research problem (Creswell, 2014). In other words, the numerical data from quantitative data and the narrative data from qualitative data are combined to strengthen the understanding of the problem under research. However, a researcher who adopts a mixed-method design in a study may also combine two approaches in many ways rather than only merging numerical and narrative data. They may hypothesize both quantitative and qualitative research questions, apply random and purposeful sampling procedures, analyse data statistically and thematically, and present conclusions objectively and subjectively (Tashakkori & Creswell, 2007).

By implementing a mixed-method design, it is assumed that the limitations of pure quantitative or pure qualitative design might be overcome (Creswell, 2014). Edmonds and Kennedy (2017) support this assumption by stating that a mixed-method design enables investigators to analyse research variables “at a deeper level, where quantitative strand reveals what qualitative strand leaves out and vice versa” (p. 178). Similarly, Richards and Morse (2012) add that a qualitative study might have some aspects that can be measured statistically and enhance the understanding of the phenomenon, or a quantitative study may include some aspects which cannot be measured, but the qualitative approach may provide meaning and insights (p. 93).

Mixed method design is implemented through several approaches: convergent parallel, explanatory sequential, exploratory sequential, and embedded (Creswell, 2014; Edmonds & Kennedy, 2017). When the *convergent parallel approach* is applied in a study, both quantitative and qualitative data are collected at the same time. Then, two separate data are analysed simultaneously, and the results are compared and contrasted to determine whether the findings confirm or disconfirm each other (Creswell, 2014). The *explanatory sequential approach* is a two-phase approach where the focus is on quantitative data, which are collected and analysed in the first step. When the quantitative data findings need more explanations, a researcher proceeds to the other phase, which is collecting qualitative data. That is, the purpose of utilizing the qualitative approach is to enable a researcher to interpret quantitative findings more accurately (Creswell, 2014). The *exploratory sequential approach* is the reversed version of the explanatory sequential approach, which means a study starts with qualitative data, and if necessary, the quantitative approach is applied in the second phase to improve the measurement and find out whether the small-scale data gained from the qualitative study can be generalized to larger populations (Creswell, 2014). The last mixed-method design approach is the *embedded approach*, in which both forms of data are collected simultaneously or sequentially, and one plays a primary role while the other has a secondary role (Creswell, 2014). To clarify, a researcher may start a study with quantitative data; however, qualitative data, which might be gathered before, during, or after the research, can be embedded into the primary data to better understand the research study.

In this study, the convergent-parallel approach was implemented among these four mixed-method design approaches. That is, both quantitative and qualitative designs were integrated into all steps (from hypothesizing research questions to presenting findings) of this study. To collect the quantitative data, non-experimental surveys were utilized, including three scales (student engagement scale, foreign language motivation scale, and foreign language anxiety scale) along with demographic questions. As for the qualitative part of this study, the data were gathered through individual interviews, open-ended questionnaires, and focus group interviews.

3.3 Research Settings and Participants

The research settings of this study include two universities (one foundation, one state) located in different cities in Turkey. These universities joined this study during both *online* and *hybrid* education periods. In total, 489 participants (469 EFL learners and 20 EFL instructors) took part in this study. The details of the research settings and the participants are documented below.

3.3.1 Research settings. Since this study was carried out both during the online education period (2020-2021 academic year) and the hybrid education period (2021-2022 academic year), research settings are divided into two parts. Online education research settings constitute the first part, and the study was conducted at two universities in Turkey. One of these universities is a foundation university, and the other is a state university. Hybrid education research settings are the same universities that participated in this study during the online education period. The detailed description of each university setting is presented separately for both education periods.

3.3.1.1 Research settings of the online education period. The research settings of the online education period includes two universities located in different cities in Turkey. As stated, the first research setting is a foundation university, and the second study setting is a state university. Firstly, general information about each university is presented. Then, detailed information regarding the universities' preparatory programs and the adaptations from face-to-face to online education is given.

3.3.1.1.1 University 1. The first research setting is a foundation university in İstanbul, Turkey. This university offers courses in six different faculties: business, engineering, social sciences, aviation and aeronautical sciences, law, and architecture and design. As the medium of instruction is English in these faculties, students who register in this university are required to be proficient enough in English language skills. Upon entrance to the university, all students take the English placement test. If students' placement grade is lower than a specific score (out of 100), they are placed into three different levels (A2, B1, B2) based on their success grades. The students who score high

(above a specific score out of 100) in the placement exam are required to take the proficiency exam. If students' proficiency exam score is 65 or above, they start taking their faculty courses in their undergraduate departments.

The students who are placed at appropriate levels start their English language education in the preparatory program. Each level lasts 16 weeks (one semester), and students have 20 hours of lessons every week. When students complete their levels with a minimum of 65 points, they start studying at a higher English level the following semester. All students are to study at the B2 level to be equipped with the necessary English language skills; therefore, students who start to study in the preparatory program as A2 level learners are offered a summer school module to complete their studies at the B2 level. At the end of the B2 level, students take the proficiency exam to certify their English language competency. If they are successful, they start their undergraduate programs in the upcoming semester or academic year.

In all levels (A2, B1, B2), students practice and improve their reading, listening, speaking, writing, and use of language skills in an integrated way. At each level, different coursebooks with their online platforms and in-house materials are used to support students' language learning process. The assessment system includes formative, summative, and continuous assessment types.

When this university started to deliver online courses due to the COVID-19 pandemic, the preparatory program administrators (curriculum and assessment members, line managers, and assessment specialists) made necessary adaptations in the layout of materials, the types and weightings of exams, and the requirements of participation (attendance).

As for the materials, firstly, course books' online platforms and the activities on these platforms, which were used as optional supplementary materials during face-to-face education, started to be used as daily and weekly assignment components to make online education more interactive. Also, all in-house materials were revised and transferred into digital documents like PowerPoint presentations and online quizzes to be used during the course delivery and shared with students.

When it comes to the assessment, the types and the weightings of the exams were changed. Before online education, each level had a mid-term exam (formative assessment). This exam was eliminated from the assessment system, and instead, the number of continuous exams was increased to provide ongoing feedback to students about their performances. In addition to these exams, final exams (summative assessments) were carried out at the end of each level. Also, as the students' individual performances in their daily and weekly tasks gained more importance in online education mode, the weightings of all the tasks and exams were modified accordingly.

Another change was made to class participation (attendance) requirements. While 80% of participation in the lessons was a must in face-to-face education, attending online classes was not compulsory during the whole online education period. That is, attendance was not taken during online education owing to the high possibility of technical issues such as lack of internet or disconnection problems.

However, regarding the curriculum design, no changes or adaptations were made. The syllabuses used for each level in the face-to-face education time continued to be used in the online education period.

The online lessons were delivered through the LMS and Zoom platforms, and each lesson lasted 50 minutes, which was the same as face-to-face education. The instructors were flexible in designing their lessons synchronously and asynchronously. To clarify, instructors and students connected to online platforms (LMS, Zoom) when the instructors planned to deliver their courses synchronously. When instructors designed the lessons asynchronously, they assigned daily tasks to be completed by students at specified lesson times.

Finally, all the exams were administered through the use of the university's LMS system and the Zoom platform. All of the exams were proctored by class instructors. When students experienced any technical issues during the exam times, incident reports were filled in by the instructors and sent to the assessment members. After the reports were analysed, make-up exam procedures were applied.

3.3.1.1.2 University 2. The second research setting is a state university located in Kocaeli, Turkey. The faculties of the university are engineering, science, architecture, business, and administration. Some of the departments' medium of instruction is Turkish, and some departments deliver their courses in English. Students whose faculty courses are offered in Turkish do not study in the preparatory program, and they start their undergraduate programs once they register for the university. All the other students whose department courses are in English must take the proficiency exam at the beginning of the first semester. If students get a minimum of 70 points out of 100, they begin their studies in their departments.

Students who cannot pass the proficiency exam successfully take the English placement exam and are placed into the appropriate language levels depending on their placement exam scores. There are two different levels in this university: A (covering A1 and A2) and B (covering B1 and B2) levels. Low achievers are placed in the A levels, and high achievers start their language education at the B levels. Each module lasts sixteen weeks (one semester), and 20 lessons are delivered weekly. If students have a minimum of 65 points out of 100 at the end of the first semester, they can continue their language education in the second semester. However, B module starters study at the same level throughout one academic year since they must take and pass the proficiency exam, which is held only at the end of the second semester. Also, students who cannot successfully complete their levels at the end of the second term must pass one of the proficiency exams held at the beginning of the fall semester and at the end of the spring semester in the following academic year. Similar to the first research setting, students can begin their faculty programs when they pass the proficiency exam.

In both levels, all language skills (reading, listening, speaking, writing, and use of language) are taught in an integrated way through course books and instructor-prepared materials. As for the assessment, formative, continuous, and summative assessment tools are utilized to evaluate students' performances.

Once the university began its online courses, the preparatory program only adapted to the lesson durations. One lesson lasted 40 minutes during face-to-face education, but this duration was decreased to 30 minutes when the lessons were held online. The types

and weightings of the exams and the curriculum design were neither changed nor adapted; they were used as they were.

The preparatory program used the Microsoft Teams platform while delivering the online lessons, which were carried out synchronously. During the synchronous classes, attendance was taken, and students were expected to attend their lessons up to 85%. Also, the exams were administered through the same online platform, and the class instructors proctored these exams. Similar to the previous setting, in the case of technical issues experienced by students, the make-up exams were provided by following specific procedures.

3.3.1.2 Research settings of the hybrid education period. As stated, the research settings of the hybrid education period are the same universities that participated in this study during the online education period (2020-2021 academic year). Therefore, only the changes and adaptations made by these two universities from online education to hybrid education are presented below.

3.3.1.2.1 University 1. The first research setting is the foundation university, which took part in this study during the online education period. Detailed information regarding this university and the English preparatory program is presented under the title of *'University 1'* in the previous section.

Right after the announcement of the hybrid mode of instruction by the Council of Higher Education (CoHE), the preparatory program administrators of this university designed its courses accordingly. In other words, 60% of the lessons were organized to be delivered face-to-face, and 40% were designed to be delivered online. As face-to-face lessons were integrated into education after one and a half years of online education, some changes were adopted to decrease the possibility of the virus spreading in the classrooms and increase the efficiency of language education.

The first adaptation was the duration of the lessons. As students and instructors started to use classrooms and were required to wear hygiene masks throughout the day, the lessons were shortened to 40 minutes from 50 minutes. The duration was the same (40

mins) for the online lessons, and they were carried out synchronously only through the LMS of the university and the Zoom platform. Another change was in the administration style of the exams, which were carried out face-to-face to increase the reliability of the exams and decrease the possibility of technical problems.

Apart from these adaptations, there were no significant changes in other areas. The preparatory program continued using the same coursebooks with their online platforms. The weightings and the types (continuous and summative) of the exams were similar to the ones carried out during the online education period. Also, attendance was not compulsory during the hybrid education period as well; however, the participation of students was integrated into the assessment to enhance student engagement. To clarify, when students attended the classes, they were rewarded with grades that were part of the assessment.

3.3.1.2.2 University 2. The second research setting is the state university, whose detailed information regarding this university and the English preparatory program is given under the title of '*University 2*' in the previous section.

Similar to the first research setting of the hybrid education period, the administrators of the preparatory program adjusted their English education courses according to CoHE regulations, meaning the lessons were conducted 60% face-to-face and 40% online. Regarding the adaptations, the only change was made to the duration of the lessons. While a lesson was 30 minutes long during the online education period, it became 40 minutes during the hybrid education period.

Aside from this change, the preparatory program used the same coursebooks and followed the same curriculum design. Online lessons continued to be carried out synchronously through the Microsoft Teams platform. Also, attendance was compulsory, as it was during the online education period. The weightings and the types (formative, continuous, summative) of the exams were the same, but they were administered face-to-face to increase the reliability of the assessment and avoid possible technical issues. The research settings of this study, including both periods, are presented briefly in Table 1 below.

Table 1

Research Settings of the Online and Hybrid Education Periods

	University 1	University 2
Type of university	Foundation	State
Location	İstanbul	Kocaeli
Medium of instruction	English	English and Turkish
System in effect	Modular	Modular
Lessons in a week	20	20
ONLINE EDUCATION PERIOD		
Adaptations for online education	Materials Exam weightings Attendance requirements	Lesson Duration
Attendance	Not taken	Taken
Lesson duration in face-to-face education mode	50 minutes	40 minutes
Lesson duration in online education mode	50 minutes	30 minutes
Lesson types	Asynchronous and Synchronous	Synchronous
Exams	Proctored by class instructors	Proctored by class instructors
HYBRID EDUCATION PERIOD		
Adaptations for hybrid education	Lesson duration Exam administration	Lesson duration Exam administration
Attendance	Not taken	Taken
Lesson duration in online education mode	50 minutes	30 minutes
Lesson duration in hybrid education mode	40 minutes	40 minutes
Online lesson types	Synchronous	Synchronous
Exams	Administered face-to-face	Administered face-to-face

3.3.2 Participants. As this study was carried out in two different education periods, the participants are given in two separate sections. In each section, there are three groups of participants. The first group of participants is the EFL learners who joined the survey, the second group of participants is the EFL learners who participated in focus group interviews, and the third group of participants is the EFL instructors who took part in interviews and open-ended questionnaires. First, demographic information of two groups of EFL learners and instructors who experienced *online* English education in the academic

year 2020-2021 is presented. Secondly, the demographics of two groups of EFL learners and EFL instructors who had experiences in *hybrid* English education in the academic year 2021-2022 are given.

3.3.2.1 Participants of the online education period. As stated, the demographics of participants who joined this study during the online education period are presented in this section.

3.3.2.1.1 The first group of participants. One hundred seventy-five EFL learners studying in their universities' preparatory programs took part in this study voluntarily in the spring semester of the 2020-2021 academic year. The demographic information inventory included two parts, and the findings are presented respectively.

According to the findings of the first part of the demographic inventory, shown in Table 2, the students who joined the survey varied in their genders, English proficiency levels, and the type of universities they were studying in.

Table 2

Demographics of Online EFL Learners (First Part)

		N	%
Gender	Female	97	55.4
	Male	78	44.6
English Proficiency Level	A2	5	2.9
	B1	34	19.4
	B2	136	77.7
University Type	State	82	46.9
	Foundation	93	53.1

Note: N= 175

Table 2 shows that the number of female learners was 97 (55.4 %), while the number of male learners was 78 (44.6 %). When this study took place, the participant students were studying at different English levels in their preparatory programs. Five (2.9 %) students were from elementary (A2) level, 34 (19.4 %) from intermediate level (B1), and 136 (77.7 %) of them were from upper-intermediate level (B2) level English. Based on the university type, 82 (46.9 %) state university students and 93 (53.1 %) foundation

university students participated in this study. The mean of ages was calculated, and it was found as 19.18.

The findings of the second part of the demographic inventory aimed to gather data from the EFL students about how much importance they attach to learning English, their frequency of participating in lessons during the online education period, their frequency of active participation in lessons, and their perceived self-efficacy in ICT skills along with their foreign language achievement grades, are presented in Table 3 below.

Table 3

Demographics of Online EFL Learners (Second Part)

		N	%
How important is it to you to learn English?			
	very important	151	86.3
	important	23	13.1
	undecided	1	0.6
How often do you attend your online synchronous English classes?			
	always	118	67.4
	often	50	28.6
	sometimes	4	2.3
	rarely	2	1.1
	never	1	0.6
When you attend online synchronous English classes, how often do you perform actions such as asking questions, answering questions, and making comments?			
	always	33	18.9
	often	68	38.9
	sometimes	49	28.0
	rarely	21	12.0
	never	4	2.3
How would you rate your ability to use a computer, the internet, and computer programs like Word, Excel?			
	very good	16	9.1
	good	94	53.7
	neither good nor poor	57	32.6
	poor	8	4.6
English Achievement Grade		$\overline{X}$	SD
		82.21	9.17

Note: N= 175

As Table 3 shows, the question *'How important is it to you to learn English?'* was answered by the majority of the participants (N=151, 86.3%) as 'very important' and then as 'important' by 23 (13.1%) participants. One (0.6%) student answered this question as 'undecided'. These findings indicated that most participants found English learning important during the online education period.

The question '*How often do you attend your online synchronous English classes?*' was answered by most of the students (N=118, 67.4%) as 'always', then it was answered as 'often' by 50 (28.6%), and 'sometimes' by 4 (2.3%) students. Two (1.1%) participants answered it as 'rarely' while one (0.6%) of the students' answer was 'never'. The findings of this question revealed that most of the students attended their online English classes.

The question *'When you attend online synchronous English classes, how often do you perform actions such as asking questions, answering questions, and making comments?'* was replied by the majority of the participants (N=68, 38.9%) as 'often', then it was replied by 49 (28%) as 'sometimes', and 'always' by 33 (18.9%) students. Twenty-one (12%) students replied it as 'rarely' while four (2.3%) students answered it as 'never'. As for this question, the findings pointed out that the learners actively participated in the lessons most of the time, if not all the time, during the online English education period.

The last question, '*How would you rate your ability to use computer, internet and computer programs like Word, Excel?*' was answered by most of the students (N=94, 53.7%) as 'good', then it was answered by 57 (32.6%) as 'neither good nor poor', and 'very good' by sixteen (9.1%) students. Eight (4.6%) students' answer was 'poor' to that question. This question's findings showed that most students perceived their ICT skills as competent.

The mean score of English achievement grade for the fall semester was 82.21 (SD= 9.12) for the students who received their English education in online mode in the 2020-2021 academic year.

3.3.2.1.2 The second group of participants. In total, 16 students participated in focus group interviews. Ten students were from the foundation university, while six were from the state university. Eleven of the students were female, and five were male. The mean of their ages was 19.43.

3.3.2.1.3 The third group of participants. Eleven EFL instructors working at the participant universities voluntarily joined the interviews and questionnaires of this study. Before the interviews, a demographic information inventory, including two parts shared with the instructors. The findings of the first part regarding instructors' ages, genders, bachelor's and master's degrees, and their years of English teaching experience are presented in Table 4 below.

Table 4

Demographics of Online EFL Instructors (First Part)

		N	%
Age	26-30	1	9.1
	31-35	4	36.4
	36-40	5	45.4
	41-45	1	9.1
Gender	Female	5	45.4
	Male	6	54.6
Bachelor's Degree	ELT	6	54.6
	Other	5	45.4
Master's Degree	ELT	5	45.4
	Other	6	54.6
Teaching Experience	6-10 years	4	36.4
	11-15 years	5	45.4
	16-20 years	1	9.1
	21+ years	1	9.1
University Type	Foundation	6	54.6
	State	5	45.4

Note: N=11

According to Table 4, most instructors aged between 36-40 (45.4 %), and their mean age was 35.81. Five (45.4 %) of the instructors were female, and six (54.6 %) were male. As for the bachelor's degrees, six (54.6 %) of them graduated from English Language Teaching (ELT) departments, and five (45.4 %) of them graduated from other departments

such as English Language and Literature, American Culture, and Literature. When it comes to the master's degree, five (45.4 %) of the instructors completed their master's studies in ELT departments, while six (54.6 %) of them completed their master's programs in various programs.

The participant instructors varied in their English teaching experiences as well. Four (36.4 %) instructors had teaching experience between 6-10 years, five (45.4 %) of them had 11-15 years, one (9.1 %) of them had 16-20 years, and one (9.1 %) of them had more than 21 years of teaching experience in English language teaching. Finally, six (54.6%) instructors joined from the foundation university and five (45.5%) of them participated from the state university.

The findings of the second part of the demographic inventory aimed to gather information from the EFL instructors about whether the institutions they work in provided any training/workshop on teaching online. Through the demographic inventory, it was also asked whether the instructors attended any training programs on online English teaching outside their institutions. The findings are given in Table 5 below.

Table 5

Demographics of Online EFL Instructors (Second Part)

		N	%
Did your institution provide a 'training/workshop on online teaching' to the instructors at the beginning or during the academic year 2020-2021?			
	yes	8	72.7
	no	3	27.3
If yes, was the training/workshop' effective?			
	yes	6	75
	no	2	25
Did you attend any training programs (webinars, seminars, courses) on online English teaching outside your institution?			
	yes	7	63.6
	no	4	34.4
If yes, did you benefit from them?			
	yes	6	85.7
	no	1	14.3

Note: N=11

According to Table 5, the question '*Did your institution provide 'training/workshop on online teaching' to the instructors at the beginning or during the academic year 2020-2021'* was answered by the majority of the participants (N=8, 72.7%) as 'yes', and three (27.3%) of the instructors answered this question as 'no'. Out of eight participants who stated that their institution provided training/workshop on online teaching, six (75%) instructors found the given training/workshop 'effective' while two (25%) instructors found the provided training/workshop 'ineffective'.

The question *'Did you attend any training programs (webinars, seminars, courses) on online English teaching this year?'* was replied to by seven (63.6%) instructors as 'yes' whereas four (34.4%) of them replied to this question as 'no'. Out of seven instructors stating that they attended training programs on online English teaching outside their institutions, six (85.7%) indicated that they benefited from these programs. Only one (14.3) of the instructors stated that s/he did not benefit from the programs.

These findings showed that most instructors attended training programs (webinars, workshops) on online English teaching, and most of them found these training programs effective and beneficial.

3.3.2.2 Participants of the hybrid education period. As indicated previously, the demographic information of three groups of participants who took part in this study during the hybrid education is given in this section.

3.3.2.2.1 The first group of participants. Two hundred ninety-four EFL learners studying in their universities' preparatory programs joined this study voluntarily in the spring semester of the 2021-2022 academic year. The demographic information inventory included two parts, and the findings are presented one after another.

As the findings of the first part of the inventory are given in Table 6, the students who participated in the survey differed in their genders, English proficiency levels, and the type of universities.

Table 6

Demographics of Hybrid EFL Learners (First part)

		N	%
Gender	Female	149	50.7
	Male	145	49.3
English Proficiency Level	A1	80	27.2
	A2	48	16.3
	B1	154	52.4
	B2	12	4.1
University Type	State	176	59.9
	Foundation	118	40.1

Note: N=294

According to Table 6, one hundred forty-nine (50.7 %) were female, while 145 (49.3 %) were male. At the time of this study, the students were studying at different English levels at their universities' preparatory programs. Eighty (27.2 %) students were studying at the beginner (A1) level, 48 (16.3 %) at the elementary level (A2), 154 (52.4 %) at the intermediate level (B1), and 12 (4.1 %) of them were at the upper-intermediate level (B2). Based on the university type, 176 (59.9 %) students from the state university and 118 (40.1 %) from the foundation university joined this study. The mean age of the students was 19.08.

The findings of the second part of the demographic inventory aimed to collect data from the EFL students about how much importance they attach to learning English, their frequency of participating in lessons (synchronous and face-to-face) during the hybrid education period, their frequency of active participation in lessons, and their perceived self-efficacy in ICT skills along with their foreign language achievement grades, are given in Table 7 below.

Table 7

Demographics of Hybrid EFL Learners (Second part)

		N	%
How important is it to you to learn English?			
	very important	235	79.9
	important	57	19.4
	undecided	1	0.3
	not important at all	1	0.3
How often do you attend your online synchronous English classes?			
	always	105	35.7
	often	152	51.7
	sometimes	28	9.5
	rarely	8	2.7
	never	1	0.3
When you attend online synchronous English classes, how often do you perform actions such as asking questions, answering questions, and making comments?			
	always	31	10.5
	often	70	23.8
	sometimes	127	43.2
	rarely	56	19.0
	never	10	3.4
How often do you attend face-to-face English classes?			
	always	152	51.7
	often	112	38.1
	sometimes	23	7.8
	rarely	7	2.4
When you attend face-to-face English classes, how often do you perform actions such as asking questions, answering questions, and making comments?			
	always	54	18.4
	often	116	39.5
	sometimes	99	33.7
	rarely	24	8.2
	never	1	0.3
How would you rate your ability to use a computer, the internet, and computer programs like Word, Excel?			
	very good	31	10.5
	good	116	39.5
	neither good nor poor	124	42.2
	poor	21	7.1
	very poor	2	0.7
English Achievement Grade		$\overline{X}$	SD
		73.82	9.01

Note: N= 294

As Table 7 illustrates, the question of *'How important is it to you to learn English?'* was responded to by most students (N=235, 79.9%) as 'very important'. Then, 57 (19.4%) students answered it as 'important'. While one (0.3%) student replied it as 'undecided', one (0.3%) answered it as 'not important at all'. According to the findings of this question, it can be stated that most of the EFL learners valued English learning during the hybrid education period.

The question of '*How often do you attend your online synchronous English classes?*' was answered by most students (N=152, 51.7%) as 'often'. Then, it was replied to by 105 (35.7%) students 'always' and 'sometimes' by 28 (9.5%) students. While eight (2.7%) students answered it as 'rarely', one (0.3%) student replied it as 'never'. The findings of this question displayed that most students attended online synchronous classes most of the time, if not all the time.

The question *'When you attend online synchronous English classes, how often do you perform actions such as asking questions, answering questions, and making comments?'* was replied to by the majority of the students (N=127, 43.2%) as 'sometimes'. Then, it was answered as 'often' by 70 (23.8%) and 'rarely' by 56 (19%) students. The number of students who replied to this question as 'always' was 31 (10.5%), while 10 (3.4%) students answered it as 'never'. As the findings of this question revealed, most students showed an average level of active participation when they attended the online synchronous English classes.

The question of *'How often do you attend face-to-face English classes?'* was responded to by the majority of the participants (N=152, 51.7%) as 'always'. Then, it was answered as 'often' by 112 (38.1%) and 'sometimes' by 23 (7.8%) students. Seven (2.4%) students answered it as 'rarely'. The findings of this question revealed that when the English classes were held face-to-face, most of the students attended the lessons all the time during the hybrid education period.

The question *'When you attend face-to-face English classes, how often do you perform actions such as asking questions, answering questions, and making comments?'* was replied to by most students (N=116, 39.5%) as 'often'. Then, it was replied to as 'sometimes' by 99 (33.7%) students and 'always' by 54 (18.4%) students. Twenty-four

(8.2%) students answered it as ‘rarely’ while one (0.3%) answered it as ‘never’. As the findings of this question showed, most of the students exhibited active participation in face-to-face English classes most of the time, if not all the time.

The final question of ‘*How would you rate your ability to use computer, internet and computer programs like Word, Excel?*’ was answered by the majority of the students (N=124, 42.2%) as ‘neither good nor poor’. Then, it was answered as ‘good’ by 116 (39.5%) students and ‘very good’ by 31 (10.5%) students. Twenty-one (7.1%) students replied to this question as ‘poor’ while 2 (0.7%) answered it as ‘very poor’. Regarding the findings of the ICT skills, most students perceived their skills as moderate during the hybrid education period.

The mean score of the English achievement grade for the fall semester was 73.82 (SD= 9.01) for the students who received English education in the hybrid mode in the 2021-2022 academic year.

3.3.2.2.2 The second group of participants. The total number of students who joined focus group interviews was sixteen. Ten students were from the foundation university, and six were from the state university. The number of female participants was nine, and the number of male participants was seven. The mean of their ages was 19.56.

3.3.2.2.3 The third group of participants. The number of EFL instructors who participated in this study's interviews and questionnaires was nine. Before the interviews, a demographic information inventory, including two parts shared with the instructors. The findings of the first part regarding the EFL instructors’ ages, genders, bachelor’s and master’s degrees, and their years of English teaching experience are documented in Table 8 below.

Table 8

Demographics of Hybrid EFL Instructors (First Part)

		N	%
Age	31-35	4	44.4
	36-40	5	55.6
Gender	Female	5	55.6
	Male	4	44.4
Bachelor's Degree	ELT	3	33.3
	Other	6	66.7
Master's Degree	ELT	3	33.3
	Other	6	66.7
Teaching Experience	0-5 years	1	11.1
	6-10 years	1	11.1
	11-15 years	6	66.7
	16-20 years	1	11.1
University Type	Foundation	5	55.6
	State	4	44.4

Note: N=9

The mean age of the instructors was 35.44. Five (55.6 %) of the instructors were female, and four (44.4 %) were male. As for the bachelor's degrees, three (33.3 %) of them graduated from English Language Teaching (ELT) departments, and six (66.7 %) of them graduated from other departments such as English Language and Literature, American Culture and Literature. Regarding the master's degree, they had the same numbers and percentages as their bachelor's degrees. The participant instructors varied in their English teaching experiences as well. Most teachers had teaching experience between 11-15 (66.7 %) years. Finally, the number of instructors who joined this study from the foundation university was five (55.6%), and four (44.4%) from the state university.

The findings of the second part of the demographic inventory aimed to gather information from the EFL instructors about whether the institutions they work in provided any training/workshop on hybrid English teaching. The demographic inventory also asked whether the instructors joined any training programs on hybrid English teaching outside their institutions. The findings are given in Table 9 below.

Table 9

Demographics of Hybrid EFL Instructors (Second Part)

		N	%
Did your institution provide a 'training/workshop on hybrid teaching' to the instructors at the beginning or during the academic year 2021-2022?			
	yes	5	55.6
	no	4	44.4
If yes, was the training/workshop' effective?			
	yes	5	100
	no	0	0
Did you attend any training programs (webinars, seminars, courses) on hybrid English teaching outside your institution?			
	yes	4	44.4
	no	5	55.6
If yes, did you benefit from them?			
	yes	2	50
	no	2	50

Note: N=9

According to Table 9, the first question was answered by five of the participants (55.6%) as 'yes', and four (44.4%) instructors answered this question as 'no'. All participants who stated that their institution provided training/workshop on hybrid English teaching found the provided training/workshop 'effective'.

The question *'Did you attend any training programs (webinars, seminars, courses) on hybrid English teaching outside your institution?'* was replied to by four (44.4%) instructors as 'yes' while five (55.6%) of them replied this question as 'no'. Out of four instructors who indicated that they attended training programs on hybrid English teaching, half of them (N=2, 50%) indicated that they benefited from these programs, and the other half (N=2, %50) did not benefit from the training programs.

These findings showed that the instructors who attended training programs through their institutions benefited more than the programs (webinars, workshops) they participated in outside their institutions.

3.4 Procedures

To answer the research questions of this study, both quantitative and qualitative data were gathered through various instruments. The details of the instruments used and the analyses applied for the data are presented in Table 10 below.

Table 10

Data Collection Instruments and Data Analyses

Research Questions	Instruments	Data Analyses
1. What are the EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?	Student Engagement Scale (Günüç & Kuzu, 2014) Foreign Language Motivation Scale by Doğan (2009) adapted from Attitude /Motivation Test Battery (Gardner, 1985) Foreign Language Classroom Anxiety Scale (FLCAS) by Gürsu (2011) was adapted from FLCAS by Horwitz et al. (1986).	Descriptive Statistics
2. Is there a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type?	Student Engagement Scale Foreign Language Motivation Scale Foreign Language Classroom Anxiety Scale	Inferential Statistics
3. If there are any relations, to what extent do student engagement, foreign language motivation, and foreign language anxiety have an influence on foreign language achievement during *online* and *hybrid* education periods?	Student Engagement Scale Foreign Language Motivation Scale Foreign Language Classroom Anxiety Scale	Descriptive Statistics Inferential Statistics
4. What are the opinions of EFL instructors on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?	Interviews Open-ended Questionnaires	Content Analysis
5. What are the opinions of EFL learners on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?	Focus Group Interviews	Content Analysis

3.4.1 Data collection instruments. As this study employed a mixed method design, the data were collected through quantitative and qualitative instruments. The quantitative data were gathered through the use of a survey including three scales and a demographic information inventory. As for the qualitative data, in-person interviews, focus-group interviews, and open-ended questionnaires were carried out. Detailed information regarding each data collection instrument is presented in the sub-sections.

3.4.1.1 Quantitative data instruments. A survey consisting of four parts was utilized to address the quantitative research questions of this study. The first part of the survey included a demographic information inventory. The second part was a 30-item student engagement scale. The third section of the questionnaire was a foreign language motivation and attitude scale with 34 items. The final part of the questionnaire was a 32-item foreign language classroom anxiety scale. All questionnaire items were in Turkish in order to avoid any possible misunderstandings or ambiguity while gathering the data from the Turkish EFL learners. In addition, the students who attended the study during the online education period were asked to give their responses to the scales by considering the online education dynamics, while the students who attended the research during the hybrid education period were required to respond to the items according to the hybrid education conditions. The questionnaire was prepared in digital form to share with the EFL learners through online communication tools.

3.4.1.1.1 Demographic information inventories. In this study, three demographic information inventories were used. The first demographic information inventory included two sections, aiming to collect information from EFL students who joined the surveys. In the first section, the participant students' age, gender, English proficiency level, and type of university information were collected. In the second section, the questions were about the importance of learning English, the frequency of participating in lessons during online and hybrid education periods, the frequency of active participation in lessons during these two education modes, and perceived self-efficacy in ICT skills. These questions were in the 5-Likert type. The questions in this inventory were in Turkish.

The second demographic information inventory, used at the beginning of the interviews with EFL instructors, included two sections. The first section had questions regarding the participant instructors' age, gender, bachelor's degree, master's degree, and years of teaching experience in English language education. In the second section, the questions were about whether instructors attended training programs in and outside their institutions during online and hybrid education periods. The questions in this inventory were in English.

The third demographic information inventory was utilized at the beginning of the focus group interviews with EFL students. The inventory included three questions: age, gender, and the university the students were studying. The questions in this inventory were in Turkish. The demographic inventories used to collect information from EFL learners and EFL instructors were developed by the researcher to provide more insights into the findings of this study (Appendix A).

3.4.1.1.2 Student engagement scale (SES). In this study, Student Engagement Scale (SES) was used to answer the first part of the first research question, *'What are the EFL learners' levels of student engagement during online and hybrid education periods?'* and to analyse the possible differences and relationships between the research variables (i.e., student engagement, foreign language motivation, foreign language classroom anxiety) in the second and the third research questions. The SES was developed by Günüç and Kuzu (2014) to be used in higher education. It consists of 41 items, and they were prepared in 5-Likert type ranging from (1) strongly disagree to (5) strongly agree. The scale includes two main components and six dimensions in total. The first component, campus engagement, consists of the *valuing* and *sense of belonging* dimensions, while the second component, class engagement, has four dimensions: *cognitive engagement, emotional engagement with peers, emotional engagement with faculty members,* and *behavioural engagement* (Figure 10).

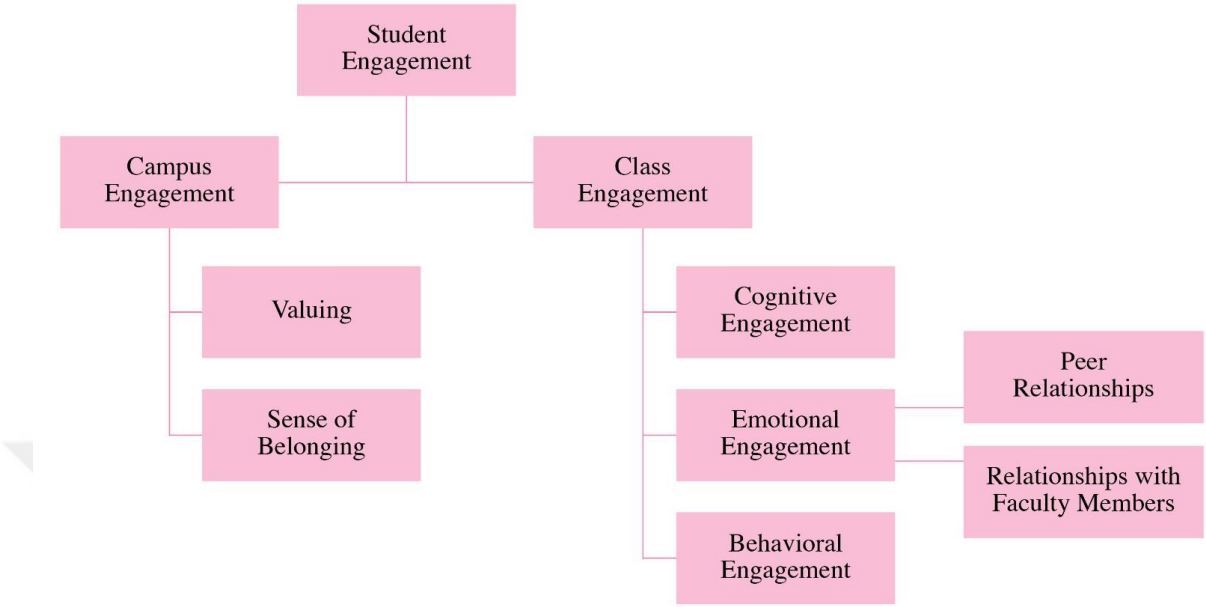

Figure 10. Student engagement components and dimensions (Günüç & Kuzu, 2014).

The internal consistency reliability was calculated for the entire scale and its sub-dimensions. Cronbach's alpha (α) was found to be .929 for the total scale. As for the sub-dimensions, it was found to be α = .823 for valuing, α = .896 for a sense of belonging, α = .878 for cognitive engagement, α = .853 for emotional engagement-I (peer relationships), α = .890 for emotional engagement-II (relationships with faculty members), and α = .716 for the behavioural engagement. As factor analyses were carried out for each dimension, adaptations such as removing a dimension (or dimensions) from the scale are applicable. Since both online and hybrid education were under investigation in this research, and the students could not go to their campuses during the online education period, the *campus engagement* component with its two dimensions (valuing and sense of belonging) was not used. Therefore, 11 items were removed from the scale (Appendix B). Also, the sub-dimensions of emotional engagement (peer relationships and relationships with faculty members) were accepted as a single dimension in this study. Günüç and Kuzu (2014) state that the scores gained from the scale can be grouped as high, moderate, and low levels. While high-level scores indicate *engagement*, low-level scores refer to low engagement or *disengagement*.

3.4.1.1.3 Foreign language motivation scale. To answer the second part of the first research question, '*What are the EFL learners' levels of foreign language motivation during online and hybrid education periods?'* and to analyse the possible differences and relationships among the research variables in questions two and three, the 5-Likert foreign language motivation scale was applied. This scale was developed by Gardner (1985) by the name of 'The Attitude /Motivation Test Battery (AMTB)' to investigate the motivation and attitude level of English-speaking students who are learning French as a second language in Canada. The AMTB comprises 104 items and twelve dimensions which are: interest in foreign languages, parental encouragement, motivational intensity, desire to learn, attitudes toward learning the FL, attitudes toward FL speakers, integrative orientation, instrumental orientation, FL course evaluation, evaluation of FL teacher, FL use anxiety, FL classroom anxiety. The AMTB was translated into English to be used in Brazil, Croatia, Japan, Poland, Romania, and Spain (Catalonia) (Gardner, 2004). Four dimensions of AMTB, *motivational intensity, desire to learn (English), attitudes toward learning the FL (English), and instrumental orientation*, were adapted into Turkish by Doğan (2009) as a master dissertation, and it consists of 34 items in 5-Likert type ranging from (1) strongly disagree to (5) strongly agree (Appendix C). The internal consistency reliability for the entire scale was computed through Cronbach's alpha (α), and it was found to be .91. As for the sub-dimensions, it was found to be .70 for motivational intensity, .79 for the desire to learn English, .87 for attitudes toward learning English, and .74 for instrumental orientation. Table 11 demonstrates each sub-scale with positively and negatively worded (reverse scored) items.

Table 11

Motivation Scale with Its Sub-dimensions and Items

Sub-scales	Items
Motivational Intensity	7, 19, 21, 23, 28, 8r, 14r, 24r, 29r, 31r
Desire to Learn English	5, 6, 11, 17, 18, 13r, 15r, 22r, 25r, 33r
Attitudes toward Learning English	2, 10, 27, 30, 32, 3r, 4r, 12r, 20r, 34r
Instrumental Orientation	1, 9, 16, 26

3.4.1.1.4 Foreign language classroom anxiety scale (FLCAS). To answer the third part of the first research question, *'What are the EFL learners' levels of foreign language anxiety during online and hybrid education periods?'* and to analyse the possible differences and relationships among the variables in research questions two and three, Foreign Language Classroom Anxiety Scale (FLCAS) which was developed by Horwitz et al. (1986) was utilized in this study. FLCAS comprises three sub-scales: *communication apprehension, test anxiety, and fear of negative evaluation.* FLCAS is a 5-Likert-type scale consisting of 33 items which range from (1) strongly disagree to (5) strongly agree (Appendix D). However, as participant students did not study any subject other than English in their preparatory programs, item 26, *'I feel more tense and nervous in my English class than in my other classes',* was removed from the scale. Therefore, the total item number used in this study is 32. This scale was adapted into the Turkish language by Gürsu (2011) as a master dissertation. The internal consistency reliability was computed through Cronbach's alpha (α) which was found to be .935 for the entire scale. The Cronbach's alpha values for the sub-scales were computed by Altunel (2018) as a master dissertation, and they were found as .855 for communication apprehension, .844 for test anxiety, and .826 for fear of negative evaluation. Table 12 shows the items of FLCAS for each sub-dimension with its reverse-scored items.

Table 12

FLCAS with Its Sub-dimensions and Items

Sub-scales	Items
Communication Apprehension	1, 4, 9, 14r, 15, 18r, 24, 27, 29, 30, 32r
Test Anxiety	3, 5r, 6, 8r, 10, 11r, 12, 16, 17, 20, 21, 22r, 25, 26*, 28r
Fear of Negative Evaluation	2r, 7, 13, 19, 23, 31, 33

*removed item

3.4.1.2 Qualitative data instruments. Qualitative data collection methods are generally composed of observations, interviews (in-person, focus groups), records

(videos, sounds), documents (journals, diaries), and open-ended questionnaires (Brown, 2009; Creswell, 2014). Among these methods, in-person interviews, open-ended questionnaires, and focus group interviews were adopted as qualitative data collection methods in this study. The detailed information regarding each qualitative data instrument is documented separately below.

3.4.1.2.1 Interviews. Interviews are the most preferred qualitative data collection instruments as they give an opportunity for interviewers and interviewees to talk about their experiences, beliefs, motivations, and perceptions of the world they live in and to explain how they interpret the situations from their perspectives, which enables researchers to gather detailed information about the phenomenon under investigation (Cohen, Manion & Morrison, 2018; Richards, 2009, Polkinghorne, 2005). The types of interviews are widely categorized as structured (standardized, formal), semi-structured (semi-standardized, guided), and unstructured (unstandardized, narrative).

The first type is the structured interview which is formal (standardized) in nature and is conducted to elicit information from participants through predetermined questions. The questions are generally asked in the same order to each participant, and the answers of participants are recorded according to this order by the interviewers. These interviews are generally preferred by researchers who have solid and focused ideas about the topic they study (Lune & Berg, 2017; Stuckey, 2013).

The other type of interview is the semi-structured interview, and it is also performed through pre-set questions, which are followed in a specific order. However, semi-structured interviews have a more flexible implementation process compared to structured interviews. During these interviews, interviewers are allowed to ask further questions depending on the interviewees' responses (Lune & Berg, 2017). Therefore, information collected during this type of interview can be in-depth, which is why semi-structured interviews are commonly preferred by qualitative research scholars (Stuckey, 2013).

The last type of interview is the unstructured interview, and as the name suggests, it may not necessarily be planned or have scripted questions. Researchers may investigate a specific topic; however, the respondent is not directed to the topic during the interview.

On the contrary, the interviewee is encouraged to lead the conversation as much as possible (Lune & Berg, 2017). Due to this flexible nature, unstructured interviews are also conceptualized as narrative interviews, in which participants may narrate their life experiences (Stuckey, 2013).

In this study, among these types, semi-structured interviews were preferred and conducted with the instructors to answer the fourth research question, *'What are the opinions of EFL instructors on student engagement, foreign language motivation, and foreign language anxiety during online and hybrid education periods?'.* Although the study topic was specific, and the questions were scripted in order, the researcher (interviewer) encouraged the participants to reflect on the areas they wanted so that the researcher could seek the study topic from a broader and deeper perspective. There are five open-ended interview questions for each education period, and they were developed by the researcher (Appendix E).

3.4.1.2.2 Open-ended questionnaires. Open-ended questionnaires are also chosen as a qualitative data collection method in many studies as they are exploratory in nature. These questionnaires are in written forms and generally take two types; fill-in questionnaires and short-answer questionnaires. The fill-in type includes the biodata form (which collects participants' demographic information) and the sentence completion form (in which an unfinished prompt is given and participants are required to complete it). Another type of open-ended questionnaire is the short-answer questionnaire, which has two forms; specific open questions and broad open questions. While the former is used to gather data about a specific topic regarding the study, the latter is used when a participant is allowed to provide deeper explanations about the research topic (Brown, 2009).

In this study, open-ended questionnaires were prepared in the short-answer format, and they are in both specific open and broad open-question forms. The researcher gathered this data as complementary data to answer the fourth research question comprehensively and to find out whether the instructors could provide more insights about their experiences when they finalized their courses. Therefore, the open-ended questionnaire was sent to the instructors via technological channels at the end of the spring semesters of both academic

years. The questionnaire includes four open-ended questions for each period, and these questions were developed by the researcher (Appendix F).

3.4.1.2.3 Focus group interviews. The types of interviews vary from individual to group, and a focus group interview is one form of group interview in which a small number of participants discuss a topic identified by the researcher (Morgan, 1988). The interaction during the focus group interviews is mostly among the participants, but there is a moderator (can be the researcher himself/herself) who regulates or guides the discussion whenever it is necessary (Lune & Berg, 2017). Focus group interviews are not held to collect data from each group member simultaneously. Instead, they are carried out to gather the data through group interaction, which might be relevant to the research topic (Edmund, 2000).

In this study, to answer the fifth research question, *'What are the opinions of EFL learners on student engagement, foreign language motivation, and foreign language anxiety during online and hybrid education periods?'*, focus group interviews were carried out with small groups of students during both online and hybrid education periods.

There are two groups of focus group interview questions prepared by the researcher. The first group includes four open-ended questions, and they were used during the spring semester of the 2020-2021 academic year. The second group has the same number of questions that were utilized during the spring semester of the 2021-2022 academic year (Appendix G).

3.4.2 Data collection procedures. As the design of this study is the convergent parallel mixed-method research design, both quantitative and qualitative data were collected simultaneously during the spring semesters of the 2020-2021 and 2021-2022 academic years. Before the data collection started, the ethical board application procedures were carried out in the fall semesters of both academic years. First of all, the researcher applied to the research committee of the university, where she continues her doctoral program. Afterward, she applied to the ethical board of the research universities where she carried out this study. These application procedures were carried out for each

education period (online and hybrid) separately. After receiving approval from the universities, the researcher contacted the research universities' preparatory program coordinators to invite instructors and students to participate in this study. Quantitative and qualitative data collection procedures for each education period are presented separately.

3.4.2.1 Data collection procedures during the online education period. Firstly, the procedures of quantitative data, then the procedures of qualitative data collected during the spring semester of the 2020-2021 academic year are given in this part.

3.4.2.1.1 Quantitative data collection procedures. To answer the first, second, and third research questions, which aim to describe the levels, possible differences, and relations of research variables regarding the online education period, quantitative data were collected through the student engagement scale (Günüç & Kuzu, 2014), foreign language motivation scale (Gardner, 1985), foreign language classroom anxiety scale (Horwitz et al., 1986), and the demographic information inventory. The target population was the participant universities' EFL students studying in preparatory programs during the spring semester of the 2020-2021 academic year.

As there were pandemic restrictions (lockdowns) at the time of the online education period, the researcher could not visit the participant universities to collect the data. Therefore, she emailed the participant universities' preparatory program coordinators and explained the purpose and requirements of the research study. Then, she sent the survey to the coordinators in a digital format with detailed information about the study and the voluntary participation consent. The coordinators shared the questionnaire with the instructors working in the universities' preparatory programs so that they could inform the students about the research and encourage them to join it. Also, the instructors who attended this study's interviews were requested to share the questionnaire with their students when convenient.

3.4.2.1.2 Qualitative data collection procedures. To answer the fourth and fifth research questions aiming to investigate the opinions of EFL instructors and EFL learners on student engagement, foreign language motivation, and foreign language anxiety during

the online education period, qualitative data were gathered through interviews and open-ended questionnaires with the instructors, and focus group interviews with the EFL learners.

When the researcher contacted the program coordinators of each university to collect the quantitative data at the beginning of the spring semester of the 2020-2021 academic year, she also explained the qualitative data procedures. Considering the pandemic restrictions, the researcher requested the program coordinators' guidance to reach and invite instructors willing to share their experiences related to the research topic. After that request, the program coordinators sent an email to the instructors to initiate the procedure. After a week, the researcher was informed about the names and email addresses of fifteen instructors who volunteered to participate in this study. Upon receiving the instructors' contact information, the researcher sent an interview protocol to give more specific information about the study topic (student engagement and its sub-dimensions) and to prepare them through a few questions before the interviews (Appendix H). Interview protocols are usually sent to participants as a brief document by researchers so the participants know what questions might be asked during the interviews, and in this way, they can be prepared to share their opinions and experiences regarding the research topic (Hill et al., 1997; Hill et al., 2005). Then, a schedule was planned to meet with fifteen instructors individually through video meetings. However, at this stage, four instructors withdrew from the study; therefore, the interviews were conducted with eleven instructors from two participant universities in the first weeks of the spring semester. When the researcher had a video meeting with each instructor, she shared a digital consent form requiring their permission to record the session to analyse and code the interview afterward. Also, the demographic information of each instructor was gathered through this digital consent form. An average interview lasted around 45 minutes. After the interview procedure was completed, the instructors were sent an open-ended questionnaire to reflect on their opinions on online English education one more time at the end of the spring semester. All data gained from the interviews were transcribed verbatim and collated with the data obtained from the open-ended questionnaires by the researcher.

As for the focus group interviews, the interviewee instructors' guidance was requested. The instructors informed their students about the focus group interviews and

the research topic in one of their online classes. Then, they took notes of the voluntary students' names and email addresses to share with the researcher. When the researcher was informed about the voluntary students, she created two groups; one for the foundation university students and one for the state university students. The focus group interviews were conducted in the middle of the spring semester through video-recorded meetings, taking the students' permission via a digital consent form. These meetings were administered on different days for each group of participants. The researcher took the moderator role during the interviews and facilitated the discussions by using the interview questions. Each meeting lasted around 80 minutes, and the data were transcribed verbatim by the researcher.

3.4.2.2 Data collection procedures during the hybrid education period. First, the quantitative data collection procedures, then the qualitative data collection procedures carried out during the spring semester of the 2021-2022 academic year, are presented in this section.

3.4.2.2.1 Quantitative data collection procedures. To answer the quantitative research questions regarding the hybrid education period, the data were gathered through the same scales used during the online education period. However, considering the differences in hybrid education, a few items were added to the demographic information inventory. The target population was the participant universities' EFL students studying in the preparatory programs during the spring semester of the 2021-2022 academic year.

The researcher could visit the participant universities as the pandemic restrictions were lifted during the hybrid education period. Before going to the schools, she contacted the preparatory program coordinators to learn the availability of the program, lessons, instructors, and students. After that, the program coordinators sent an email to the instructors to find out whether their classrooms could participate in the study. After a week, the coordinators of both universities informed the researcher about the available dates and the voluntary language classrooms. Then, the researcher visited the schools to collect the data by entering the voluntary classrooms on arranged days. Unlike the online

education period, the researcher herself explained the details of the study to the students and shared the survey with its consent form through technological channels.

3.4.2.2.2 Qualitative data collection procedures. To answer the qualitative research questions regarding the hybrid education period, the data were collected through the same instruments: interviews, open-ended questionnaires with the instructors, and focus group interviews with the EFL learners. However, the questions were adapted according to the hybrid education dynamics.

When the program coordinators were contacted for the quantitative data collection at the beginning of the spring semester of the 2021-2022 academic year, their guidance was also asked for reaching instructors who might participate in the interviews. When the coordinators emailed the preparatory program instructors to find out their availability for the quantitative data collection, they also asked the instructors whether they could volunteer to participate in this study's qualitative part. Five instructors from the foundation university and four from the state university volunteered for the research. The program coordinators shared their names and email addresses with the researcher. Then, the researcher contacted these instructors in order to send the interview protocol about the research topic and schedule a day for the individual interviews (Appendix H). Four instructors (two from the foundation university and two from the state university) preferred to conduct interviews face-to-face rather than via video meetings. Therefore, when the researcher visited the schools to conduct the survey with the EFL learners, she also carried out these interviews with the instructors after the lessons finished. The other instructors preferred the video meeting, and the interviews were conducted at their convenience. In both situations, a consent form was shared through online platforms, and the interviews were video recorded with the permission of the instructors. An average interview lasted around 35 minutes. In the last week of the spring semester, the instructors received the open-ended questionnaire through which they reflected on their ideas and experiences about hybrid English education once again. All data gained from the interviews were transcribed verbatim and collated with the data gathered from the open-ended questionnaires by the researcher.

When the researcher visited the language classrooms on the quantitative data collection days, she also briefly informed the students about the focus group interviews. She asked if they could join these interviews to share their opinions and experiences regarding the research topic. Afterward, the contact information of the voluntary students was taken, and two meeting sessions were scheduled. The focus group interviews were administered via video-recorded meetings, and the students' permission was taken by sharing a digitalized consent form. The researcher moderated the interviews by utilizing the focus group interview questions. The duration of the meetings was around 60 minutes, and the data were transcribed verbatim by the researcher.

3.4.3 Data analysis procedures. Since the convergent parallel mixed-method research design was employed in this study, both quantitative and qualitative data analysis procedures were applied to examine the research data. The details regarding these procedures are given below.

3.4.3.1 Quantitative data analysis. In quantitative data analysis, two techniques are generally applied: descriptive statistics and inferential statistics. Descriptive statistics are applied to summarize the characteristics of a numerical data set through images, graphs, and charts in which percentages, frequencies, and mean scores are given to show the patterns and relationships. Inferential statistics, on the other hand, are used to test hypotheses which enable researchers to make estimations about a population by using the information gained from a sample (Teddlie & Tashakkori, 2009). In this study, both descriptive and inferential statistics were applied to analyse the data.

To answer the first research question, '*What are the EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety during online and hybrid education periods?'* descriptive statistics were applied, and to communicate the findings, mean and standard deviation scores were given.

To respond to the second research question, *'Is there a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type?'*

inferential statistics were employed to analyse the data. This research question aimed to find out the differences, if any, between two different education modes (online and hybrid), two gender (female and male), and two university types (state and foundation). The independent samples t-test and Mann-Whitney U test were administered to reveal significant differences between these groups. The independent samples t-test is a parametric test used to compare the means of two independent groups to determine whether there is a statistically significant difference (Pagano, 2012). On the other hand, the Mann-Whitney U test is a non-parametric test equivalent to the independent samples t-test, and it is applied when the data assumptions, such as normal distribution, cannot be met. Mann-Whitney U test compares the ranks of two independent groups to find out whether the groups are significantly different (Huck, 2012). Finally, Cohen's *d* effect size was computed for each scale and sub-dimension to show the practical significance of the findings. If effect size value is less than 0.2, the effect size can be defined as weak, if it is 0.5, it can be defined as medium, and if it is larger than 0.8, it can be defined as strong (Cohen, 1988). In this study, these intervals were considered while interpreting the findings of the second research question.

In order to answer the third research question, *'If there are any relations, to what extent do student engagement, foreign language motivation, and foreign language anxiety have an influence on foreign language achievement during online and hybrid education periods?'*, both descriptive statistics (Pearson correlation coefficient) and inferential statistics (multiple regression analysis, stepwise regression analysis) were administered.

First, the correlation analysis (Pearson correlation coefficient) was administered to determine whether any relationships exist between the research variables. Then, the relationship's direction (positive or negative) and strength (low, moderate, or strong) were identified. In correlation analysis, there is a rule of thumb to interpret the strength of the correlation coefficient value (*r*) in the literature. The values between 0 and 0.3 (0 and -0.3) indicate a low-level positive (negative) linear relationship, and the values between 0.3 and 0.7 (-0.3 and -0.7) indicate a moderate-level positive (negative) linear relationship and the values between 0.7 and 1.0 (-0.7 and -1.0) indicate a strong level positive (negative) linear relationship (Ratner, 2009). In this study, these intervals were considered while interpreting the correlation analysis findings.

After the analysis of the correlation among research variables, multicollinearity analysis was administered. Multicollinearity is a statistical phenomenon when an independent variable correlate highly with one or more independent variables in a multiple regression model (Jensen & Ramirez, 2013). As the multicollinearity issue decreases the statistical power of a regression model, the analysis should be carried out before the multiple regression analysis starts (Daoud, 2017). When the multicollinearity analysis is administered, VIF (Variance Inflation Factors) value, CI (Confidence Interval) value, and tolerance value are controlled, and if VIF is found to be less than 10, CI is less than 30, and tolerance is greater than .20, the multiple regression analysis can be applied.

After it was found that there was no multicollinearity issue in the research data (the details were given in the findings chapter), the multiple regression analysis was conducted to measure the extent of influence of the independent variables on the dependent variable of this study. When multiple regression analysis is applied, the strength of the relationship between the dependent variable and several predictor (independent) variables and the importance of each predictor to the relationship are determined (Petchko, 2018). Finally, the regression equation model explaining the influence (strength and the importance) of each independent variable on the dependent variable of this study was given for each education period. All these statistical analyses were administered through the usage of Statistical Package for Social Sciences (SPSS) version 25.

3.4.3.2 Qualitative data analysis. There are many different techniques to analyse qualitative data, and some examples of well-established techniques are content analysis, thematic analysis, narrative analysis, discourse analysis, and grounded theory analysis (Humble & Mozelius, 2022). In this study, content analysis was applied to analyse the qualitative data gained through in-person interviews, open-ended questionnaires, and focus group interviews.

Content analysis is defined as a technique of examining communication (data) systematically, objectively, and quantitatively to measure research variables (Kerlinger, 1986). According to Hsieh and Shannon (2005), there are three approaches to content analysis: conventional content analysis, directed content analysis, and summative content

analysis. *Conventional content analysis* is used "when existing theory or research literature on a phenomenon is limited" (p. 1279). Researchers using this approach avoid using pre-determined categories while analysing the data set. Rather, they work inductively to discover the categories emerging from the data (Kondracki, Wellman & Amundson, 2002). *Directed content analysis*, on the other hand, is a deductive and theory-driven approach that is used by researchers aiming to extend or validate an existing theory or phenomenon (Hsieh & Shannon, 2005). Compared to conventional content analysis, direct content analysis has a more structured process (Hickey & Kipping, 1996), which starts with determining categories by using existing theories or earlier research studies (Potter & Levine-Donnerstein, 1999). The third approach is *summative content analysis*, which is applied by quantifying the pre-determined codes or content in the data set to better understand the words, phrases, and chunks in the research data content. According to Hsieh and Shannon (2005), there are five steps to be followed while applying summative content analysis. The first step is creating an initial coding based on a theory, previous studies, or data. The second one is counting the frequency of the words, patterns, or key concepts. The third step is calculating and comparing the frequencies regarding the total data length and/or to different data sources. The fourth is identifying and quantifying alternative words, patterns, or key concepts. The final step is revising the calculation and comparison of coded words and statements. In this study, summative content analysis was applied to analyse the qualitative data, and these five steps were followed one after another.

To ensure the reliability of the data analysis, the researcher of this study and one of her colleagues analysed the data independently. When the qualitative data analysis was finalized by two coders, the patterns (statements) and their frequencies were compared. As for the interrater reliability, Cohen's Kappa value was computed and found to be 0.89. Cohen (1960) states that values between 0.81 and 1.00 indicate almost perfect agreement. As for the 1.1 difference, the coders revised the patterns and their frequencies to reach an agreement. The most frequent patterns were given under the pre-determined codes and exemplified with relevant quotations by the participants.

3.4.4 Reliability, validity, and trustworthiness. Reliability and validity in quantitative data and trustworthiness in qualitative data were taken into consideration in this study.

Reliability in quantitative research means that when a measurement instrument is applied, the same numerical results give similar results consistently, which also refers to *measurement reliability*. There are other types of reliability, such as *stability reliability* (reliability that does not change over time), *representative reliability* (reliability that does not vary across groups), and *equivalence reliability* (reliability that does not change across indicators) (Neuman, 2014). In this study, reliability was ensured through the internal consistency of the three scales. These scales' internal consistency was computed through Cronbach alpha value, which is applied to measure the internal consistency of the instruments, including items that require respondents to choose one answer ranging from, for example, strongly agree to strongly disagree (Cronbach, 1951). To respond to the first three research questions of this study, the student engagement scale by Günüç and Kuzu (2014), the foreign language motivation scale by Gardner (1985), and the foreign language classroom anxiety scale by Horwitz et al. (1986) were administered. The internal consistency values were computed for each scale, and they were found as 0.929 (for the student engagement scale), 0.91 (for the foreign language motivation scale), and 0.935 (for the foreign language anxiety scale). Besides, the internal consistency values for each sub-dimensions of the scales were computed, and all were found to be 0.70 or above. According to the general rule of thumb, a Cronbach alpha value of 0.70 and above is good, 0.80 and above is better, and 0.90 and above is the best. Considering these values, it can be stated that the scales utilized in this study ensure reliability.

Validity in quantitative research refers to "how well an idea fits with actual reality" (Neuman, 2014, p. 212). It provides 'truthfulness' for a study, which should be projecting the real social world. There are many types of validity, such as *face validity* (concerning whether the test or instrument is appropriate for what is being measured), *content validity* (addressing whether a test or instrument measures all aspects of a construct), *criterion validity* (evaluating how accurately a test measures the results), and *construct validity* (concerning with the correct operationalization of a construct under study) (Neuman, 2014). The instruments of this study were frequently used by many scholars worldwide

and in Turkey, ensuring the content and construct validity. However, as this study aimed to measure the levels of student engagement, foreign language motivation, and foreign language classroom anxiety, particularly in *online* and *hybrid* modes of education, the participants were informed to respond to the instruments according to the dynamics of these education modes, through which the researcher aimed to increase the face validity.

Trustworthiness in qualitative research is ensured by credibility, transferability, dependability, and confirmability. *Credibility* can be implemented in many ways, such as the adoption of well-established research methods, the development of an early familiarity with the culture of participating organizations, random sampling, triangulation, ensuring honesty in informants, negative case analysis, debriefing sessions, the researcher's reflective commentary, member checks and thick description of the phenomenon under scrutiny (Shenton, 2004). In this study, credibility was ensured in several ways. The first one is the familiarity with the culture of participating organizations. The researcher has been an EFL instructor for many years, and therefore, she is familiar with the preparatory programs' working mechanisms. The second way of ensuring credibility was random sampling. The data of this study were collected from two Turkish universities, which were included in this study randomly. The third way was triangulating the data collection procedures. The data were collected from EFL learners and EFL instructors to gain a deeper understanding and a broader perspective. Also, not only quantitative data but also qualitative data were collected from the participants. The fourth way was to ensure honesty in informants by inviting only the participants who were volunteers to join the study, and all participants were informed at every stage of the research that they could withdraw from the study whenever they wanted. The last way to ensure credibility was by providing a thick description of the phenomenon under scrutiny. All details regarding this study's rationale and procedures were aimed to be presented in a detailed way in all stages.

Transferability means the generalizability of the findings to a wider population. However, due to the nature of qualitative studies, which is mostly specific to a small population, it is not always possible to generalize the results for other situations (Shenton, 2004). Although this is the case, as Bassey (1981) suggested, the researchers or practitioners who find the study description similar to their situations can relate the findings of this study to their positions.

Dependability refers to reaching similar findings in the case of conducting the study in the same context, with the same methods, and with the same participants (Shenton, 2004). In order to ensure the dependability of this study, all necessary details regarding the participants, settings, data collection instruments, and data analysis procedures were explained in a detailed way in this chapter.

Confirmability is about the objectivity of the research, which is one of the difficulties of qualitative research and researchers face (Patton, 2002). However, there are some suggested ways to ensure that the study results are gained from the participants' experiences rather than the researcher's preferences or biases. One of the ways is implementing triangulation to decrease the possibility of the researcher's biases. As stated earlier, triangulation of data collection instruments and methods was applied in this study, which also promotes confirmability.

3.4.5 Ethical considerations. Ethical considerations were adhered to in several ways in this study. First, the ethical approval was taken from the university where the researcher continues her doctoral program (Appendix I). Then, the ethical approvals were taken from the universities (one state, one foundation) where the researcher carried out this study. As the study was conducted in these two universities in two academic years (2020-2021 and 2021-2022), ethical approvals were taken for each period and each university separately (Appendix I).

The second measure applied for the ethical considerations was the consent forms taken from three groups of participants (EFL students who joined the survey, EFL instructors who joined the interviews, and EFL students who joined the focus group interviews). These consent forms were prepared as digital forms, and before collecting the quantitative and qualitative data of this study, the participants were requested to read and sign the form to continue participating in this study (Appendix J). Through this consent form, all participants were informed that participation in this study was voluntary, and they were aware that they could withdraw from the study at any time. Also, the researcher shared her contact information details with the participants in case they might want to ask further questions about the study at any time.

The third measure was protecting the research-related documents from other parties. The data collected from the participants and the approvals taken from the universities were all in digital forms and kept in a digital folder with a password for confidentiality issues. Only the researcher of this study has access to these data and documents.

Another measure was taking the permission of the authors who developed or translated this research's scales into Turkish. Before conducting the study, the researcher contacted three authors via email and asked for their approval to be used in this study. These approvals are kept in an encrypted folder by the researcher.

The final measure was taken to maintain the anonymity of the participants. The names and contact details of the first group participants (EFL students who joined the survey) were not collected. Regarding second-group participants (EFL instructors who joined the interviews) and third-group participants (EFL learners who joined focus group interviews), their names were taken for qualitative data analysis purposes. However, anonymity was granted to each participant by assigning them a random number, and this information was shared with these two groups of participants.

3.5 Limitations

In this study, the quantitative data were gathered through three different scales, and the qualitative data were collected through in-person interviews, open-ended questionnaires, and focus group interviews. The data collection and analysis procedures were administered carefully. Besides, as stated in the previous section, all necessary ethical considerations were applied before or during the study. Despite implementing all steps as required, this study has its limitations, which were impossible to avoid.

The first limitation concerns the number of participating universities during the online education period. Initially, four universities (two state and two foundation universities) participated in this study. However, during the interviews with the EFL instructors of two universities (one state and one foundation), the instructors shared that the online exams were not carried out by taking necessary precautions. For example, the exams were not carried out through online video meetings, so the instructors could not proctor these exams through cameras. Instead, the exams were administered by sharing links through online

platforms with students, and the students sent their answers to their instructors at a given time. Therefore, the instructors stated they had concerns about the reliability of the exams. Then, the researcher analysed the students' grades at these two universities and found that there was nearly no difference between the exam grades, which were all above 90 out of 100. Due to the lack of reliability and the importance of the exam grades in this study, the researcher decided to exclude the data collected from these two universities.

The second limitation, directly related to the first one, concerns the number of research participants. Due to the exclusion of two universities, the number of the EFL students who joined the study survey during the online education period decreased from 266 to 175. Besides, the instructors who joined the interviews from these two universities were also excluded from the study. Thus, the number of instructors who attended the interviews during the online education period decreased from 15 to 11.

The other limitation is regarding qualitative data, which aimed to gather opinions of EFL instructors and EFL learners on research variables. However, as the online and hybrid education modes were quite new to the participants, particularly the instructors, tended to share the difficulties and challenges they experienced during the interviews. Although the researcher tried to guide them to share their perspectives on specifically student engagement, foreign language motivation, and foreign language anxiety, the data gained from the interviews were more about the disadvantages of these education modes. To solve this, the researcher sent an open-ended questionnaire to EFL instructors at the end of each semester to gather information about their perspectives on the research variables one more time and find out if there were any changes in their opinions. In conclusion, the findings of this research study should be interpreted by considering these limitations.

Chapter 4

Findings

4.1 Introduction

This chapter presents the findings of the research questions of this study. First of all, the levels of the EFL learners' student engagement, foreign language motivation, and foreign language anxiety are given for both periods. Secondly, the significant differences in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety analysed by education mode, gender, and university type are presented for *online* and *hybrid* education periods. Thirdly, the influence of student engagement, foreign language motivation, and foreign language anxiety on foreign language achievement for each education period is given. Finally, the opinions of EFL instructors and EFL learners on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods are presented in the last two sections.

4.2 Research Question 1: What are the EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?

To answer the first research question aiming to find out the EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety during online and hybrid education periods, descriptive statistics (mean, standard deviation) were applied in the analysis of the data. The findings of each scale with their sub-dimensions were interpreted according to the evaluation criteria which are stated by Günüç (2020), Gürsu (2011), and Doğan (2009), and they are given in Table 13 below.

Table 13

The Evaluation Criteria Used for Student Engagement, Foreign Language Motivation, Foreign Language Classroom Anxiety Scales, and their Sub-dimensions

$\overline{X}$	
Student Engagement	
1.00 – 1.80	not engaged at all
1.81 – 2.60	not engaged
2.61 – 3.40	low level of engagement
3.41 – 4.20	engaged
4.21 – 5.00	highly engaged
Foreign Language Motivation	
1.00 – 1.80	very low
1.81 – 2.60	low
2.61 – 3.40	moderate
3.41 – 4.20	high
4.21 – 5.00	very high
Foreign Language Classroom Anxiety	
1.00 – 1.80	very low
1.81 – 2.60	low
2.61 – 3.40	moderate
3.41 – 4.20	high
4.21 – 5.00	very high

4.2.1 The findings of the online education period. The findings of online EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety with their sub-dimensions are given in Table 14 below.

Table 14

Online EFL Learners' Levels of Student Engagement, Foreign Language Motivation, and Foreign Language Anxiety with their Sub-dimensions

Scale/Sub-dimension	N	k	$\overline{X}$	SD	$\overline{X}$ /k	
Student Engagement	175	30	121.41	15.11	4.05	Engaged
Cognitive Engagement	175	10	38.50	6.37	3.85	Engaged
Emotional Engagement	175	16	65.58	8.46	4.10	Engaged
Behavioural Engagement	175	4	17.33	2.37	4.33	Highly Engaged
Foreign Language Motivation	175	34	137.34	16.58	4.04	High
Motivational Intensity	175	10	36.34	6.40	3.63	High
Desire to Learn English	175	10	41.25	5.54	4.13	High
Attitudes Toward Learning English	175	10	42.06	5.58	4.21	Very High
Instrumental Orientation	175	4	17.69	2.07	4.42	Very High
Foreign Language Classroom Anxiety	175	33	91.45	22.25	2.77	Moderate
Communication Apprehension	175	11	33.49	7.49	3.04	Moderate
Test Anxiety	175	15	38.40	9.97	2.56	Low
Fear of Negative Evaluation	175	7	19.56	6.55	2.79	Moderate

k: number of items in a scale/sub-dimension

$\overline{X}$ /k: mean value (M) in a 5-Likert scale

According to Table 14, online EFL learners' overall mean value of student engagement was found as 4.05, which put the students into the category of 'engaged'. As for its sub-dimensions, the lowest mean value belonged to cognitive engagement with 3.85; however, this value fell into the category of 'engaged', which showed that the students were also cognitively 'engaged'. The sub-dimension of emotional engagement's mean value was 4.10, exhibiting that the EFL learners were emotionally 'engaged' during the online English education period. The final sub-dimension of student engagement, which is behavioural engagement, had the highest mean value (M=4.33), revealing that the students were behaviourally 'highly engaged'. As all the scores gained from the

student engagement scale were higher than 3.41, it can be stated that the EFL learners were *engaged* with their English lessons while they were receiving their courses online.

Regarding foreign language motivation, the overall mean score of the online EFL learners was 4.04, which demonstrated that the students had a 'high' level of foreign language motivation. Among its sub-dimensions, the motivational intensity had the lowest mean value (M=3.63); however, this value showed that the learners' motivational intensity level was also 'high'. Similar to the sub-dimension of motivational intensity level, the desire to learn English dimension pointed out that students had a 'high' level with a mean value of 4.13. The learners' attitudes toward learning English (M=4.21) and the instrumental orientation (M=4.42) levels were found as 'very high'. The descriptive findings obtained from the foreign language motivation scale revealed that the participant students appeared to be *motivated* to learn English during their online English education period.

The findings of the foreign language classroom anxiety scale revealed that the general anxiety level of the EFL students was 'moderate' with a mean score of 2.77. The sub-dimension of communication apprehension had the highest mean value (M=3.04), but the students' level fell into the category of 'moderate'. Different from the other findings from this scale, the mean score of the test anxiety sub-dimension had the lowest value (M=2.56), which pointed out that the students did not experience test anxiety at higher levels during the online English education period. The mean score of the final sub-dimension, fear of negative evaluation, was found as 2.79, and it showed that the students' level of this type of anxiety was 'moderate' as well. The descriptive findings of the FLCAS indicated that EFL learners mostly experienced *moderate level of anxiety* at the time of their online education period.

4.2.2 The findings of the hybrid education period. The findings of hybrid EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety with their sub-dimensions are presented in Table 15 below.

Table 15

Hybrid EFL Learners' Levels of Student Engagement, Foreign Language Motivation, and Foreign Language Anxiety with their Sub-dimensions

Scale/Sub-dimension	N	k	$\overline{X}$	SD	$\overline{X}$ /k	
Student Engagement	294	30	118.73	13.17	3.96	Engaged
Cognitive Engagement	294	10	37.92	5.16	3.79	Engaged
Emotional Engagement	294	16	64.14	8.68	4.01	Engaged
Behavioural Engagement	294	4	16.67	2.14	4.17	Engaged
Foreign Language Motivation	294	34	132.83	15.41	3.91	High
Motivational Intensity	294	10	35.05	5.59	3.51	High
Desire to Learn English	294	10	39.95	5.45	4.00	High
Attitudes Toward Learning English	294	10	40.44	5.63	4.04	High
Instrumental Orientation	294	4	17.39	2.28	4.35	Very High
Foreign Language Classroom Anxiety	294	33	92.22	21.61	2.79	Moderate
Communication Apprehension	294	11	32.87	7.08	2.99	Moderate
Test Anxiety	294	15	39.18	9.50	2.61	Moderate
Fear of Negative Evaluation	294	7	20.17	6.36	2.88	Moderate

k: number of items in a scale/sub-dimension

$\overline{X}$ /k: mean value (M) in a 5-Likert scale

As given in Table 15, hybrid EFL learners' overall mean value of student engagement was 3.96, indicating that the level of the learners was in the 'engaged' category. When the sub-dimensions' mean scores were analysed, it was seen that the students were cognitively (M=3.79), emotionally (M=4.01), and behaviourally (M=4.17) 'engaged' during the hybrid English education period. Although the emotional and behavioural engagement had slightly higher mean values than the cognitive and overall student engagement, all of the findings gained from the student engagement scale showed that the learners were '*engaged'* with their English lessons during hybrid education time.

The descriptive findings of the foreign language motivation scale put forward that the students' level of motivation was 'high' with a mean score of 3.91. The motivational intensity sub-dimension had the lowest mean value (M=3.51), but this finding also fell into the category of 'high' motivation. The sub-dimensions of desire to learn English (M=4.00) and attitudes toward learning English (M=4.04) were also in the category of 'high' motivation with slightly higher mean values. Unlike other findings from this scale, the instrumental orientation sub-dimension was in the 'very high' motivation category with a mean score of 4.35. Through these findings, it can be concluded that the EFL learners were *highly motivated* during the hybrid English education period.

When the findings of the foreign language classroom anxiety scale were analysed, the students' overall level was found as 'moderate' with a mean score of 2.79. Similarly, the levels of all sub-dimensions, communication apprehension (M=2.99), test anxiety (M=2.61), and fear of negative evaluation (M=2.88), were found as 'moderate'. The findings gained from this scale showed that the EFL learners' *anxiety* levels were *not very high* or *very low* while they were receiving their English education in hybrid mode.

4.3 Research Question 2: Is there a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type?

To respond to the second research question, which aims to reveal whether there is a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type, the inferential statistics (independent samples t-test, Mann-Whitney U test, Cohen's d effect size) were employed to analyse the data. The comparative findings were presented for each group (education mode, gender, and university type) separately in the sub-sections.

4.3.1 The findings by the education mode. To find out whether there was a significant difference in the levels of EFL learners' student engagement, foreign language

motivation, and foreign language anxiety when analysed by education mode, first of all, the scores were examined to determine whether they were normally distributed according to the education mode, and it was found that the scores gained from the scales and their sub-dimensions were normally distributed. Afterward, independent samples t-test was applied to analyse the data obtained from the scales and their sub-dimensions. The findings are illustrated in Table 16.

Table 16

Comparison of Online and Hybrid Education Periods

Scale/Sub-dimension	Education Mode	N	$\overline{X}$	SD	t	df	p	d
Student Engagement	Online	175	121.41	15.11	-2.014	467	.045*	.192
	Hybrid	294	118.73	13.17				
Cognitive Engagement	Online	175	38.50	6.37	-1.019	467	.309	.103
	Hybrid	294	37.92	5.16				
Emotional Engagement	Online	175	65.58	8.46	-1.754	467	.080	.167
	Hybrid	294	64.14	8.68				
Behavioural Engagement	Online	175	17.33	2.37	-3.102	467	.002*	.296
	Hybrid	294	16.67	2.14				
Foreign Language Motivation	Online	175	137.34	16.58	-2.975	467	.003*	.284
	Hybrid	294	132.83	15.41				
Motivational Intensity	Online	175	36.34	6.40	-2.220	467	.027*	.219
	Hybrid	294	35.05	5.59				
Desire to Learn English	Online	175	41.25	5.54	-2.469	467	.014*	.236
	Hybrid	294	39.95	5.45				
Attitudes toward Learning English	Online	175	42.06	5.58	-3.015	467	.003*	.288
	Hybrid	294	40.44	5.63				
Instrumental Orientation	Online	175	17.69	2.07	-1.427	467	.154	.136
	Hybrid	294	17.39	2.28				
Foreign Language Classroom Anxiety	Online	175	91.45	22.25	.369	467	.712	.035
	Hybrid	294	92.22	21.61				
Communication Apprehension	Online	175	33.49	7.49	-.894	467	.372	.085
	Hybrid	294	32.87	7.08				
Test Anxiety	Online	175	38.40	9.97	.844	467	.399	.081
	Hybrid	294	39.18	9.50				
Fear of Negative Evaluation	Online	175	19.56	6.55	.988	467	.324	.094
	Hybrid	294	20.17	6.36				

*****p<.05

$\overline{X}$: mean (M) score

When Table 16 is examined, it can be viewed that according to the education mode of participants, no statistically significant difference existed in the findings of cognitive engagement ($t_{(467)}$ = -1.019, p > .05), emotional engagement ($t_{(467)}$ = -1.754, p > .05), instrumental orientation ($t_{(467)}$ = -1.427, p > .05), foreign language anxiety ($t_{(467)}$ = -.369, p > .05), communication apprehension ($t_{(467)}$ = -.894, p > .05), test anxiety ($t_{(467)}$ = -.844, p > .05), and fear of negative evaluation ($t_{(467)}$ = -.988, p > .05). In other words, two different modes of education (online and hybrid) did not affect the participants' score of *cognitive engagement, emotional engagement, instrumental motivation, foreign language anxiety, communication apprehension, test anxiety,* and *fear of negative evaluation*. It can be stated that those who received an online mode of education and those who experienced a hybrid mode of education had similar opinions on these constructs.

On the other hand, as it is illustrated in Table 16, according to the education mode of the EFL learners, there was a statistically significant difference in the findings of student engagement ($t_{(467)}$ = -2.014, p < .05), behavioural engagement ($t_{(467)}$ = -3.102, p < .05), foreign language motivation ($t_{(467)}$ = -2.975, p < .05), motivational intensity ($t_{(467)}$ = -2.220, p < .05), desire to learn English ($t_{(467)}$ = -2.469, p < .05), and attitudes toward learning English ($t_{(467)}$ = -3.015, p < .05).

To start with the first significant difference, the findings of the *student engagement* scale revealed that the online EFL learners' mean score ($\overline{X}$ = 121.41) was higher than the hybrid EFL learners' mean score ($\overline{X}$ = 118.73), indicating that the participants who received online education had a higher level of *engagement* with their English language education than the participants who had their courses in hybrid mode.

To continue with the second significant difference, *behavioural engagement* findings showed that online EFL students had a higher mean value ($\overline{X}$ = 17.33) than hybrid EFL students ($\overline{X}$ = 16.67). Through this result, it can be stated that online EFL learners experienced more *behavioural engagement* than hybrid EFL learners.

As for the *foreign language motivation*, the results displayed that online EFL learners' mean score ($\overline{X}$ = 137.34) was higher than the hybrid EFL learners' mean score ($\overline{X}$ = 132.83). The significant difference between these two groups of learners asserted that online EFL participants had a higher level of *motivation* than hybrid EFL participants.

The *motivational intensity* sub-dimension was another significant difference between the two groups of learners. The findings put forth that online EFL learners' mean value was 36.34, and the hybrid EFL students' mean value was 35.05, which showed that online EFL learners were found to have more *motivational intensity* than the hybrid EFL learners.

The findings of the other sub-dimension of foreign language motivation, the desire to learn English, were also significantly different. The mean score of the online EFL learners ($\overline{X}$ = 41.25) was higher than the hybrid EFL learners' mean score ($\overline{X}$ = 39.95). This difference showed that the online EFL learners' *desire to learn English* was more than the hybrid EFL learners.

The last significant difference between the two groups of learners was gained from the results of the *attitudes toward learning English* sub-dimension. The mean value of the online EFL learners was 42.06, and the mean value of hybrid EFL learners was 40.44, which indicated that the online learners' level of *attitudes toward learning English* was higher than the hybrid EFL learners.

The above-mentioned statistically significant findings showed that the EFL learners who received their education *online* had higher mean scores than the EFL students who studied their English courses in *hybrid* mode. In other words, all the statistical differences that emerged from the comparison of *online* and *hybrid* education periods revealed that online EFL learners were more *engaged* and *motivated* but not more anxious than hybrid EFL learners.

4.3.2 The findings by the gender. The findings according to gender were presented for both *online* and *hybrid* education periods, respectively, below.

4.3.2.1 The findings of the online education period. To reveal if there was a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by gender, the scores were tested to find out whether they were normally distributed. After it was found that the scores obtained from the scales and their sub-dimensions were normally distributed, independent samples t-test was administered to analyse the data. The findings related to gender during the online education period are given in Table 17.

Table 17

The findings of Online Education Period by Gender

Scale/Sub-dimension	Gender	N	$\overline{X}$	SD	T	df	p	d
Student Engagement	Female	97	124.93	11.91	3.414	173	.001*	.540
	Male	78	117.03	17.43				
Cognitive Engagement	Female	97	40.11	5.38	3.890	173	.000*	.592
	Male	78	36.49	6.95				
Emotional Engagement	Female	97	66.98	7.10	2.390	137.607	.018*	.376
	Male	78	63.85	9.67				
Behavioural Engagement	Female	97	17.84	1.82	3.121	126.630	.002*	.496
	Male	78	16.69	2.79				
Foreign Language Motivation	Female	97	140.26	15.00	2.643	173	.009*	.402
	Male	78	133.71	17.79				
Motivational Intensity	Female	97	36.95	6.18	1.400	173	.163	.213
	Male	78	35.59	6.63				
Desire to Learn English	Female	97	42.37	5.09	3.067	173	.003*	.466
	Male	78	39.85	5.80				
Attitudes toward Learning English	Female	97	42.78	5.15	1.935	173	.055	.294
	Male	78	41.15	5.99				
Instrumental Orientation	Female	97	18.15	1.77	3.396	173	.001*	.516
	Male	78	17.12	2.28				
Foreign Language Classroom Anxiety	Female	97	96.35	21.08	3.341	173	.001*	.508
	Male	78	85.36	22.30				
Communication Apprehension	Female	97	35.78	6.87	4.794	173	.000*	.729
	Male	78	30.64	7.27				
Test Anxiety	Female	97	39.85	9.97	2.160	173	.032*	.329
	Male	78	36.60	9.74				
Fear of Negative Evaluation	Female	97	20.72	6.28	2.664	173	.008*	.405
	Male	78	18.12	6.62				

*****p<.05

$\overline{X}$: mean (M) score

As Table 17 illustrates, according to the gender of *online* EFL learners, there was no statistically significant difference in the findings of motivational intensity ($t_{(173)} = 1.400$, $p > .05$) and attitudes towards learning English ($t_{(173)} = 1.935$, $p > .05$). To put it differently,

the gender of online education participants did not affect their score of *motivational intensity* and *attitudes towards learning English*. It can be stated that both female and male participants had similar opinions on these constructs.

However, when Table 17 is analysed according to the gender of *online* EFL students, statistically significant differences were found in the findings of student engagement ($t_{(173)} = 3.414$, $p < .05$), cognitive engagement ($t_{(173)} = 3.890$, $p < .05$), emotional engagement ($t_{(173)} = 2.390$, $p < .05$), behavioural engagement ($t_{(173)} = 3.121$, $p < .05$), foreign language motivation ($t_{(173)} = 2.643$, $p < .05$), desire to learn English ($t_{(173)} = 3.067$, $p < .05$), instrumental orientation ($t_{(173)} = 3.396$, $p < .05$), foreign language anxiety ($t_{(173)} = 3.341$, $p < .05$), communication apprehension ($t_{(173)} = 4.794$, $p < .05$), test anxiety ($t_{(173)} = 2.160$, $p < .05$), and fear of negative evaluation ($t_{(173)} = 2.664$, $p < .05$).

To begin with the first significant difference, the findings of the *student engagement* scale indicated that the mean value of female students ($\overline{X} = 124.93$) was higher than the mean value of the male students ($\overline{X} = 117.03$), revealing that the female learners had a higher level of *engagement* with their online English courses than the male learners.

All other sub-dimensions of the student engagement scale had similar significant findings. To start with the *cognitive engagement*, the female participants' mean value ($\overline{X} =40.11$) was higher than the male participants' mean value ($\overline{X} =36.49$). When it comes to *emotional engagement*, the mean score of the female participants was 66.98, and the male participants' mean score was 63.85. As for the last sub-dimension, *behavioural engagement*, the female students had a higher mean score ($\overline{X} = 17.84$) than the male learners ($\overline{X} = 16.69$). Through these results, it can be concluded that the female learners were *cognitively*, *emotionally*, and *behaviourally* more *engaged* than the male learners during the online English education period.

When the results of the *foreign language motivation* scale were analysed, it was found that the mean score of the female students was 140.26, while it was 133.71 for the male students. Since this difference was found as statistically different, it can be stated that the female online learners had a higher *foreign language motivation* level than the male online learners.

The findings of the two sub-dimensions of the foreign language motivation scale were similar. The first sub-dimension that showed a significant difference was the *desire to learn English*. Table 17 illustrates that the female learners' mean value ($\overline{X}$ = 42.37) was higher than that of male learners ($\overline{X}$ =39.85). The second sub-dimension showing a statistically significant difference was *instrumental orientation*. While the mean value of the female learners was 18.15, it was 17.12 for the male learners. Therefore, it was concluded that the female learners showed more *desire to learn English* and had a higher level of *instrumental orientation* than the male learners at the time of the online English education.

The findings of the *foreign language classroom anxiety* scale and all sub-dimensions had statistically significant differences between female and male learners. To start with the overall findings of the scale, it was found that the female students' mean score was 96.35 while it was 85.36 for the male students, which indicated that the female learners experienced *foreign language anxiety* more than the male learners during the online English education period.

To continue with the first sub-dimension of the foreign language classroom anxiety scale, which is *communication apprehension*, had similar findings. The female students' mean value ($\overline{X}$ = 35.78) was higher than the male students' mean value ($\overline{X}$ = 30.64). The results of the second sub-dimension, *test anxiety*, displayed that the female learners' mean score was 39.85, and it was 36.60 for the male students. The results of the last sub-dimension, *fear of negative evaluation*, were parallel. The female students' mean score ($\overline{X}$ = 20.72) was higher than the male students' mean score ($\overline{X}$ = 18.12). Since all of these differences were found statistically significant, it can be put forth that *foreign language anxiety* and its three types, *communication apprehension, test anxiety, and fear of negative evaluation,* were experienced by the female participants more than the male participants during the online English education period. Put differently, female EFL learners were more *anxious* than their male counterparts during the online English education period.

To summarize this part, the findings of the student engagement scale pointed out that female EFL learners exhibited a higher level of *engagement* than male EFL learners. When it comes to the findings of the foreign language motivation scale, the female EFL

learners had a higher level of *motivation* (except for the motivational intensity and attitudes toward learning English sub-dimensions) than the male EFL learners. The findings of the final scale, foreign language classroom anxiety, revealed that female EFL learners experienced *anxiety* more than male EFL learners when receiving their English courses online.

4.3.2.2 The findings of the hybrid education period. To find out whether there was a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by gender, the scores were tested for normality. When the scores gained from the scales and their sub-dimensions were found as normally distributed, independent samples t-test was employed to analyse the data. The findings according to the gender of the hybrid education period are illustrated in table 18 below.

Table 18

The findings of Hybrid Education Period by Gender

Scale/Sub-dimension	Gender	N	$\overline{X}$	SD	T	df	p	d
Student Engagement	Female	149	119.38	12.75	.863	292	.389	.101
	Male	145	118.06	13.60				
Cognitive Engagement	Female	149	38.07	4.92	.523	292	.601	.061
	Male	145	37.76	5.41				
Emotional Engagement	Female	149	64.32	8.27	.345	292	.730	.040
	Male	145	63.97	9.10				
Behavioural Engagement	Female	149	16.99	2.06	2.685	292	.008*	.313
	Male	145	16.33	2.16				
Foreign Language Motivation	Female	149	133.26	16.06	.482	292	.630	.056
	Male	145	132.39	14.77				
Motivational Intensity	Female	149	35.38	5.69	1.021	292	.308	.119
	Male	145	34.71	5.48				
Desire to Learn English	Female	149	40.00	5.46	.130	292	.897	.015
	Male	145	39.91	5.46				
Attitudes toward Learning English	Female	149	40.60	5.97	.499	292	.618	.058
	Male	145	40.28	5.26				
Instrumental Orientation	Female	149	17.29	2.26	-.782	292	.435	.091
	Male	145	17.50	2.30				
Foreign Language Classroom Anxiety	Female	149	97.56	21.55	4.427	292	.000*	.516
	Male	145	86.74	20.32				
Communication Apprehension	Female	149	34.76	6.89	4.794	292	.000*	.559
	Male	145	30.94	6.77				
Test Anxiety	Female	149	41.05	9.86	3.491	292	.001*	.407
	Male	145	37.26	8.74				
Fear of Negative Evaluation	Female	149	21.75	6.13	4.449	292	.000*	.519
	Male	145	18.54	6.21				

*p<.05

$\overline{X}$: mean (M) score

Table 18 displays that according to the gender of *hybrid* EFL learners, no statistically significant difference emerged in the findings of student engagement ($t_{(292)} = .863$, $p > .05$), cognitive engagement ($t_{(292)} = .523$, $p > .05$), emotional engagement ($t_{(292)} = .345$, $p > .05$),

foreign language motivation ($t_{(292)}$ = .482, p > .05), motivational intensity ($t_{(292)}$ = 1.021, p > .05), desire to learn English ($t_{(292)}$ = .130, p > .05), attitudes toward learning English ($t_{(292)}$ = .499, p > .05), and instrumental orientation ($t_{(292)}$ = -.782, p > .05). To state in a different way, hybrid education learners' gender did not affect the score of *student engagement, cognitive engagement, emotional engagement, foreign language motivation, motivational intensity, desire to learn English, attitudes toward learning English,* and *instrumental orientation.* It can be concluded that both female and male students shared similar opinions on these constructs.

Yet, as Table 18 shows, according to the gender of *hybrid* EFL learners, there were statistical differences in the findings of behavioural engagement ($t_{(292)}$ = 2.685, p < .05), foreign language anxiety ($t_{(292)}$ = 4.427, p < .05), communication apprehension ($t_{(292)}$ = 4.794, p < .05), test anxiety ($t_{(292)}$ = 3.491, p < .05), and fear of negative evaluation ($t_{(292)}$ = 4.449, p < .05).

The first statistically significant difference emerged from the findings of *behavioural engagement.* The female participants' mean value ($\overline{X}$=16.99) was higher than the male participants' mean value ($\overline{X}$=16.33), which pointed out that the female learners had a higher level of *behavioural engagement* than the male learners during the hybrid English education period.

All other significant differences were found in the foreign language classroom anxiety scale results. To start with the overall *anxiety* findings, the female students had a higher mean value ($\overline{X}$=97.56) than the male students' mean value ($\overline{X}$=86.74). As for the communication apprehension sub-dimension findings, the mean score of the female learners (/=34.76) was higher than that of the male students ($\overline{X}$=30.94). The findings of the second sub-dimension, *test anxiety*, showed that while the female students' mean score was 41.05, the male students' mean score was 37.26, indicating that the female learners had a higher level of test anxiety. The results of the final sub-dimension of foreign language anxiety, which is *fear of negative evaluation*, displayed that the female students had a higher mean value ($\overline{X}$=21.75) than the male students' mean value ($\overline{X}$=18.54). All these findings obtained from the foreign language classroom anxiety scale revealed that

the female students were more *anxious* than the male students while receiving their English courses in the hybrid mode.

In conclusion, the results gained from the student engagement scale indicated that the female and male EFL learners' levels of engagement were similar, except for the behavioural engagement, which was found to be higher for the female learners. The foreign language motivation scale findings showed that all learners had similar scores; therefore, there was no statistically significant difference between the genders. When it comes to the findings of the foreign language classroom anxiety scale, it was found that female EFL learners had a higher-level of anxiety than their male counterparts during the *hybrid* English education period.

4.3.3 The findings by the university type. The findings according to university type (foundation and state) were given below for online and hybrid education periods, one after another.

4.3.3.1 The findings of the online education period. To determine if there was a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when examined by the university type, firstly, the scores were tested for normality. Except for the scores of cognitive engagement and behavioural engagement sub-dimensions, the other scores gained from the scales of student engagement with emotional engagement sub-dimension, foreign language motivation with the sub-dimensions, and foreign language anxiety including the sub-dimensions were found as normally distributed. Therefore, while the Mann-Whitney U test was applied for the cognitive engagement and behavioural engagement sub-dimensions, the independent samples t-test was employed for the other scales and sub-dimensions. Thus, the online education period findings according to the university type are reported in Table 19 and Table 20 separately below.

Table 19

The findings of Online Education Period by University Type-Part I

Scale/Sub-dimension	University Type	N	$\overline{X}$	SD	t	df	p	d
Student Engagement	State	82	117.24	15.37	-3.533	173	.001*	.535
	Foundation	93	125.08	13.95				
Emotional Engagement	State	82	63.35	8.80	-3.367	173	.001*	.510
	Foundation	93	67.55	7.68				
Foreign Language Motivation	State	82	137.06	16.28	-.206	173	.837	.031
	Foundation	93	137.58	16.92				
Motivational Intensity	State	82	35.17	6.69	-2.303	173	.022*	.349
	Foundation	93	37.38	5.98				
Desire to Learn English	State	82	41.56	5.44	.705	173	.481	.107
	Foundation	93	40.97	5.65				
Attitudes toward Learning English	State	82	42.50	5.66	.986	173	.326	.149
	Foundation	93	41.67	5.51				
Instrumental Orientation	State	82	17.83	1.80	.825	173	.410	.125
	Foundation	93	17.57	2.29				
Foreign Language Classroom Anxiety	State	82	97.66	22.75	3.581	173	.000*	.542
	Foundation	93	85.98	20.40				
Communication Apprehension	State	82	35.41	6.96	3.280	173	.001*	.497
	Foundation	93	31.80	7.56				
Test Anxiety	State	82	41.26	11.16	3.611	173	.000*	.558
	Foundation	93	35.88	8.05				
Fear of Negative Evaluation	State	82	20.99	6.57	2.761	173	.006*	.418
	Foundation	93	18.30	6.29				

*p<.05

$\overline{X}$: mean (M) score

As table 19 shows, according to the university type of online EFL learners, no statistically significant differences were identified in the findings of foreign language motivation ($t_{(173)}$ = -.206, p > .05), desire to learn English ($t_{(173)}$ = .705, p > .05), attitudes toward learning English ($t_{(173)}$ = .986, p > .05), and instrumental orientation ($t_{(173)}$ = .825, p > .05). In other words, online EFL participants' university type, whether it is state or foundation, did not affect the score of *foreign language motivation*, *desire to learn English*, *attitudes toward learning English*, and *instrumental orientation*. It can be stated

that the EFL students who took courses in the state university and those who received their lessons in the foundation university in an online mode of education had similar ideas on these constructs.

However, as Table 19 illustrates, statistically significant differences were found in the findings of student engagement ($t_{(173)}$ = -3.533, p < .05), emotional engagement ($t_{(173)}$ = -3.367, p < .05), motivational intensity ($t_{(173)}$ = -2.303, p < .05), foreign language anxiety ($t_{(173)}$ = 3.581, p < .05), communication apprehension ($t_{(173)}$ = 3.280, p < .05), test anxiety ($t_{(173)}$ = 3.611, p < .05), and fear of negative evaluation ($t_{(173)}$ = 2.761, p < .05).

The first significant difference was obtained from the findings of the *student engagement* scale. The mean score of the foundation university students ($\overline{X}$ = 125.08) was higher than the state university students' mean score ($\overline{X}$ = 117.24), which indicated that the EFL learners who studied at the foundation university had a higher-level *engagement* with their courses than the students of the state university at the time of the online education period.

The second statistical difference belonged to the findings of the *emotional engagement* sub-dimension. The mean value of the foundation university students was 67.55, while it was 63.35 for the state university students. This difference showed that the foundation university students' *emotional engagement* level was higher than the state university students while receiving their English courses online.

Another significant difference was *motivational intensity*, which was the only sub-dimension of the foreign language motivation scale. The mean score of the foundation university students ($\overline{X}$ = 37.38) was higher than the mean score of the state university students ($\overline{X}$ = 35.17), showing that the foundation university students had a higher level of *motivational intensity* than their state university counterparts.

All other significant differences emerged in the foreign language classroom anxiety scale findings. To start with the overall findings of *foreign language anxiety*, it was found that the state university students' mean value ($\overline{X}$ = 97.66) was higher than the foundation university students' mean value ($\overline{X}$ = 85.98). When it comes to the *communication apprehension* sub-dimension, the findings put forward that the mean score of the state

university students ($\overline{X}$ = 35.41) was higher than the mean score of the foundation university students ($\overline{X}$ =31.80). The second sub-dimension, *test anxiety*, had similar results. While the state university students' mean value of *test anxiety* was 41.26, it was 35.88 for the foundation university students. The final sub-dimension, *fear of negative evaluation*, had parallel findings. The state university students had a mean score of 20.99, whereas the foundation university students had a mean score of 18.30, which points out that the state university students had a higher level of *fear of negative evaluation* than the foundation university students. The findings obtained from the foreign language classroom anxiety scale revealed that the state university students experienced *foreign language anxiety* and *its types* more than the foundation university students during the online English education period.

As the scores of *cognitive engagement* and *behavioural engagement* sub-dimensions were not normally distributed, they were analysed by employing the Mann-Whitney U test; therefore, their findings are presented in Table 20 below.

Table 20

The findings of Online Education Period by University Type-Part II

Sub-dimension	University Type	N	Mean Rank	Sum of Ranks	U	p
Cognitive Engagement	State	82	75.73	6209.50	2806.50	.003*
	Foundation	93	98.82	9190.50		
Behavioural Engagement	State	82	77.57	6361.00	2958.00	.009*
	Foundation	93	97.19	9039.00		

*p<.05

When Table 20 is analysed, it can be viewed that according to the university type, there were significant differences in the findings of *cognitive engagement* (U = 2806.50, $p < .05$) and *behavioural engagement* (U = 2958.00, $p < .05$).

To begin with *cognitive engagement*, it was found that the mean rank of the foundation university students (98.82) was higher than the mean rank of state university

students (75.73), and this difference indicated that the foundation university students' *cognitive engagement* level was higher than the state university students.

The final significant difference was gained from the findings of *behavioural engagement*. The mean rank of the foundation university students (97.19) was higher than that of state university students (77.57), showing that the foundation university students' level of *behavioural engagement* was more than the state university students at the time of the online education period.

To conclude this part, the findings of the student engagement scale revealed that the foundation university students showed more *engagement* than the state university students. As for the findings of the foreign language motivation scale, it can be concluded that both the foundation university students and the state university students had similar levels of *motivation*, except for the *motivational intensity*, which was found to be higher for the foundation university students. The final scale, foreign language classroom anxiety, put forward that the state university students experienced *anxiety* more than the foundation university students during the *online* English education period.

4.3.3.2 The findings of the hybrid education period. To find out whether there was a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by the university type, the scores were analysed for normality. When the scores gained from the scales and their sub-dimensions were found as normally distributed, independent samples t-test was run to analyse the data. The findings according to the university type of hybrid education period are illustrated in table 21 below.

Table 21

The findings of Hybrid Education Period by University Type

Scale/Sub-dimension	University Type	N	$\overline{X}$	SD	T	df	p	d
Student Engagement	State	176	117.41	12.92	-2.109	292	.036*	.251
	Foundation	118	120.69	13.36				
Cognitive Engagement	State	176	37.39	5.29	-2.173	292	.031*	.259
	Foundation	118	38.71	4.87				
Emotional Engagement	State	176	63.51	8.46	-1.527	292	.128	.182
	Foundation	118	65.08	8.95				
Behavioural Engagement	State	176	16.51	2.12	-1.526	292	.128	.182
	Foundation	118	16.90	2.14				
Foreign Language Motivation	State	176	132.73	15.29	-.136	292	.892	.016
	Foundation	118	132.98	15.66				
Motivational Intensity	State	176	34.87	5.64	-.667	292	.505	.079
	Foundation	118	35.31	5.53				
Desire to Learn English	State	176	39.94	5.29	-.057	292	.955	.007
	Foundation	118	39.97	5.71				
Attitudes toward Learning English	State	176	40.41	5.60	-.102	292	.919	.012
	Foundation	118	40.48	5.70				
Instrumental Orientation	State	176	17.51	2.03	1.053	292	.294	.131
	Foundation	118	17.21	2.60				
Foreign Language Classroom Anxiety	State	176	95.41	22.1	3.142	292	.002*	.374
	Foundation	118	87.46	19.93				
Communication Apprehension	State	176	34.02	7.25	3.518	292	.001*	.409
	Foundation	118	31.17	6.48				
Test Anxiety	State	176	40.34	9.77	2.569	292	.011*	.306
	Foundation	118	37.46	8.86				
Fear of Negative Evaluation	State	176	21.06	6.48	2.989	292	.003*	.356
	Foundation	118	18.83	5.96				

*p<.05

$\overline{X}$: mean (M) score

As Table 21 demonstrates, according to the university type, no statistical differences were found in the findings of emotional engagement ($t_{(292)}$ = -1.527, p > .05), behavioural engagement ($t_{(292)}$ = -1.526, p > .05), foreign language motivation ($t_{(292)}$ = -.136, p > .05), motivational intensity ($t_{(292)}$ = -.667, p > .05), desire to learn English ($t_{(292)}$ = -.057, p > .05),

attitudes toward learning English ($t_{(292)}$ = -.102, p > .05), and instrumental orientation ($t_{(292)}$ = 1.053, p > .05). To put differently, hybrid EFL learners' university type, state or foundation, did not affect the score of *emotional engagement, behavioural engagement, foreign language motivation, motivational intensity, desire to learn English, attitudes toward learning English,* and *instrumental orientation.* These findings revealed that the EFL learners who studied courses in the state and the foundation universities during the hybrid education period shared similar ideas on these constructs.

On the other hand, there were statistically significant differences in the findings of student engagement ($t_{(292)}$ = -2.109, p < .05), cognitive engagement ($t_{(292)}$ = -2.173, p < .05), foreign language anxiety ($t_{(292)}$ = 3.142, p < .05), communication apprehension($t_{(292)}$ = 3.518, p < .05), test anxiety ($t_{(292)}$ = 2.569, p < .05), and fear of negative evaluation ($t_{(292)}$ = 2.989, p < .05).

The first significant difference was gained from the findings of the *student engagement* scale. The mean score of the foundation university students ($\overline{X}$ = 120.69) was higher than the state university students' mean score (117.41), which showed that the foundation university students' level of *student engagement* was higher than the state university students during the hybrid education period.

The second statistically significant difference was obtained from the findings of the *cognitive engagement* sub-dimension. While the mean value was found as 38.71 for the foundation university students, it was 37.39 for the state university students, which indicated that the foundation university students' level of *cognitive engagement* was higher than the state university students.

All other significant differences were gained from the *foreign language classroom anxiety* scale and its sub-dimensions. To begin with, the overall findings of the *foreign language classroom anxiety*, the mean score of the state university students ($\overline{X}$ = 95.41) was higher than the mean score of the foundation university students ($\overline{X}$ = 87.46). The results of the first sub-dimension, *communication apprehension*, were similar. The mean value of the state university students was found as 34.02, while it was found to be 31.17 for the foundation university students, indicating that the state university students had a higher level of *communication apprehension* than the foundation university students. As

for the second sub-dimension, *test anxiety*, the state university students had a higher mean score ($\bar{X}$ = 40.34) than the foundation university students ($\bar{X}$ = 37.46). The final sub-dimension of the foreign language classroom anxiety scale, which is *fear of negative evaluation*, had similar findings. The mean value of the state university students ($\bar{X}$ = 21.06) was found to be higher than the mean value of the foundation university students ($\bar{X}$ = 18.83). These findings indicated that the level of *anxiety* was higher among the state university students than the foundation university students during the hybrid education period.

To sum up, the findings gained from the student engagement scale demonstrated that the foundation university students had a higher level of *engagement* (except for the emotional and behavioural engagement) than the state university students. However, the findings obtained from the foreign language motivation scale showed that both universities' students had a similar level of *motivation*. On the other hand, the last scale, foreign language classroom anxiety, revealed that state university students had a higher level of *anxiety* than foundation university students at the time of the *hybrid* education period.

4.4 Research Question 3: If there are any relations, to what extent do student engagement, foreign language motivation, and foreign language anxiety have an influence on foreign language achievement during *online* and *hybrid* education periods?

To answer the third research question aiming to find out the relationships, if there are any, among student engagement, foreign language motivation, foreign language anxiety, and foreign language achievement, descriptive statistics (Pearson correlation coefficient) were applied. After that, to measure the extent of influence of the independent variables (i.e., student engagement, foreign language motivation, and foreign language anxiety) on the dependent variable (i.e., foreign language achievement), inferential statistics (multiple regression analysis, stepwise regression analysis) were administered. The findings of both analyses are presented for each education period respectively.

4.4.1 Correlation analysis findings for the online education period. *To* identify the direction (positive or negative) and the strength (low, moderate, or strong) of the relationships among four criterion measures (i.e., student engagement, foreign language motivation, foreign language classroom anxiety, and foreign language achievement), first of all, correlational analysis was performed by using a Pearson correlation coefficient (*r*). The findings of the analysis are given in Table 22 for the online education period.

Table 22

Correlation Findings of Online Education Period

Scale/Sub-scale	Foreign Language Achievement	Student Engagement	Foreign Language Motivation	Foreign Language Classroom Anxiety
Foreign Language Achievement		.20**	.20*	-.31**
Student Engagement			.67**	-.33**
Foreign Language Motivation				-.42**
Foreign Language Classroom Anxiety				

*: correlation is significant at .05 level (2-tailed).
**: correlation is significant at .01 level (2-tailed).

According to the findings given in Table 22, the correlation between student engagement and foreign language achievement was found to be positive, low level, and significant ($r = .20$, $p < .05$), which revealed that when the student engagement score increased, the foreign language achievement score increased as well. To continue with the correlation between foreign language motivation and foreign language achievement, it was found that there was a positive, low level and significant relationship ($r = .20$, $p < .05$), which indicated that once the score of foreign language motivation increased, the foreign language achievement score increased, too. When it comes to the correlation between foreign language classroom anxiety and foreign language achievement, it was

found that there was a negative, moderate level and significant relationship (r =-.31, p < .05). In other words, when the foreign language classroom anxiety score decreased, the foreign language achievement score increased. As for the correlation between student engagement and foreign language motivation, it was found that there was a positive, moderate level, and significant relationship (r = .67, p < .05). Put differently, when the score of student engagement increased, the score of foreign language motivation increased as well. The correlational finding between student engagement and foreign language classroom anxiety was negative, moderate level, and significant (r =-.33, p < .05), which showed that when the student engagement score increased, the score of foreign language anxiety decreased, as well. The last correlational finding in Table 22 pointed out that there was a negative, moderate level, and significant relationship (r =-.42, p < .05) between foreign language motivation and foreign language anxiety, meaning that when the score of foreign language motivation increased, the score of foreign language anxiety declined. The correlational analysis was run for all variables (scales) and their sub-dimensions for the online education data.

To sum up, student engagement, foreign language motivation, and foreign language achievement were positively correlated with each other. Yet, foreign language anxiety was negatively correlated with these three constructs, which indicated that when the anxiety score increased, student engagement, foreign language motivation, and foreign language achievement decreased or vice versa. A detailed correlation analysis was run for each variable and their sub-dimensions, and the findings are given in Table 23.

Table 23

Detailed Correlation Findings of Online Education Period

Scale/Sub-scale	Foreign Language Achievement	Student Engagement	Cognitive Engagement	Emotional Engagement	Behavioural Engagement	Foreign Language Motivation	Motivational Intensity	Desire to Learn English	Attitudes toward Learning English	Instrumental Orientation	Foreign Language Classroom Anxiety	Communication Apprehension	Test Anxiety	Fear of Negative Evaluation
Foreign Language Achievement		.20**	.19*	.18*	.10	.20*	.17*	.19*	.19*	.06	-.31**	-.26**	-.31**	-.28**
Student Engagement			.87**	.91**	.80**	.67**	.68**	.53**	.53**	.40**	-.33**	-.21**	-.41**	-.27**
Cognitive Engagement				.60**	.73**	.69**	.74**	.55**	.52**	.37**	-.27**	-.11**	-.37**	-.21**
Emotional Engagement					.59**	.49**	.47**	.39*	.43**	.32**	-.32**	-.24**	-.37**	-.26**
Behavioural Engagement						.62**	.66**	.48**	.44**	.42**	-.26**	-.14**	-.32**	-.23**
Foreign Language Motivation							.85**	.92**	.89**	.52**	-.42**	-.26**	-.51**	-.34**
Motivational Intensity								.65**	.60**	.31**	-.48**	-.32**	-.55**	-.43**
Desire to Learn English									.83**	.46**	-.31**	-.18**	-.41**	-.23**
Attitudes toward Learning English										.36**	-.38**	-.24**	-.48**	-.30**
Instrumental Orientation											.02	.07	-.03	.02
Foreign Language Classroom Anxiety												.92**	.94**	.92**
Communication Apprehension													.76**	.81**
Test Anxiety														.80**
Fear of Negative Evaluation														

*: correlation is significant at .05 level (2-tailed) **: correlation is significant at .01 level (2-tailed).

4.4.2 Multiple regression analysis findings for the online education period. To measure the extent of influence of the independent variables (i.e., student engagement, foreign language motivation, and foreign language anxiety) on the dependent variable (i.e., foreign language achievement), first of all, the relations between all the research variables were required to be tested, and these findings were presented in the previous section. In this section, the scatterplot graph showing the relations between the research variables is also given in Figure 11 for the online education period.

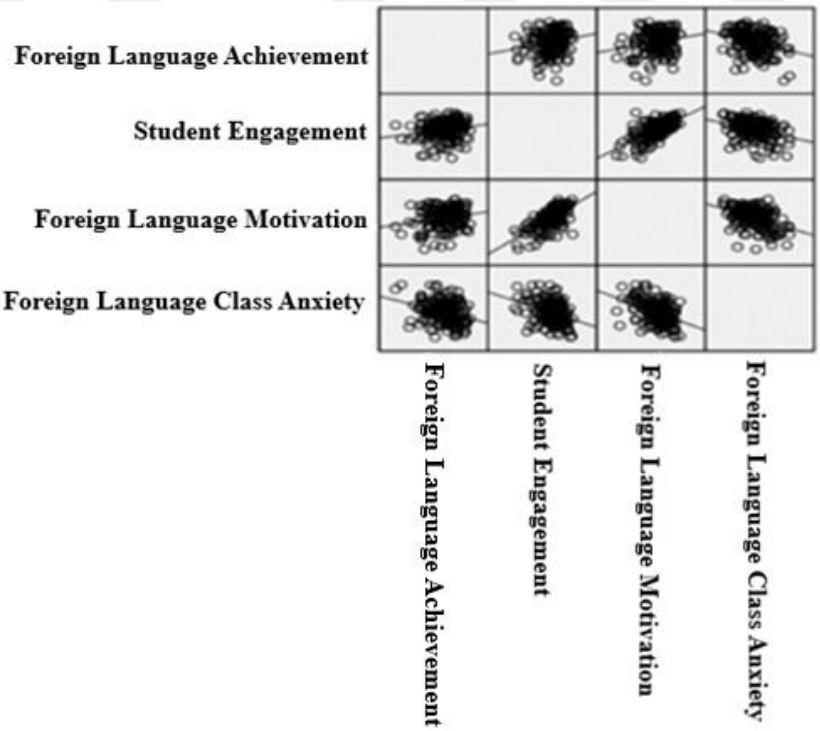

Figure 11. The scatterplot graph of the research variables for the online education period

When the figure is analysed, it can be viewed that all research variables showed linear relations. After analysing the relationships among four criterion measures, the analysis continued with the examination of whether there was multicollinearity among the

independent variables. The findings of the multicollinearity analysis are presented in Table 24.

Table 24

Multicollinearity Findings of Online Education Period

Variable	Tolerance	VIF	CI
Student Engagement	,553	1,810	8,089
Foreign Language Motivation	,515	1,942	27,057
Foreign Language Anxiety	,822	1,216	30,069

Table 24 shows that the tolerance values were greater than .20, the VIF (Variance Inflation Factor) values were less than 10, and the CI (Confidence Interval) values were less than 30. In addition to these findings, the correlation values, given in the previous section, among independent variables were also found to be lower than .80. In this case, it can be stated that the multicollinearity problem did not exist among the independent variables of this study.

After these results, multiple regression analysis was administered, and the findings regarding student engagement, foreign language motivation, and foreign language anxiety achievement are presented in Table 25 below.

Table 25

Multiple Regression Findings of Online Education Period

Variable	B	Standard Error B	β	T	p	Zero-order	Partial
Constant	83,549	8,253		10,124	,000		
Student Engagement	,052	,059	,086	,885	,377	,197	,068
Foreign Language Motivation	,018	,056	,032	,319	,750	,201	,024
Foreign Language Anxiety	-,111	,033	-,268	-3,367	,001	-,310	-,249
$R = .327$, $R^2 = .107$, $F(3, 171) = 6.810$, $p = .000$							

The findings of multiple regression analysis showed that student engagement and foreign language motivation variables were not statistically significant ($p > .05$); therefore, these two variables were excluded from the model and stepwise regression analysis was administered by including only foreign language anxiety variable. The findings regarding this analysis are given in Table 26 below.

Table 26

Regression Findings of Online Education Period

Variable	B	Standard Error B	β	T	p
Constant	93.910	8,253		10,124	,000
Foreign Language Anxiety	-,128	,030	-,310	-4.296	,001
R = .310, R^2 = .096, F (1, 173) = 18.452, p = .000					

The findings of regression analysis showed that foreign language anxiety had a moderate level and significant influence on foreign language achievement, R = .310, R^2 = .096, $p < .01$. Foreign language anxiety variable explained approximately 10% of the total variance in English achievement of EFL students who received their foreign language education in online mode. The standardized regression coefficient (β) of foreign language anxiety was calculated as -.310.

The regression equation model, which predicted the influence of foreign language anxiety on English language achievement according to the results of the regression analysis is given below for the online education period.

English Language Achievement = 93.910- .128 Foreign Language Classroom Anxiety

4.4.3 Correlation analysis findings for the hybrid education period. To find out the direction and the strength of the relationships among the research variables, correlational analysis was administered by using a Pearson correlation coefficient (*r*). The findings of the analysis are given in Table 26 for the hybrid education period.

Table 27

Correlation Findings of Hybrid Education Period

Scale/Sub-scale	Foreign Language Achievement	Student Engagement	Foreign Language Motivation	Foreign Language Classroom Anxiety
Foreign Language Achievement		.06	.13*	-.26**
Student Engagement			.54**	-.29**
Foreign Language Motivation				-.46**
Foreign Language Classroom Anxiety				

*: correlation is significant at .05 level (2-tailed).
**: correlation is significant at .01 level (2-tailed).

As table 27 illustrates, there was no statistically significant correlation between student engagement and foreign language achievement (r = .06, p < .05), which showed that no association existed between these two variables in the data of the hybrid education period. As for the correlation between foreign language motivation and foreign language achievement, it was found that there was a positive, low level and significant relationship (r = .13, p < .05), which revealed that when the score of foreign language motivation increased, the foreign language achievement score increased as well. To continue with the correlation between foreign language classroom anxiety and foreign language achievement, it was found that there was a negative, low level and significant relationship (r = -.26, p < .05). This finding showed that when the foreign language classroom anxiety score decreased, the foreign language achievement score increased. When it comes to the correlation between student engagement and foreign language motivation, it was found that there was a positive, moderate level, and significant relationship (r = .54, p < .05),

which indicated that once the score of student engagement increased, the score of foreign language motivation increased, too. The correlational finding between student engagement and foreign language classroom anxiety was found to be negative, low level, and significant (r = -.29, p < .05). Put differently, when the student engagement score increased, the foreign language classroom anxiety score decreased. The final correlational finding between foreign language motivation and foreign language classroom anxiety revealed that there was a negative, moderate level, and significant relationship (r = -.46, p < .05), which indicated that when the score of foreign language motivation increased, the score of foreign language classroom anxiety decreased. The correlational analysis was applied for all variables (scales) and their sub-dimensions for the hybrid education data.

To conclude, there was no correlation between student engagement and foreign language achievement; therefore, it was not included in the multiple regression analysis. When it comes to the correlation between foreign language motivation and foreign language achievement, it was found positive. However, foreign language anxiety was negatively correlated with student engagement, foreign language motivation, and foreign language anxiety, which indicated that when the anxiety score increased, the scores of these three constructs decreased or vice versa. A detailed correlation analysis was run for each variable and their sub-dimensions, and the findings are given in Table 28.

Table 28

Detailed Correlation Findings of Hybrid Education Period

Scale/Sub-scale	Foreign Language Achievement	Student Engagement	Cognitive Engagement	Emotional Engagement	Behavioural Engagement	Foreign Language Motivation	Motivational Intensity	Desire to Learn English	Attitudes toward Learning English	Instrumental Orientation	Foreign Language Classroom Anxiety	Communication Apprehension	Test Anxiety	Fear of Negative Evaluation
Foreign Language Achievement		.06	.20**	-.05	.08	.13*	.15**	.13*	.16**	-.18**	-.26**	-.24**	-.24**	-.26**
Student Engagement			.76**	.90**	.70**	.54**	.57**	.43**	.40**	.25**	-.29**	-.19**	-.35**	-.24**
Cognitive Engagement				.41**	.59**	.56**	.67**	.40**	.40**	.16**	-.29**	-.20**	-.36**	-.22**
Emotional Engagement					.46**	.38**	.34**	.32**	.29**	.25**	-.24**	-.16**	-.28**	-.22**
Behavioural Engagement						.45**	.50**	.35**	.33**	.14*	-.13*	-.07	-.18**	-.09
Foreign Language Motivation							.77**	.92**	.89**	.47**	-.46**	-.35**	-.53**	-.37**
Motivational Intensity								.56**	.52**	.14*	-.44**	-.37**	-.46**	-.38**
Desire to Learn English									.82**	.42**	-.39**	-.29**	-.46**	-.31**
Attitudes toward Learning English										.33**	-.43**	-.32**	-.50**	-.34**
Instrumental Orientation											-.03	.02	-.10	.03
Foreign Language Classroom Anxiety												.93**	.95**	.95**
Communication Apprehension													.79**	.85**
Test Anxiety														.84**
Fear of Negative Evaluation														

*: correlation is significant at .05 level (2-tailed) **: correlation is significant at .01 level (2-tailed)

4.4.4 Multiple regression analysis findings for the hybrid education period. To measure the extent of influence of independent variables on foreign language achievement, first of all, the relations between all the research variables were tested, and these results were documented in the previous section. As there was no correlation between student engagement and foreign language achievement, the student engagement variable was not included in this section. The scatterplot graph showing the relations between foreign language motivation, foreign language classroom anxiety, and foreign language achievement is given in Figure 12 for the hybrid education period.

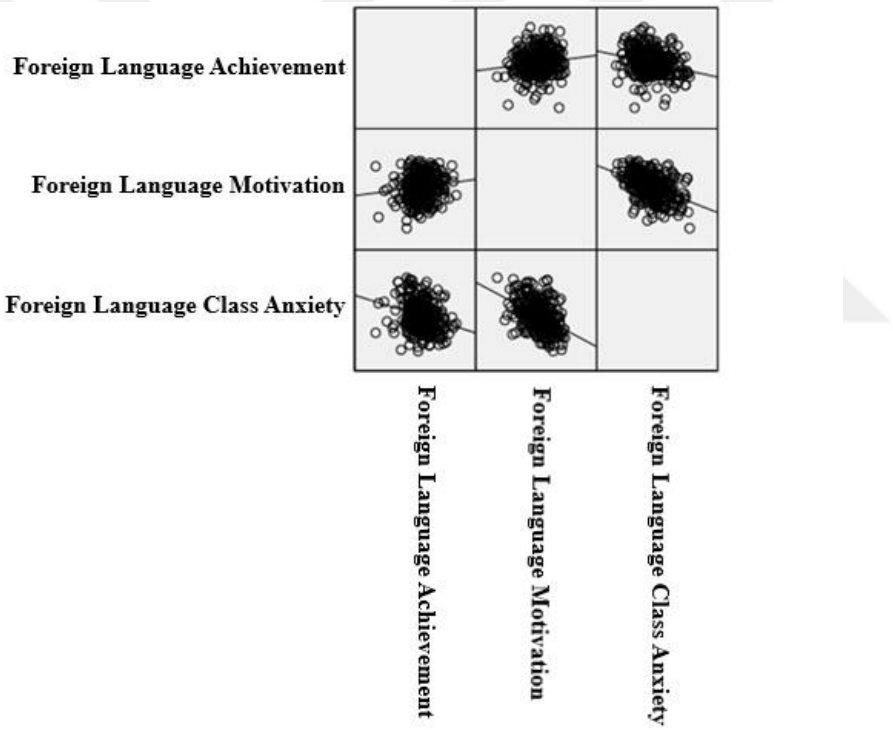

Figure 12. The scatterplot graph of the research variables for the hybrid education period

As Figure 12 illustrates, research variables showed linear relations. After the correlation analysis, the data were examined to reveal whether there was multicollinearity among foreign language motivation and foreign language classroom anxiety. The findings of the multicollinearity analysis are presented in Table 29.

Table 29

Multicollinearity Findings of Hybrid Education Period

Variable	Tolerance	VIF	CI
Foreign Language Motivation	,792	1,263	7,853
Foreign Language Classroom Anxiety	,792	1,263	27,638

According to Table 29, the tolerance values were found to be greater than .20, the VIF values were found to be less than 10, and the CI values were found to be less than 30. Also, the correlation values given in the previous section were found to be less than .80. Through these findings, it can be stated that there was no multicollinearity problem among the variables of foreign language motivation and foreign language classroom anxiety.

After reaching these results, multiple regression analysis was applied, and the findings regarding foreign language motivation and foreign language classroom anxiety are given in Table 30 below.

Table 30

Multiple Regression Findings of Hybrid Education Period

Variable	B	Standard Error B	β	T	p	Zero-order	Partial
Constant	82,323	6,453		12,757	,000		
Foreign Language Motivation	,009	,037	,015	,244	,808	,131	,014
Foreign Language Anxiety	-,105	,027	-,252	-3,968	,000	-,259	-,227

$R = .260$, $R^2 = .068$, $F(2, 231) = 10.535$, $p = .000$

The findings of multiple regression analysis showed that foreign language motivation was not statistically significant ($p > .05$); therefore, this variable was excluded from the model and stepwise regression analysis was administered by including only foreign language anxiety variable. The findings regarding this analysis are given in Table 31 below.

Table 31

Regression Findings of Hybrid Education Period

Variable	B	Standard Error B	β	T	p
Constant	83.798	2.232		37.546	,000
Foreign Language Anxiety	-,108	,024	-,259	--4.591	,000

R = .259, R^2 = .067, F (1, 292) = 21.080, p = .000

The findings of regression analysis showed that foreign language anxiety had a low level and significant influence on foreign language achievement, R = .259, R^2 = .067, p < .01. Foreign language anxiety variable explained approximately 7% of the total variance in English achievement of EFL students who received their foreign language education in hybrid mode. The standardized regression coefficient (β) of foreign language anxiety was calculated as -.259.

The regression equation model, which predicted the influence of foreign language anxiety on English language achievement according to the results of the regression analysis is given below for the hybrid education period.

Foreign Language Achievement = 83.798 - .108 Foreign Language Classroom Anxiety

4.5 Research Question 4: What are the opinions of EFL instructors on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?

To answer the fourth research question aiming to investigate the opinions of EFL instructors on student engagement, foreign language motivation, and foreign language anxiety in online and hybrid education periods, the data were gained from interviews and open-ended questionnaires were analysed by implementing summative content analysis. The most frequent statements (codes) were given under five pre-determined themes,

which are: evaluation of student engagement, strategies to engage students behaviourally, emotionally, and cognitively, factors affecting student engagement, evaluation of foreign language motivation, and evaluation of foreign language anxiety. The findings were exemplified by quotations stated by instructors. The interviews and open-ended questionnaire findings were integrated for each period. First, the online education period findings were presented, then the hybrid education results were given followingly. The EFL instructors were assigned a random number, such as T1, T2, T3…, to ensure anonymity. To be precise and concise, the statements that appeared less than two times were not included in the findings.

4.5.1 Student engagement in online education. When the instructors (N=11) were asked to evaluate and compare face-to-face and online education in terms of student engagement, five (45.5%) instructors out of eleven shared that the students had a lower engagement in online lessons due to various reasons addressed in some of the quotations below.

Compared to face-to-face education, there is a dramatic decrease in student engagement. As teachers, we cannot focus on increasing student engagement as we are supposed to focus on how to deliver lessons by using all necessary technological tools. We are trying to understand what tools to use or how to use them. Besides, we are trying to guide students about using these tools appropriately, which takes time and energy and decreases student engagement more (T5, interview).

The rate of engagement decreased compared to face-to-face education. I feel like students see online classes as optional lessons. Only motivated ones attend or participate in the lessons regularly (T7, interview).

I do not have a chance to observe the students as I do in a physical class because their cameras are always off. That's why I cannot say that all of them are engaged. However, when I ask warm-up questions, for example, they are often unanswered. The students prefer to be silent. They do not want to speak, and they do not want to participate. I feel that. (T8, interview).

Three instructors (27.3%) commented that there was not much difference between face-to-face and online education. They added that teaching mode did not influence student engagement, but students' learning habits and curriculum were. The quotations below reflect this finding.

I believe engagement is more about a student's background, not the education mode used. I mean, if students are experienced in engaging with classroom activities and lessons during high school, they show similar engagement at university. The education mode, whether face-to-face or online, is unimportant, and the students are involved with lessons if they are experienced in this manner (T1, interview).

There is not much difference. It is not about what education mode we use; it is about a curriculum design that an institution adopts. A curriculum that engages students interactively works in both face-to-face and online education modes (T3, interview).

On the other hand, the other three instructors (27.2%) remarked that student engagement was higher in online education than in face-to-face education due to mainly learner characteristics. The quotation below exemplifies this finding.

If I compare, I can say that students are more engaged in online education. It is maybe because they feel more comfortable and less shy themselves. That distance gives them this comfort, and their self-esteem is not in danger. I mean, their anxiety levels are lower. Therefore, they generally answer the questions. They rarely say, 'I have no idea' (T10, interview).

The findings gained from the interviews indicated that although there was no consensus among instructors regarding student engagement in online education, most of them stated that students exhibited less engagement in online lessons.

4.5.2 Student engagement in hybrid education. When the participant instructors (N=9) compared the online and hybrid education period regarding student engagement, six instructors (66.7%) expressed that the students' engagement was lower in hybrid education. According to the instructors, the nature of the hybrid education, a combination of face-to-face and online classes, was the main reason which decreased student engagement as students valued face-to-face classes over online ones. The quotations below clarify this finding.

> *Personally, I do not find hybrid education beneficial. Students do not value online days and do not attend classes on these days. When the education was full online, the students did not have any other alternative, and they were more focused, but in hybrid education, online lessons are seen as optional lessons (T3, interview).*

> *When it was fully online, students had this mindset: this is the only way to education; I need to make the most of it. However, now, they think that face-to-face days are education days and online days are optional. When I observe my students, I can understand that they are not asking their questions on online days because they think that they can ask whatever is on their minds on face-to-face days (T8, interview).*

Three instructors (33.3%) shared that students had a higher engagement in hybrid education mode as they had a chance to take face-to-face classes. However, they agreed that engagement was lower when the lessons were carried out online. The quotation below gives these details and exemplifies this finding.

> *The engagement level of students is higher in hybrid education compared to online education times. They participate in the lessons and activities more. However, they do not show the same performance on face-to-face days and online days. For example, when they have questions about the lesson activities, they prefer to do it on face-to-face days as they feel more comfortable themselves. On online days, they generally prefer being silent, and if they have questions about the activities done on online days, they ask these on face-to-face days (T4, interview).*

The results revealed that most of the instructors found the student engagement level lower in the hybrid mode of education as it caused a division in students' perceptions. In other words, students valued face-to-face classes more; therefore, they showed more engagement on these days. However, their engagement levels decreased on online days as they perceived online classes as optional rather than part of their education. As a result, the fully online period was found more engaging as students did not have a chance to attend the classes on their campuses.

4.5.3 Strategies to engage students behaviourally, emotionally, and cognitively in online education. According to the findings obtained from the interviews and open-ended questionnaires, the strategies used by the participant instructors to engage students behaviourally, emotionally, and cognitively in online lessons were various. Therefore, as given in the literature, the most common strategies applied by EFL instructors in the online education period are given as a list in Table 32 below, and then some quotations were given to clarify or exemplify the strategies used by the instructors. It is noteworthy to state that some techniques were overlapping. For example, a strategy which was used for emotional engagement might have been used for behavioural or cognitive engagement as well. While categorizing these techniques, the primary purpose was considered and the techniques were categorized accordingly.

Table 32

The Strategies Used by Online Education Period Instructors

Strategies for Behavioural Engagement	Strategies for Emotional Engagement	Strategies for Cognitive Engagement
Implementing interactive activities through online tools.	Meeting with students after class to talk about their lives, interests, or problems.	Simplifying the challenging tasks or dividing them into pieces.
Teaching students how to use some digital tools (improving their ICT skills).	Exhibiting positive and supportive teacher presence.	Doing receptive skills in the first and productive skills in the last lessons.
Choosing students randomly and asking topic-related questions.	Knowing students' interests.	Giving students a choice about the activities, assignments, and games.
Asking students to share their ideas/answers through the chat box when they cannot/do not speak.	Collecting feedback from students and making necessary adaptations about the lessons/activities/assignments.	Having students research the lesson topic before the classes.
Explaining every task's purpose and giving instructions clearly.	Being flexible about assignment times or types of assignments (individual, peer, or group work).	Carrying out discussions as an after-class activity.
Rewarding students' daily or weekly performances through assessment.	Using L1 from time to time to make students more comfortable.	Sharing extra resources to improve students' language skills.
Integrating productive activities (writing and speaking) in lessons more.	Replying to students' emails or messages timely.	Setting real-life assignments.
Asking students to give virtual reactions to show whether they agree or disagree with an idea.	Creating an online group/forum where teachers (s) and students communicate or cooperate.	Providing constructive feedback on their tasks regularly.
Using breakout rooms to encourage students to study collaboratively.	Praising students' progress.	Having students reflect on their progress.
Having students give feedback on each other's tasks and performances (peer feedback).		Holding one-to-one online sessions to provide feedback on their tasks/progress.

The strategies used by the instructors were categorized by the researcher; however, as it was stated in the literature, the differences between the dimensions of student engagement were found subtle and fuzzy by three (27.3%) instructors, and they shared their opinions regarding this fuzziness in the interviews and open-ended questionnaires. The quotations below were given to highlight this finding.

I think these engagement types are intertwined. When I plan to apply a strategy to engage them behaviourally, for example, I take their feelings and mental abilities into consideration as well (T10, interview).

Sometimes, I do an activity that engages students in all dimensions. It is not easy to separate the strategies according to these three dimensions (T1, open-ended questionnaire).

When the strategies in the table were analysed, 'using interactive activities/documents' was the most frequent strategy to engage students behaviourally. Seven (63.6%) instructors mentioned either during the interviews or in open-ended questionnaires that they benefited from such tools to engage students behaviourally more often, and this finding was explained through a quotation below.

I use interactive documents where students can type their answer(s) to the questions I ask about a reading text they have read or listening audio they have listened to. In this way, I make sure that they do their tasks (T9, interview).

What instructors used as a strategy to engage students emotionally was mainly 'meeting with students after the class to talk about their lives, interests or problems'. Five (45.5%) instructors shared that they tried to spare some time to meet with their students to strengthen their bond with each other. The quotation below reflects this finding.

We set some informal sessions where we came together, talked about the events in our lives, and celebrated students' birthdays in that particular month. Although this seems academically irrelevant, it helped us to form a positive connection which may also have some academic implications (T7, open-ended questionnaire).

The most frequent strategy to engage students cognitively was ‘simplifying the challenging tasks or dividing them into pieces’, which was shared by four (36.4%) instructors, and this finding was exemplified with a quotation below.

I try to simplify the tasks in order not to overwhelm the students. Sometimes, I divide a task into pieces and assign them one by one. When I do this, the activities become more manageable, and the students engage with the tasks more and easily (T3, interview).

The findings gained from the interviews, and open-ended questionnaires revealed that although the participant instructors were experienced in face-to-face teaching rather than online delivery, they tried to use and adapt many strategies to involve their students in English lessons during the online education period.

4.5.4 Strategies to engage students behaviourally, emotionally, and cognitively in hybrid education. The strategies used during hybrid education were similar to online education, and the most frequent strategies used by the instructors are documented in Table 33 below. Also, some quotations were provided emphasizing the efficiency of the frequent strategies used.

Table 33

The Strategies Used by Hybrid Education Period Instructors

Strategies for Behavioural Engagement	Strategies for Emotional Engagement	Strategies for Cognitive Engagement
Nominating students (calling students by their names to participate in lessons).	Creating a positive classroom atmosphere/relationship.	Carrying out a needs analysis to adjust the activities/assignments.
Integrating games into face-to-face and online lessons.	Preparing activities according to students’ interests.	Implementing challenging/competitive tasks.
Using breakout rooms on online days.	Appreciating the progress.	Assigning group project responsibilities.
Setting pair/group activities.	Communicating with students outside of the class through online platforms.	Setting a common/class goal.

As stated in the findings of the online education period, the strategies categorized under three dimensions had subtle differences sometimes. For example, 'integrating games into face-to-face and online lessons' can be used as a behavioural, emotional, or even cognitive engagement strategy, as stated by some instructors during the interviews and open-ended questionnaires. However, as related literature suggests, observable behaviours are accepted as signs of behavioural engagement. Thus, this strategy was categorized under the behavioural engagement dimension.

According to the findings, the most frequent behavioural engagement strategy was 'nominating students', expressed by four (44.4%) instructors. They explained that to move forward in the lessons, particularly on online days, the instructors called their students by their names to ask their opinions or comments about a topic rather than asking questions to the whole class. The quotation below details this finding.

> *During the online education period, I learned my lessons. I do not wait for a volunteer student to reply when I ask a question because it may take much time. Rather than waiting, I nominate the students; in this way, they feel more alert and active and participate in the lessons (T9, open-ended questionnaire).*

The most common strategy applied to engage students emotionally was 'creating a positive classroom atmosphere/relationship'. Three (33.3%) instructors mentioned that they tried this strategy throughout the semester due to the hybrid education dynamics. Instructors shared that as students valued face-to-face days over online days, the instructors felt a need to keep the classroom atmosphere as supportive as possible to encourage students to participate in online classes more regularly. The quotation below highlights this finding.

> *To engage my students emotionally, I try to have a bond among us by creating a friendly class atmosphere. If we do not spare time to get to know them, they think we are just teachers of the lesson, not their teachers. Then, they do not feel motivated to attend online classes, which they do not value much (T7, interview).*

The strategies used for cognitive engagement during the hybrid education period had similar frequencies. As the table above shows, four strategies emerged from the qualitative data. However, different from the online education period, some of the hybrid education period instructors shared that they needed to increase the difficulty level of the tasks rather than simplify them, mostly due to students' low-level motivation. The quotation below supports this finding.

I do not know whether it is specific to this term, but I cannot see my students motivated to learn. Because of this, I try to use competitive and challenging activities to take their interest and improve their language skills (T2, interview).

According to qualitative data findings from hybrid education, instructors used similar but fewer strategies than online education instructors to keep their students engaged in the lessons. This finding might have resulted from the dynamics of hybrid education, which required both parties (instructors and students) to adapt to a combination of face-to-face and online education modes after one and half year full online education period.

4.5.5 Factors affecting student engagement in online education. The instructors were asked about the positive and negative factors that affected their students' engagement in online education, and the findings are classified in Table 34 below. The most frequent ones were exemplified with quotations.

Table 34

The Factors Affecting Students' Engagement in Online Education

Positive Factors	Negative Factors
-High/moderate level of motivation*	-Low level of motivation*
-Easy access to lessons (no commuting issue)	-Lack of stable and strong internet connection
-Interactive/differentiated activities	-Lack of technological equipment
-Teachers' constructive feedback	-Lack of a suitable learning environment
-Positive classroom atmosphere	-Irregular attendance
	-Poor or lack of ICT skills
	-Fear of negative evaluation (anxiety)*
	-Lack of face-to-face communication
	-Duration of the lessons (long slots)
	-Students' difficulty in paying attention
	-Lack of campus environment to socialize
	-Not adapting the curriculum according to online education needs

*The findings are given in the following sections.

As can be viewed from the table, the negative factors outweighed the positive factors during the online education period. According to the findings, the most frequent factors were related to *motivation* and *anxiety*; however, as these two factors are also the research variables in this study, the findings and details regarding them are presented in the other sections below.

Apart from these two, the most frequent negative factors were related to technical issues. Seven (63.7%) instructors shared that their students often experienced technical problems during lessons or exams, which decreased their engagement. The quotations below support this finding.

> *Specific to online education, technical problems are the factors that affect students' engagement. If they have internet connection problems or equipment problems, the level of engagement decreases (T3, interview).*

The negative factors are mainly technical issues like disconnection or equipment problems such as not having a laptop or not working microphones and webcams. When I say technical, it may sound so cliché, but it does happen every day (T10, interview).

Four (44.4%) instructors mentioned that as the students had to take their lessons at home, some could not isolate themselves from family-related issues, noise, or other distractions, which affected their engagement with the lessons. The quotations below were given to exemplify this finding.

I can observe that some students are experiencing problems with their family members, which puts them in a disadvantageous position. They cannot focus on what we are doing or follow the class requirements (T6, interview).

Family can be both a positive and a negative factor. To succeed in online education, students must have a stable learning environment. If a family can provide this environment to their child, this is a positive factor, but if not, it becomes negative (T11, interview).

According to findings of the online period, the technical issues and lack of learning environment were the dominant factors affecting students' engagement. Some instructors expressed that when these problems were not experienced, online education was advantageous for students as it was easy to access, and there was no need to commute to campus, which was one of the positive factors making students engaged.

4.5.6 Factors affecting student engagement in hybrid education. Similar to online education, the instructors' opinions were asked about the positive and negative factors that affected their students' engagement in the hybrid mode of education, and the findings are documented in Table 35 below. The most frequent factors were exemplified through quotations.

Table 35

The Factors Affecting Students' Engagement in Hybrid Education

Positive Factors	Negative Factors
-High/moderate level of motivation*	-Low level of motivation*
-Face-to-face classes	-Fear of failure/making mistakes (anxiety)*
-Campus environment to socialize	-Lack of suitable learning environment on online days
-Supportive/positive class atmosphere	-Irregular attendance
	-Technical and connection issues on online days

*The findings are given in the following sections.

As can be seen from the table, similar to online education data findings, *motivation* and *anxiety* found as influential factors from the hybrid period data. As stated earlier, these findings are presented in the following sections. When the other factors are analysed, it can be stated that there were fewer factors affecting student engagement in hybrid education compared to online education.

Since instructors started to deliver 60% of courses on campus and 40% as online courses, positive factors such as face-to-face classes, students' socializing with their peers on campus, and meeting with their instructors face-to-face emerged as effective in student engagement. The quotation below reflects this finding.

> *Language education is a very social type of education, so having the chance to do face-to-face classes is really helpful. My students are more participatory when they come to face-to-face classes, but on online days, we do not get the same benefit (T2, interview).*

On the other hand, as online classes continued to be delivered as part of hybrid education, problems such as stable internet connection and suitable learning environments became more critical as students started receiving online lessons on their campuses and dormitories. The quotations below support this finding.

Some students attend online lessons from their dormitories or library and cafes; therefore, they generally experience many different technical issues and do not want to speak as they are surrounded by many other students attending other lessons. Once I wanted to visit the school café, I saw that all students were trying to attend the online lessons (T4, interview).

In hybrid education, students attend online classes from anywhere, like dorms, libraries, and cafés. Therefore, they generally do not feel comfortable enough to speak during the lessons, which affects their engagement, attention, and motivation (T9, interview).

Many instructors also shared that their students found the hybrid mode of education confusing as they needed to adapt to two types of education simultaneously. When the continuous lack of a proper learning environment and technical issues are considered, it might be stated that hybrid education requires more effort to follow the lessons regularly and get involved in lesson activities compared to fully online and face-to-face education modes, which seem more organized in terms of schedules, and stable learning environments.

4.5.7 Foreign language motivation in online education. Students' motivation, which was also one of the influential factors on student engagement, was found to be low by five instructors (45.5%) during the online education period. These instructors related this low-level motivation to various reasons, such as technical problems, family-related issues, and lack of campus life experience. The quotations below underline these findings.

The students cannot isolate themselves from their family life as they take this education home. That's why they are generally distracted, and this decreases their learning motivation (T6, interview).

From time to time, students feel demotivated. There can be many reasons behind this, but I think one of the reasons is they do not feel like university students as they receive their education online (T3, open-ended questionnaire).

Six (54.5%) instructors were neutral about evaluating the motivation level of their students. They shared that students' motivation types and levels differ from each other. In other words, while some students exhibited high or moderate motivation levels, others did not. While for some students, the type of motivation was intrinsic or extrinsic; it was instrumental for others. The quotations below indicate this finding.

Intrinsic and extrinsic motivation make students more or less engaged. Some students own both, and some only have one or none (T1, interview).

Students with instrumental orientation motivation want to learn and use the language more. I mean, the students who will use this language in their business life are eager to learn English (T7, interview).

As findings indicated, there was no consensus among the instructors about the levels of foreign language motivation of the students who received their English classes online.

4.5.8 Foreign language motivation in hybrid education. Similar to online education period findings, motivation was seen as a factor contributing to students' engagement. Five (55.6%) of the hybrid period instructors stated that students had a low and unstable level of foreign language motivation compared to the fully online education period, as students had difficulty adapting to the hybrid system. This finding is supported by the instructors' quotations below.

The motivation of students changes a lot because students cannot adapt to this type of education. One day online, the other day face-to-face, and another online again. It is confusing and affects their motivation negatively (T3, interview).

Students were more motivated during the fully online education times. As they accommodate on campus, they join the online lessons from various places such as dormitories, cafes, or any place they find suitable. Therefore, they are distracted a lot, and they do not exhibit regular engagement and motivation (T4, interview)

The other four (44.4 %) instructors explained that their students were motivated, particularly when they had face-to-face classes. Besides, the instructors identified the types of motivation their students adopted. Some shared that the students were extrinsically motivated rather than intrinsically motivated, and the extrinsic motivation mainly resulted from the exams. The quotation below highlights this finding.

Students look demotivated on online days. They do not participate much. On face-to-face days, they engage with the activities more. However, they are all motivated when they have an exam (T9, open-ended questionnaire).

According to these findings, it can be concluded that the students did not have a stable level of motivation in this education period due to mainly the dynamics of hybrid education.

4.5.9 Foreign language anxiety in online education. According to online education period instructors, students did not experience foreign language anxiety during the lessons. Only three (27.3) instructors shared that their students felt anxious, especially while practicing speaking skills, and the type of anxiety they described was communication apprehension. The quotations below reflect this finding.

> *Students feel anxious when they are supposed to speak because it is not easy for them to speak in front of many people they meet online. Even in face-to-face education, while doing speaking activities, students feel anxious, which is now more challenging for them (T6, interview).*
>
> *The online learning environment makes some students nervous. Maybe, they do not feel comfortable talking to their classmates or us as nobody met in person (T7, open-ended interview).*
>
> *Even high achievers experience some anxiety issues, especially when they are expected to use productive skills (T4, interview).*

4.5.10 Foreign language anxiety in hybrid education. Similar to online education, most instructors (66.6%) shared that their students were not anxious. Only three (33.3%) instructors observed anxiety-related issues in their classes during the hybrid education period. According to instructors' statements, the types of anxiety were communication apprehension and fear of negative evaluation. The quotations below indicate this finding.

> *Students shy away from speaking English whether the lessons are face-to-face or online. They become anxious while speaking. I guess they have a fear of failure and being criticized. They especially fear pronouncing the word inaccurately; therefore, they do not participate in the lessons much (T1, open-ended questionnaire).*

Fear of failure is a big reason why even highly motivated students keep silent and lose motivation in time, particularly during online lessons (T9, interview).

According to findings gained from these two different education periods, it can be stated that most of the instructors did not observe anxiety issues in their classes very often. The number of instructors who mentioned that their students experienced anxiety issues was few, and as they shared, the students generally were anxious when practicing their speaking skills. Also, as stated, the anxiety types that some students experienced were mainly communication apprehension and fear of negative evaluation.

4.6 Research Question 5: What are the opinions of EFL learners on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?

To answer the fifth research question aiming to explore the opinions of EFL learners on student engagement, foreign language motivation, and foreign language anxiety in online and hybrid education periods, the data gained from focus group interviews were analysed by implementing summative content analysis. The most frequent statements (codes) were given under four pre-determined themes: evaluation of student engagement, factors affecting student engagement, evaluation of foreign language motivation, and evaluation of foreign language anxiety. The findings gained from the online and hybrid education periods are presented under these themes comparatively. Some of the findings were exemplified by quotations from the participant students. The EFL learners were assigned a random number, such as S1, S2, S3… to ensure anonymity.

4.6.1 Student engagement in online and hybrid education. Most students who joined focus group interviews during the online education period shared that they regularly joined online lessons and participated in activities to improve their language skills. However, they also shared that this could not be generalized to all their classmates, some

of whom preferred to be silent with cameras off, which was seen as disengagement by the participant students. The quotation below was given to exemplify this finding.

I try to join all the classes and participate in all activities that my teacher uses. However, in my classroom, the students like me are very few. The others do not join the lessons a lot. They do not turn their cameras on, or they sometimes do not answer the teacher's questions. I think they just log in to the system (S6).

Most students who joined focus group interviews during the hybrid education period explained that they showed different engagement on face-to-face and online days. According to their experiences, face-to-face classes were more interactive and dynamic, but online classes were generally monotonous. Also, they stated that they got distracted very easily on online days as they joined online classes from various places, such as dormitories and cafes. Therefore, the students felt more engaged with the lessons and activities in face-to-face classes. The quotations below support this finding.

Coming to school increases my engagement. At school, I feel more motivated to attend the lessons (S1).

We join the online classes from dormitories generally. In my room, we are four of us who are having online classes on the same days and at the same times. We hear each other's voices and got distracted. Then, I lose my attention and cannot follow the lessons as I do in face-to-face classes (S8).

According to these findings, it can be stated that face-to-face classes were more engaging compared to online classes for most of the students in both education periods. Also, it can be added that due to the nature of the hybrid education, students could not show stable engagement throughout the semester.

4.6.2 Factors affecting student engagement in online and hybrid education. When the online education students were asked about the factors affecting their engagement with their classes**,** they mostly shared the negative ones, which were: technical issues such as disconnection problems or lack of technical equipment, unavailability of the learning environment (sharing a room with family members), looking at computer screens for long hours, turned off cameras, lack of face-to-face interaction and socialization. Students shared that these factors were experienced frequently and therefore had difficulty following the lessons or engaging properly in-class activities. The quotations below reflect this finding.

When I lose the internet connection, reconnecting takes a while; when I do, I realize that I missed the activity, at least some part of it. I want to ask my instructor but I do not want to interrupt my classmates. Then, I prefer to be silent (S2).

Most of the classmates keep their cameras off in the lessons. Even if I do not want to turn my camera off, after a while, I do. When my cam is off, I do not feel responsible for what we do in class. Then, I get distracted (11).

The hybrid period students also mentioned mostly the negative factors rather than positive ones as influential on their engagement with school and lessons. However, the factors such as not commuting the school every day and having a campus life were stated by many students as positive factors affecting their study habits. As for the negative factors, the most frequent ones were: attending online classes in dormitories, cafes, or libraries, adapting to the different requirements and dynamics of face-to-face and online classes, and getting distracted easily on online lesson days. The quotation below reflects the different requirements of hybrid education.

Online classes require us to be more self-disciplined and self-regulated. We need to keep the cameras on, take notes regularly and speak in lessons more to improve our English; however, most of us cannot achieve this (S14).

According to these findings, it can be concluded that online lessons in both education periods caused some negative factors which overwhelmed the positive ones.

4.6.3 Foreign language motivation in online and hybrid education. Most of the online period students explained that they were motivated to learn English despite the negative factors (given above) they experienced. When they were asked about their reasons for learning English, they mostly mentioned their future career plans (instrumental motivation). Some other students shared that their exams and faculty courses, which were delivered in English, were the reasons that they felt motivated to learn this language. The quotations below exemplify this finding.

I want to learn English for my job, which I will do in the future. Today in every job, English is a requirement (S5).

English is a world language, and I will be using it wherever I live or work. That is my main reason for learning it (S2).

I want to learn English as we will continue studying in our departments which require us to learn and use that language (S9).

The hybrid period students stated their motivation levels were unstable throughout the semester. According to their statements, some students started the semester with a higher motivation as they had a chance to receive their courses on their campuses and in their classes; however, the online classes, which created adaptation problems, decreased their motivation to learn English towards the end of the semester. The students mostly wanted to learn this language to pass the preparatory program exams. The quotations below support this finding.

Face-to-face classes motivate me, but online classes decrease my motivation (S7).

My motivation and self-discipline are not very good in this type of (hybrid) education. Online classes decrease my level of self-discipline, and my motivation is getting lower day by day (S13).

When I do the assignments or attend classes, I generally do them to get higher grades and pass the exams (S3).

In light of these findings and quotations, it might be concluded that online period students had a higher level of motivation despite the problems they experienced. On the other hand, the motivation of hybrid-period students was affected more by the nature of hybrid education, which required them to adapt to two modes of education simultaneously.

4.6.4 Foreign language anxiety in online and hybrid education. Most focus group students who received their language education online shared that they did not experience anxiety when they needed to use that language in their classes. Conversely, they stated they felt more comfortable as they could benefit from the online recourses more easily. Only a couple of students explained that they felt anxious, particularly while practicing their speaking skills, due to the fear of failure. The quotations below reflect this finding.

Speaking this language in front of a computer rather than in face-to-face class is less anxiety provoking. I feel more comfortable using English in online classes (S10).

I can look up a few words or ideas on the internet before practicing my speaking skill. I feel relaxed in the online learning atmosphere (S7).

The hybrid period focus group students compared face-to-face and online class days in terms of feeling anxious, and most of them shared that they felt more comfortable practicing their language skills in face-to-face classes. However, they added that they did not experience serious anxiety issues in online classes except when everybody was silent and not participatory. The quotation below exemplifies this finding.

On online days, most of the time, we keep our microphones muted. If there is silence when I want to speak, I feel like everybody is paying close attention to me. That makes me feel nervous sometimes. On face-to-face days, I do not feel like that (S9).

According to findings gained from the focus group interviews, which were carried out in online and hybrid education periods, anxiety was not experienced at a high level by the participant students. When it was experienced, it was mostly communication apprehension. However, as the focus group interviews were conducted with small groups, these findings might show differences when they are compared to the findings gained from the quantitative data. All these findings, obtained after analysing quantitative and qualitative data, are discussed in the following chapter.

Chapter 5

Discussion and Conclusion

5.1 Introduction

This chapter presents the discussion of the findings of this study and the conclusion drawn from them. In the first place, the findings of each research question are discussed individually and compared with the results of other studies in the relevant literature. Then, the conclusion gained from the discussion of the findings is given. In the final part, pedagogical implications and recommendations for further research are provided.

5.2 Discussion of Findings for Research Questions

This study aims to explore the role of student engagement, foreign language motivation, and foreign language anxiety on foreign language achievement in online and hybrid education modes. For this purpose, this study first investigates the student engagement, foreign language motivation, and foreign language anxiety levels of two groups of EFL learners who studied in online and hybrid education periods. Secondly, it explores the significant differences in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety according to education mode, gender, and university type. Thirdly, it examines the causal relationship between foreign language achievement and the research variables. Finally, it explores the opinions of EFL instructors and EFL learners on student engagement, foreign language motivation, and foreign language anxiety in online and hybrid education modes. In order to answer the first three research questions, quantitative data were gathered through three surveys. As for the fourth and fifth research questions, qualitative data were collected through in-person interviews, open-ended questionnaires, and focus group interviews. The findings for each education period are discussed in the same section. The findings of *online* and *hybrid* education periods are discussed comparatively.

5.2.1 Discussion of findings for research question 1: What are the EFL learners' levels of student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?

This research question aims to identify the student engagement, foreign language motivation, and foreign language anxiety levels of EFL learners who received their English education at their universities' preparatory programs in online and hybrid modes. The participant students were asked to respond to a questionnaire including three separate scales.

According to the quantitative data analysis findings for the *online* period, the EFL learners' overall engagement level was high, and among the three sub-dimensions, behavioural engagement had the highest score. That is, the results indicated that online period students exhibited behavioural engagement more than cognitive and emotional engagement. The *hybrid* education period findings showed similarity with online education period findings, and it was found that the participant students had a high level of engagement in general and in all sub-dimensions. According to these findings, it can be stated that EFL learners who received their English language education during the pandemic exhibited a high level of student engagement in both periods, indicating that transitioning to the new modes of education did not affect the students' involvement with their language classes negatively. This finding differs from the study conducted by Means and Neisler (2020), who studied student engagement with 1,008 undergraduate students during the pandemic and found that 51% were unsatisfied and disengaged with their online classes. Similarly, Hollister, Nair, Hill-Lindsay, and Chukoskie (2022) carried out a study to measure the engagement levels of 187 undergraduate learners, who transitioned to online learning due to the pandemic, and 72% of the students reported that they had a low engagement with their lectures. In addition, most students shared that they struggled with staying connected to their peers, instructors and managing the pace of work.

When it comes to the foreign language motivation findings of *online* learners, the overall motivation was high, and the sub-dimensions of attitudes toward learning English and instrumental orientation had the highest values. Similarly, the findings of the *hybrid* education period showed that students' overall motivation was high, and the highest value belonged to the instrumental orientation sub-dimension. These findings suggest that EFL learners held high motivation levels while switching from face-to-face to online and online

to hybrid education modes. The results of the study by Jiang, Namaziandost, Azizi, and Razmi (2023) align with these findings. The researchers carried out an experimental study with the participation of 200 EFL learners during the pandemic. The experimental group received online courses, and the control group received in-person English classes for ten weeks. A motivation scale was applied before and after the treatment, and the findings evidenced that the online education group had higher motivation levels than the control group, who attended face-to-face lessons. Another study conducted during the pandemic by Adıyaman and Demir (2021) reached similar findings. The participants were undergraduate students receiving online courses in the English Language Teaching Program, and the researchers found that online courses did not negatively affect the participants' motivation.

The foreign language anxiety scale findings of the *online* period showed that students' overall anxiety level was moderate and the same result found for the *hybrid* education period students. According to these two-period findings, it can be stated that EFL learners did not experience a high level of foreign language anxiety. This finding is dissimilar to the study by Valizadeh (2021), who examined 212 Turkish EFL online learners' anxiety during the pandemic. The percentage of the students who felt less anxious in face-to-face classrooms (43.4%) was higher than the students who were comfortable with online classes (21.7%), and the main reasons were a lack of technological knowledge and technological infrastructure problems.

5.2.2 Discussion of findings for research question 2: Is there a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type?

The second research question aims to reveal whether there is a significant difference in the levels of EFL learners' student engagement, foreign language motivation, and foreign language anxiety when analysed by education mode, gender, and university type.

Firstly, the data were analysed according to education mode, and the *online* and *hybrid* education modes were compared. The data analysis findings showed statistically

significant differences in student engagement, behavioural engagement, foreign language motivation, motivational intensity, desire to learn English, and attitudes toward learning English. When all these differences were analysed, it was found that online period students were more engaged and motivated than hybrid period students.

The comparative findings of this study regarding student engagement align with the studies conducted by Chen, Gonyea, and Kuh (2008) and Robinson and Hullinger (2008), in which the aim was to compare student engagement levels of learners who received their education online and on-campus. The findings of these studies found that online learners exhibited higher levels of engagement with their courses compared to face-to-face education learners. In addition, according to the report published by McCormick, Gonyea, Sarraf, Cole, and Kinzie (2021), the students who started their education after the pandemic had lower student engagement levels, and it was found that there was a decrease in collaborative learning, discussion with others, and student-faculty interaction.

The findings of foreign language motivation, which indicated that *online* learners adopted a higher level of motivation than *hybrid* learners, conflict with the study's results by Bolatov et al. (2021). This study and the research by Bolatov et al. (2021) were conducted at similar times and with similar purposes. The findings revealed that the motivation level of students who studied their courses in blended mode was higher than those who studied in complete online education mode. The study's authors stated that as the blended learning mode provided opportunities such as feeling college belongingness and having more satisfaction with academic life, the motivation level was higher in the blended education format. Although the EFL learners mentioned similar opportunities during the focus group interviews, the findings showed that these opportunities did not significantly contribute to the learners' motivation levels during the hybrid education period.

Secondly, the data were analysed according to gender for each period. The *online* education period findings put forth that female learners had statistically higher levels of engagement than male learners. Similarly, the *hybrid* education period results revealed that female learners had higher scores than male learners, particularly in the findings of behavioural engagement. These findings are consistent with the results of the studies by

Edgar (2015), Ying and Wang (2016), and Aktepe and İslamoğlu (2020), who implemented their studies to find out whether student engagement levels vary by gender at the tertiary level and found that female learners displayed higher engagement than their male counterparts.

According to the findings of foreign language motivation, *online* female learners exhibited higher motivation levels than male learners. This finding shows similarity to the studies' findings by Al-Mubireek (2020) and Halimi, Daniel, and AlShammari (2020), who studied foreign language motivation by gender and reported that female learners were more motivated than male learners. On the other hand, the findings of the hybrid education period showed no statistically significant difference between female and male learners in terms of their motivation levels.

The findings of foreign language anxiety revealed that female learners had higher anxiety levels in both periods. This finding conforms to the results of the studies by Park and French (2013), Mohtasham and Farnia (2017), Çakıcı (2016), and Koul et al. (2009), who reached the finding that female learners experienced foreign language anxiety more than male learners. However, as stated in Chapter 2, the studies on foreign language anxiety have contradictory findings in the literature, and the findings of this study conflict with the studies that found male learners more anxious (Campbell & Shaw, 1994; Elaldı, 2016; Zhang, 2000) or no statistically significant differences between female and male students (MacIntyre, Baker, Clement & Donovan, 2002; Matsuda and Gobel, 2004).

When the findings related to gender are analysed closely, it is evident that female learners were more engaged, generally more motivated, and more anxious than male students in online and hybrid education modes. In research studies, gender-related differences are generally explained by considering social and cultural contexts (Kahu, 2013; Martin, Yu, and Hau, 2014; Park and French, 2013) because the values and traditions of a context (country) greatly affect students' motivation to learn a foreign language (Pazyura, 2016). In Turkish culture, foreign language learning is valued in every level of education (from kindergarten to university), which is also evident in the findings of the demographic inventory; however, the majority of students focus on foreign language learning academically and professionally after they enrol in universities because higher education entrance exams are overvalued by most of the students and parents in

this culture. Therefore, when students start preparatory programs at their universities, they truly become involved in foreign language studies for the first time, and they gain knowledge and awareness about the importance of learning English and the obstacles they will face due to the lack of English language skills in their future careers. When career plans are considered, gender inequality in business is still a problem that needs to be overcome in Turkish culture and most countries (Esen & Seren, 2021). With this in mind, female learners may take on more responsibilities during their education, which results in more involvement, motivation, and probably anxiety.

Thirdly, the quantitative data were analysed according to university type for each period. The findings of student engagement showed that foundation university students had a higher level of engagement than state university students during both *online* and *hybrid* education periods. This finding is parallel with the results of the study by Gamage, Gamage, and Dehideniya (2022), who conducted a study to explore the engagement, satisfaction, experience, and perception of students that transitioned to online and hybrid learning modes from face-to-face learning due to the COVID-19 outbreak. The study results unveiled that non-state (foundation) university learners had higher levels of student engagement than state university learners. In addition, the satisfaction level was higher among non-state university students.

The findings gained from the foreign language motivation did not show a statistically significant difference between foundation and state university students in both education periods. Only one sub-dimension showed a statistically significant difference during the online education period: motivational intensity (how much effort learners expend in learning the language). In other words, the foundation university students held a higher level of motivational intensity than the state university students. This finding diverges from the results of the study by Bektaş-Çetinkaya and Oruç (2010), who aimed to compare state and private university students' foreign language motivation levels and found that private university students had significantly higher levels of foreign language motivation than state university students. Also, the researchers found that the students' main motivation (reason) to learn English was instrumental, and most of the private and state university students indicated that they wanted to learn English for their future careers. Although the quantitative data of this study indicated that only the motivational intensity

had a statistically significant difference, it was obvious from the qualitative data findings that both foundation and state university students, who took part in this study's focus group interviews, had the instrumental motivation to learn a foreign language, particularly in online education period.

The last finding obtained from foreign language anxiety enclosed that state university students in *online* and *hybrid* periods had statistically higher anxiety levels than foundation university students. Additionally, these findings were found for the overall foreign language anxiety scores and all sub-dimensions.

When the findings of student engagement and anxiety are examined carefully, it is seen that foundation university students held higher levels of engagement and were less anxious than state university students in both education periods.

As these findings may not be generalized to all foundation and state universities, adhering these findings to the participant universities' contextual differences would be more appropriate. As given in Chapter 3, the foundation university (University 1) adopted some changes when transitioning from one education mode to another, particularly from face-to-face to online. They made adaptations in the layout of materials, the types, and the weightings of exams. For example, course books' online platforms and the activities on these platforms, which were used as optional supplementary materials during face-to-face education, started to be used as daily and weekly assignment components to make online education more interactive. Also, all in-house materials were revised and transferred into digital documents to be used during the course delivery and shared with students. In addition, the number of continuous exams were increased to provide feedback to learners more often about their progress. However, the state university (University 2) adapted only one thing: decreasing the lessons' duration from 40 to 30 minutes. The types and weightings of the exams and the curriculum design were not changed or adapted; they were used as they were. Based on these differences, it can be stated that foundation university students had more opportunities to engage with their language classes, which might have affected their engagement levels positively. Considering the negative correlation between student engagement and anxiety (as given in the following section), it can be stated that the foundation university students, who had a higher engagement, might have experienced less foreign language anxiety than the state university students.

5.2.3 Discussion of findings for research question 3: If there are any relations, to what extent do student engagement, foreign language motivation, and foreign language anxiety have an influence on foreign language achievement during online and hybrid education periods?

The third research question, firstly, aims to discover the relationships between student engagement, foreign language motivation, foreign language anxiety, and achievement. Then, this research question aims to measure the extent of influence of the independent variables (i.e., student engagement, foreign language motivation, and foreign language anxiety) on the dependent variable (i.e., foreign language achievement).

According to the correlation findings of the *online* education period data, student engagement and foreign language achievement had a positive relationship, which meant that when students' engagement levels increased, the learners' foreign language achievement increased or vice versa. This finding aligns with the research studies conducted by Glapaththi et al. (2019) and Zhu (2010), in which a positive correlation was found between these two variables. However, according to the findings of the *hybrid* education period, there was no correlation between student engagement and foreign language achievement, which shows similarity with the study's findings by Chen et al. (2013). Although there is a difference between online and hybrid education periods regarding the relationship between student engagement and L2 achievement, the meta-analysis by Lei et al. (2018) revealed that the findings in the relevant literature remain inconclusive. From this perspective, the contradictory findings of this study agree with the meta-analysis findings. However, it is necessary to add that as no relationship was found between these two variables from the hybrid education data, student engagement was not included in the multiple regression analysis.

As for the correlation findings between foreign language motivation and L2 achievement, a positive relationship was found in the data of *online* and *hybrid* education periods. In other words, both education periods had similar findings regarding these two variables, which indicated that when the motivation levels of learners increased, their L2 achievement increased or vice versa. Similar findings were reached by Güneş and Alagözlü (2020) and Peng and Fu (2021), who revealed that foreign language motivation and achievement were positively correlated.

The correlation analysis of the last independent variable, foreign language anxiety, showed that it was negatively correlated with language achievement in both education periods, which meant once students' foreign language anxiety levels increased, their achievement decreased or vice versa. This finding shows similarity with the study by Doğan and Tuncer (2016) and the findings of the meta-analysis by Botes, Dewaele, and Greiff (2020), who found that anxiety and achievement had a negative relationship.

The findings of the regression analysis, which was carried out to measure the extent of influence of the independent variables on the dependent variable, revealed for the *online* education period that foreign language anxiety had a moderate level and significant influence on foreign language achievement. This independent variable explained approximately 10% of the total variance in English achievement of EFL students who received their foreign language education online. On the other hand, the results for the *hybrid* education period unveiled that foreign language anxiety had a low level and significant influence on foreign language achievement, and it explained approximately %7 of the total variance in English achievement of hybrid EFL learners. These findings are consistent with the study by Tuncer and Doğan (2015), who found foreign language anxiety as a powerful predictor of foreign language achievement. However, in the study by Khodadady and Khajavy (2013), who examined the role of motivation and anxiety in predicting EFL learners' foreign language achievement, foreign language motivation was found as a stronger predictor of achievement, which is dissimilar from the findings of this research.

5.2.4 Discussion of findings for research question 4: What are the opinions of EFL instructors on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods?

The fourth research question aims to investigate the opinions of EFL instructors on student engagement, foreign language motivation, and foreign language anxiety. The qualitative data were collected through in-person interviews and open-ended questionnaires in online and hybrid education periods. The data were analysed according to the pre-determined themes: evaluation of student engagement, strategies to engage students behaviourally, emotionally, and cognitively, factors affecting student engagement, evaluation of foreign

language motivation, and evaluation of foreign language anxiety. The findings regarding student engagement, foreign language motivation, and foreign language anxiety are compared and contrasted with the quantitative data findings; however, the findings concerning strategies to increase student engagement and factors affecting engagement are compared and contrasted with the findings of relevant studies in the literature.

The findings of the first theme, *evaluation of student engagement*, indicated that most of the *online* period instructors found their students' level of engagement low compared to face-to-face education times. Similarly, most *hybrid* period instructors found their students' level of engagement low mainly because the combination of face-to-face and online classes confused the students. However, quantitative findings of student engagement revealed that students had high engagement levels in both periods. This difference might be because of the experiences that EFL instructors had during face-to-face education modes when students' engagement with lessons and class activities was more observable and measurable. In online integrated systems, students might have fewer opportunities to display their engagement, which might have caused this difference between quantitative and qualitative findings.

According to the results of the second theme, *strategies to engage students behaviourally, emotionally, and cognitively*, the *online* period instructors tried to use and adapt many strategies to involve their students in English lessons, although they were experienced in face-to-face teaching rather than online delivery. The results of *hybrid* education pointed out that instructors used similar but fewer strategies than online education instructors to keep their students engaged in the lessons. This finding might have resulted from the dynamics of hybrid education, which required both parties (instructors and students) to adapt to a combination of face-to-face and online education modes after one and half year full online education period. As for the most common strategies to increase behavioural engagement, both period instructors used various digital platforms (Atoum, 2017, Teng & Wang, 2021), designed interactive/hands-on activities (Alabbasi, 2022; Prasetya, 2021), and integrated online games into lessons (Lo & Hew, 2020). Also, EFL instructors used many strategies to enhance their learners' emotional engagement, and the most common ones were: showing active and strong teacher presence (Albrahim, 2020; Bangert, 2008; Paloff & Pratt, 2011) and creating an online community

of learners (Alabbasi, 2022; Bryant & Bates, 2015). Finally, the instructors benefited from some strategies to increase the cognitive engagement of EFL learners, and the common strategies were: providing optimal challenge, incorporating authentic materials, and providing task-focused and specific feedback (Pedler et al. 2020).

The findings of the third theme, *factors affecting student engagement*, revealed that technical issues and lack of a learning environment were the dominant negative factors affecting students' engagement during online education. The *hybrid* education period findings showed that due to the continuous lack of a proper learning environment and technical issues students experienced on online days, hybrid education required more effort to follow the lessons regularly and get involved in lesson activities compared to fully online and face-to-face education modes, which seemed more organized in terms of schedules, and stable learning environments. A similar finding was found by Alabbasi (2022) and Werang and Radja Leba (2022), who stated that technology-related issues such as lack of internet connection and technological devices were among the most influential factors affecting students' engagement adversely in online classes.

The findings of the *evaluation of the foreign language motivation* theme indicated that there was no consensus among *online* period instructors. Some instructors found their students' motivation levels low, some were undecided about their students' motivation, and some shared that their students were motivated in online education mode. On the other side, the findings of the *hybrid* education period uncovered that instructors found their students' motivation unstable. As they shared, the students were more motivated in face-to-face classes, which was nearly the opposite on online teaching days. When the quantitative data findings were analysed, it was found that EFL students had a high level of motivation in both education periods; however, according to most EFL instructors, learners' motivation was not stable, which caused some of them to be undecided about students' level of motivation. This finding confirms the result by Campbell and Storch (2011), who stated in their study that the "motivation of second language learners is diverse and complex, and that L2 learning motivation changes and fluctuates over time" (p. 184). As EFL learners were required to abandon their old study habits and gain new ones through technology integration, their motivation might have fluctuated while continuing their language studies.

The last theme, the *evaluation of foreign language anxiety*, had similar findings for both education modes. Most *online* and *hybrid* period instructors did not observe anxiety issues in their classes very often. The number of instructors who mentioned that their students experienced anxiety issues was few, and as they shared, the students generally were anxious when practicing their speaking skills. Also, as stated, the anxiety types that some students experienced were mainly communication apprehension and fear of negative evaluation. According to quantitative data findings, the EFL learners' anxiety levels were mostly moderate for both education periods, which is in parallel with the qualitative data findings from the interviews with the EFL instructors.

5.2.5 Discussion of findings for research question 5: What are the opinions of EFL learners on student engagement, foreign language motivation, and foreign language anxiety during *online* and *hybrid* education periods? The fifth research question aims to investigate the opinions of EFL learners on student engagement, foreign language motivation, and foreign language anxiety. The data were gathered through focus-group interviews in online and hybrid education periods. The data were analysed according to four pre-determined themes: evaluation of student engagement, factors affecting student engagement, evaluation of foreign language motivation, and evaluation of foreign language anxiety. First, all findings in this section are compared and contrasted with the quantitative data findings. Then, they are compared and contrasted with the EFL instructors' qualitative data findings. Also, data findings gained from the demographic inventory are included to expand the discussion.

The findings of the first theme, *evaluation of student engagement*, indicated that *online* education period students attended the classes regularly; however, as focus group participants shared, most students did not show engagement with the lessons much. This finding is different from the quantitative data results, which indicated that learners had a high level of engagement. However, these findings match the EFL instructors' statements indicating low engagement in online education. Besides, according to the demographic inventory results, nearly half of the students reported that they did not actively participate in online lessons. The *hybrid* period learners, on the other hand, explained that they showed irregular engagement throughout the semester, which is dissimilar to the

quantitative findings but aligns with the instructors' qualitative data findings. Also, the focus group participants shared that they found face-to-face days more engaging and preferred to join the face-to-face classes more. This finding is consistent with the EFL instructors' statements and demographic inventory results, which revealed that the rate of joining face-to-face classes and exhibiting active participation in these lessons was more than in online classes. These findings confirm that EFL learners in hybrid period valued the physical class environment over virtual classes in hybrid education mode.

The *factors affecting student engagement* in *online* education were mostly negative and mainly about technical issues, unavailability of the learning environment, lack of face-to-face interaction, and socialization. The *hybrid* period focus group interviews revealed that they were also affected by negative factors such as attending online classes from various places (dormitories, cafes, and libraries) and adapting to the hybrid education dynamics (one day online, the other day face-to-face). However, some students reflected that there were some positive factors compared to a fully online education period, such as having a campus life which affected their study habits. All these findings show consistency with the positive and negative factors shared by the online and hybrid period instructors.

According to the findings of the third theme, *evaluation of foreign language motivation*, *online* learners were mostly motivated, and their motivation types were instrumental (e.g., career plans) and external (e.g., exams, faculty courses). The online period instructors had various opinions regarding learners' motivation; however, they also shared that students had the instrumental motivation to learn English. On the other hand, the *hybrid* period learners shared that they did not have stable motivation throughout the semester, mostly due to the nature of hybrid education, whose online part decreased students' motivation gradually. That might be the reason why most of the students shared that their learning motivation was completing the preparatory school (external). The hybrid period EFL instructors held the same opinions, and they explained that students' motivation was unstable due to the adaptation problems that students experienced. In addition, some instructors underlined that learners' motivation type was mostly extrinsic rather than intrinsic or instrumental motivation.

The last theme findings, *evaluation of foreign language anxiety*, revealed that both groups of participants (online and hybrid) did not experience anxiety-related issues at a high level. However, when it was experienced, it was mostly communication apprehension, especially while practicing speaking skills. These findings show high similarity with the results gained from the instructors' qualitative data. That is, neither students nor instructors defined foreign language anxiety as a serious problem, but they accepted that when students experienced this feeling, it was more observable during speaking practice times.

5.3 Conclusion

The present research aimed to explore student engagement, foreign language motivation, and foreign language anxiety constructs at the tertiary level, particularly in English preparatory schools, in online and hybrid education modes adopted during and after the COVID-19 pandemic. To achieve this purpose, quantitative and qualitative data were collected from 469 EFL learners and 20 EFL instructors who experienced these education modes in the 2020-2021 and 2021-2022 academic years.

The findings showed that students who received their language education in online and hybrid modes had a high level of student engagement, which indicated that students were involved in their studies despite the major changes in the ways of learning practices. Similarly, the level of foreign language motivation, particularly instrumental motivation, was also found high in both education periods, pointing out that EFL learners had pragmatic reasons to learn English, such as having better career and education opportunities. Finally, the findings of the foreign language anxiety showed that and both education period learners had moderate levels of anxiety.

When the data were analysed for the statistically significant differences, it was found that online learners displayed higher engagement and motivation than hybrid learners. As for the gender-based differences, female learners were more engaged and anxious in both education modes than their male counterparts. However, differences regarding foreign language motivation were not similar. While online period female learners showed higher motivation than male learners, there was no statistical difference between the female and

male learners in the hybrid education mode. Put differently, female and male learners had similar motivation levels while receiving their language education in hybrid mode. The last statistical difference gained from the comparison of university type. The foundation university students adopted higher engagement and motivation than the state university students in both education modes. Regarding foreign language anxiety differences, it was found that students who studied at the state university had higher levels than the foundation university students in both online and hybrid education modes.

Another finding regarding the influence of research variables on foreign language achievement unveiled that anxiety was the only predictor of foreign language achievement in both education modes. However, the influence of anxiety was found to be negative. In other words, the more anxious the EFL learners were, the lower their achievement grades or vice versa.

The opinions of EFL instructors revealed many findings concerning the research variables. First, the instructors of the online and hybrid periods found their students' level of engagement low. The second finding indicated that instructors tried to use many strategies to engage their students in both education periods; however, it was obvious that online period instructors used more strategies to engage their students behaviourally, emotionally, and cognitively. The third finding from the instructors' data was about the factors affecting the EFL students' engagement. The online period instructors stated that technical problems were constantly experienced, which affected students' engagement negatively. The hybrid period instructors shared that in hybrid education, the planning of the lessons (blending face-to-face and online lessons) created some issues for students, such as finding proper places to attend online lessons, which was accepted as a negative factor. The other finding regarding foreign language motivation of EFL learners indicated that while online period instructors had various opinions (low-level motivation, undecided, high-level motivation), the hybrid period instructors were firmer about it, and they found their students' motivation level unstable. To clarify, it was found that EFL learners were more motivated on face-to-face education days than online days. The last finding was about foreign language anxiety, and both period teachers shared similar opinions. They stated that they did not observe anxiety-related issues in their classrooms.

A few of them reported that when students practiced speaking skills, they had some anxiety issues.

The opinions of EFL learners disclosed several findings regarding the research variables. The first finding indicated that online period learners attended the lessons regularly, although active participation was low. During the hybrid period, students valued face-to-face classes over online classes; therefore, their engagement was unstable throughout the semester. Another finding was about the factors affecting students' engagement during online and hybrid education periods. These factors were mostly negative, such as technical issues and a lack of a proper learning environment to attend online lessons. The third finding indicated that online period learners were motivated (instrumental orientation), whereas the hybrid learners exhibited unsteady motivation during the semester as they found the blended learning mode hard to adapt. The last finding was regarding foreign language anxiety. In both periods, learners shared that they did not experience high-level anxiety, but when they did, it was communication apprehension, which was experienced particularly during speaking skills practice.

5.4 Pedagogical Implications

Based on the findings of this study, some implications can be recommended to institutions, administrators, curriculum designers, and teachers to increase student engagement and motivation and decrease the anxiety of learners who may continue to receive their education in online or hybrid education systems.

First of all, as online and hybrid education systems depend on technological infrastructures, all students who need to receive their education through these systems must have all the technological equipment and tools. When students do not have technological and technical opportunities, they cannot attend and participate in lessons as they do in physical classrooms (face-to-face education). Therefore, if an institution plans to implement or integrate these education modes into their education systems, technological and technical support must be provided to students throughout their education.

Secondly, if these education systems are intended to be implemented as a long-term policy, curriculum (e.g., interactive materials, tools), assessment (e.g., continuous examination), and lessons (e.g., length of the lessons) must be designed accordingly. It was evident from the study findings that all students were not engaged with the lesson activities as supposed to be, and they had difficulty following lengthy online classes. A course that integrates more interactive materials and short slots may encourage learners to attend and participate more regularly.

Finally, as the findings of this study revealed, foreign language anxiety is a strong negative predictor of foreign language achievement. Although most of the instructors and students who joined the interviews did not define anxiety as a major issue in foreign language education, the multiple regression analysis findings indicated that foreign language anxiety should be taken into consideration by EFL instructors while carrying out the lessons, especially while practicing productive skills. Because it was evident from the findings of the interviews that EFL learners experienced anxiety-related problems while practicing their speaking skills and mainly due to the fear of failure. Considering this, EFL instructors may use effective techniques and strategies to overcome foreign language anxiety and improve learners' language skills.

5.5 Recommendations for Further Research

This study contributes to the literature by providing information about the implementation of English language education in online and hybrid education modes at the tertiary level. In light of the findings and limitations of this study, the recommendations given below can be considered in future studies.

Firstly, the instructors who participated in this study experienced teaching English in online and hybrid education systems for the first time. Therefore, the strategies used to increase student engagement were limited, especially in the hybrid education period. Future studies may provide workshops or training sessions to participant instructors to encourage them to benefit from various techniques and strategies which may engage EFL learners more. Secondly, as the foreign language anxiety was found as a strong negative

predictor of foreign language anxiety, the further research may explore the techniques and strategies that instructors use for error correction purposes while carrying out productive skills, and the activity types that they prefer to improve learners' language skills. Thirdly, to examine foreign language anxiety closely, individual interviews can be held with EFL learners through which they may share their concerns or feelings more openly. Finally, an online or hybrid language education system that employs a curriculum, assessment, and materials designed by considering these systems' dynamics can be researched to measure the influence of research variables on foreign language achievement.

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