ANALYZING TEACHERS' VIEWS TOWARD THE USE OF EBA DURING COVID-19 PANDEMIC BASED ON THE TECHNOLOGY ACCEPTANCE MODEL

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

CEREN KARAGÖZ

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
COMPUTER EDUCATION AND INSTRUCTIONAL TECHNOLOGY

FEBRUARY 2022

Approval of the thesis:

ANALYZING TEACHERS' VIEWS TOWARD THE USE OF EBA DURING COVID-19 PANDEMIC BASED ON THE TECHNOLOGY ACCEPTANCE MODEL

submitted by **CEREN KARAGÖZ** in partial fulfillment of the requirements for the degree of **Master of Science** i**n Computer Education and Instructional Technology, Middle East Technical University** by,

Prof. Dr. Halil Kalıpçılar
Dean, Graduate School of **Natural and Applied Sciences** _____

Dr. Hasan Karaaslan
Head of the Department, **Computer Edu. and Inst. Tech.** _____

Assoc. Prof. Dr. S. Tuğba Tokel
Supervisor, **Computer Edu. and Inst. Tech.** _____

Examining Committee Members:

Prof. Dr. Yüksel Göktaş
Software Engineering, Atatürk University _____

Assoc. Prof. Dr. S. Tuğba Tokel
Computer Edu. and Inst. Tech., METU _____

Assist. Prof. Dr. Olgun Sadık
Computer Edu. and Inst. Tech., METU _____

Date: 11.02.2022

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name Last name : Ceren Karagöz

Signature :

ABSTRACT

ANALYZING TEACHERS' VIEWS TOWARD THE USE OF EBA DURING COVID-19 PANDEMIC BASED ON THE TECHNOLOGY ACCEPTANCE MODEL

Karagöz, Ceren
Master of Science, Computer Education and Instructional Technology
Supervisor : Assoc. Prof. Dr. S. Tuğba Tokel

February 2022, 134 pages

World Health Organization announced the COVID-19 pandemic in March, 2020. EBA (Education Information Network) platform and EBA TV were used in Turkey during the COVID-19 pandemic so as to continue education remotely. This study aimed to examine II. Abdülhamid Han secondary school teachers' view toward use of EBA during the COVID-19 pandemic process based on the Technology Acceptance Model (TAM). Since the study was conducted in a single secondary school, the study adopted the case study method. The quantitative data were collected from 51 teachers voluntarily with a questionnaire. The qualitative data were collected with one-to-one interviews via the Zoom platform due to the pandemic. Multiple regressions indicated that perceived enjoyment had positive effect on perceived usefulness and perceived ease of use. Self-efficacy had positive effect on behavioral intention and perceived ease of use. The results demonstrated that there were no significant effects of age, gender, and professional experience on teachers' acceptance of the EBA platform for online teaching during the COVID-19 pandemic. Teachers' branches had no significant effect on teachers' acceptance. However, the branches had a significant effect on perceived ease of use.

Keywords: Technology Acceptance Model, EBA, COVID-19

ÖZ

ÖĞRETMENLERİN COVID-19 PANDEMİ DÖNEMİNDEKİ EBA KULLANIMLARINA YÖNELİK GÖRÜŞLERİNİN TEKNOLOJİ KABUL MODELİ İLE İNCELENMESİ

Karagöz, Ceren
Yüksek Lisans, Bilgisayar ve Öğretim Teknolojileri Eğitimi
Tez Yöneticisi: Doç. Dr. S. Tuğba Tokel

Şubat 2022, 134 sayfa

Mart 2020'de Dünya Sağlık Örgütü COVID-19 pandemisini ilan etti. Pandemi sürecinde Türkiye'de eğitime uzaktan devam edebilmek adına EBA (Eğitim Bilişim Ağı) platformu ve EBA TV kullanıldı. Bu çalışmanın amacı, II. Abdülhamid Han Ortaokulu öğretmenlerinin COVID-19 pandemisi sürecinde EBA kullanımına yönelik görüşlerinin Teknoloji Kabul Modeli'ne göre incelemektir. Araştırma tek bir ortaokulda yürütüldüğü için vaka incelemesi yöntemi benimsenmiştir. Nicel veriler, anket ile 51 öğretmenden gönüllü olarak toplanmıştır. Nitel veriler ise pandemi nedeniyle Zoom platformu üzerinden yapılan birebir görüşmeler ile toplanmıştır. Çoklu regresyonlar, algılanan eğlencenin algılanan kullanışlılık ve algılanan kullanım kolaylığı üzerinde olumlu etkisi olduğunu göstermiştir. Öz yeterlik ise, davranışsal niyet ve algılanan kullanım kolaylığı üzerinde olumlu etkiye sahiptir. Sonuçlar, COVID-19 salgını sırasında öğretmenlerin EBA platformunu çevrimiçi eğitim için kabullerinde yaş, cinsiyet ve mesleki deneyimin önemli bir etkisinin olmadığını göstermiştir. Öğretmen branşlarının teknoloji kabulleri üzerinde anlamlı bir etkisi olmamıştır. Ancak, branşların algılanan kullanım kolaylığı üzerinde anlamlı bir etkisi olmuştur.

Anahtar Kelimeler: Teknoloji Kabul Modeli, EBA, COVID-19

This thesis is dedicated to

my lovely son

&

my husband.

ACKNOWLEDGMENTS

I received so much support, advice and encouragement from many people while conducting this study. I would like to express my warmest sincere thanks to everyone involved at some part of this study.

I would like to thank and express my sincerest gratitude to my supervisor, Assoc. Prof. Dr. S. Tuğba Tokel for her comments, suggestions, and patience through my thesis study.

I wish to warmly thank the members of my thesis committee, Prof. Dr. Yüksel Göktaş and Assist. Prof. Dr. Olgun Sadık. Their advice and assistance made valuable contributions to my study.

I would like to thank my husband, Alpay Karagöz, for his endless support and motivation for everything in my life. Words cannot express my feelings for your support. Thank you so much for being with me under all circumstances.

My special thank is for my dear friends Esra Cevizci Karataş and Sezin Eşfer Öndünç. Their support, helps, morale, criticism, encouragements, and experiences were invaluable for me during every stages of the research.

My special thanks are for my family members for their precious support and faith through each step of my life. I will be grateful forever for your love, thank you so much.

I would also like to thank my colleagues Gül Sezgin, Özge Y. Aslan, Zeynep Sürmeli, Hayriye Nur Güçlü, Züleyha Başar, Zeliha Özkan and Fadime Arıkan for their patience, support and tolerance through my thesis. I am very lucky to have such colleagues and good friends like you.

I would like to express my appreciation to my colleagues at II. Abdülhamid Han Secondary School for participating in and supporting my study.

TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF FIGURES

FIGURES

CHAPTER 1

INTRODUCTION

1.1 Background of the Problem

Technology has started to take more place in the classroom environment with the announcement of the FATIH (Movement of Enhancing Opportunities and Improving Technology) project in 2010. The project aims to enhance technology usage in the classrooms and ensure equal opportunities in education for students. Modern classrooms were created by placing smart boards and providing internet infrastructure to the classrooms with the help of this project. Teachers received in-service training within the scope of the project. E-contents have been prepared in order to provide an information technology-supported education (Timur et al., 2017).

EBA (Education Informatic Network) was developed by the Innovation and Educational Technologies General Directorate with the support of the Ministry of National Education. The EBA platform was originally included in the FATIH project. Tests were broadcasted through the EBA platform between 2012 and 2015. The platform has begun its broadcasting life in 2015 (Pala et al., 2017).

The EBA platform was not used frequently by teachers on the first days of its broadcasting. Gürfidan and Koç (2016) stated in their study that high school teachers do not use the platform often since they could not find enough content. Another study claimed that teachers find the EBA platform beneficial whereas they do not find its content sufficient (Erman, 2021). Moreover, it has been stated that teachers use existing content instead of developing new content on the platform (Arslan, 2019) .

World Health Organization announced the COVID-19 pandemic in March, 2020. The EBA platform and EBA TV were used in Turkey during the COVID-19 pandemic in order to continue education remotely. Teachers have been using the EBA platform for reinforcing and concretizing their lessons before the pandemic (Türker & Güven, 2016). Teachers used the platform as an online learning platform for education in pandemic process. Immediately after the announcement of the COVID-19 pandemic, adding and lecturing live lessons, and creating online classes, where teachers and students could be together simultaneously, features were activated in the EBA platform.

Teachers' views toward the use of EBA during the pandemic process will be examined according to the Technology Acceptance Model (TAM) throughout this study. There are many studies so as to research users' acceptance of technology. However, one of the most important models is the TAM presented by Davis in 1989. This model is specially designed to comprehensively predict the acceptance of new technology by users (Yücel & Gülbahar, 2013).

Technology Acceptance Model contains fundamental variables such as perceived usefulness, perceived ease of use, behavioral intention, and attitude towards use. This study will focus to examine teachers' views toward use of EBA during the pandemic process based on the variables of TAM.

1.2 Statement of the Problem

The World Health Organization declared the COVID-19 pandemic in March, 2020. Many countries of the world have discontinued face-to-face education at all levels and started online education after the declaration of the pandemic. Education in Turkey, as in other countries, continued online during the pandemic. Distance education facilities were provided to preschool, primary, and secondary school students and teachers via the EBA platform. Following the announcement of the

COVID-19 pandemic and shifting from face-to-face education to distance education, teaching live courses through EBA was activated.

Some teachers received in-service training on how to use the EBA platform at the beginning of the FATIH project. It was stated that in-service trainings for teachers would be provided to increase the effective use of EBA in the 2015-2019 strategic plan published by the Ministry of National Education (MEB, 2015. p.80). Teachers were already exercising and benefiting the EBA for their lessons before the outbreak. However, they did not have experience with online education.

The shift from face-to-face education to online education brought many obstacles such as lack of adequate internet infrastructre, appropriate device for online learning, and online learning skills (Barron et al., 2021). Teachers were not ready for online learning and had no experience with this new teaching style (Munoz-Najar et al., 2021). Lukas and Yunus (2020) emphasized difficulties the teachers faced with using online teaching. These difficulties involve preparation of teachers, classroom management, and access to digital content. Moreover, teachers had other problems such as lack of information and computer technology skills, lack of motivation, or limited internet access.

Due to the mandatory online teaching process and the challanges that mentioned above, it is crucial to research teachers' views toward use of the EBA online learning platform.

1.3 Purpose of the Study

This study aims to examine the teachers' views toward use of EBA during the COVID-19 pandemic process based on the Technology Acceptance Model (TAM). Teachers' technology acceptance is analyzed with the fundamental factors of the TAM. The effects of age, gender, subject, and experience factors on the TAM are examined. The results are interpreted with both qualitative and quantitative data.

1.4 Significance of the Study

The use of technology has a significant place in the field of education as in many other fields (Al-Emran, 2021). With the introduction of smart boards into classrooms, technology is being used more frequently, particularly following the FATIH project. Thus, when the COVID-19 epidemic struck in the early months of 2020, face-to-face education was suspended and traditional education was shifted to online learning platforms.

There have been a number of studies conducted on the Technology Acceptance Model and its acceptance by teachers. Nevertheless, the requirement for online learning on the EBA platform throughout the pandemic process is something new that our country has not encountered before. It was unclear whether the teachers were prepared and ready for using EBA during the pandemic to teach in an online environment. Hence, a study related with the use and acceptance of technology under pandemic circumstances would be essential. An in-depth analysis of factors influencing teachers' acceptance of the EBA platform during this epidemic phase would be provided by this research. Furthermore, the study would attempt to understand the teachers' impressions of online learning and the platform in general through interviews.

Investigating the intentions of teachers and providing education in extraordinary situations like a pandemic for technology and EBA would lend assistance on future studies.

1.5 Research Questions

This study attempts to answer the following research questions:

What is the relationship among teachers’ perceived usefulness, perceived ease of use, perceived enjoyment, facilitating conditions, self-efficacy, social influence, and

behavioral intentions toward using EBA for online teaching during the COVID-19 pandemic?

Do teachers' age, gender, branch, and professional experience affect their acceptance of EBA for online teaching during the COVID-19 pandemic?

1.6 Assumptions

For this study, the following assumptions are made:

- The questionnaire and the interview form prepared for teachers are suitable for participants' levels and the purpose of the research.
- Participants would respond sincerely to all measures that would be used in this study.
- The data gathered for the study would be correctly analyzed.

1.7 Limitations

The limitation of the study would be:

- Since the study was conducted in only one secondary school, the results from the study can not be generalized for all teachers.
- Since the study was conducted in II. Andülhamid Han secondary school, the study was limited with 51 participants.
- The study was limited to the spring semester of the 2020-2021 academic year.
- The researcher was working at the same school with the participants.
- The interviews with the teachers were limited from 6 to 10 minutes.
- The study was conducted during the COVID-19 pandemic process. Hence, the teachers' perspecticves may have been influenced by pandemic circumstances.

1.8 Delimitations

The delimitation of the study would be:

- Since the study was conducted in only one secondary school, the sample size was limited.
- Since the study was conducted in only one secondary school, teachers' subjects were limited.
- The study was limited by the data collection tools used in the research.

1.9 Definition of the Terms

EBA: Eğitim Bilişim Ağı (Education Information Network)

Perceived Usefulness (PU): It is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989).

Perceived ease-of-use (PEU & PEOU): It is defined as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989).

Perceived Enjoyment (PE): It is defined as "the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system usage" (Taylor & Todd, 1995).

Facilitating Conditions (FC): It is defined as "the control beliefs relating to resource factors such as time and money and IT compatibility issues that may constrain usage." (Taylor & Todd, 1995).

Self-efficacy (SE): It is defined as " the belief that one has the capability to perform a particular behavior." (Bandura, 1977).

Social Influence (SI): It is defined as " a person's perception that most people who are important to him think he should or should not perform the behavior in question." (Fishbein & Ajzen, 1975).

Behavioral Intention (BI): It is defined as " a measure of the likelihood that a person will engage in a given behavior" (Fishbein & Ajzen, 1980).

TRA: It is an abbreviation of Theory of Reasoned Action.

TPB: It is an abbreviation of Theory of Planned Behaviour.

TAM: It is an abbreviation of Technology Acceptance Model.

DTPB: It is an abbreviation of Decomposite Theory of Planned Behaviour.

UTAUT: It is an abbreviation of Unified Theory of Technology Acceptance and Use of Technology.

1.10 Organization of the Study

Chapter one of the study describes the background of the problem, statement of the problem, the purpose of the study, the significance of the study, research questions, assumptions, limitations, delimitations, the definition of the terms, and organization of the study.

Chapter two is the review of the literature. Technology Acceptance Models are explained in this chapter. The EBA platform is examined in detail. Moreover, details related to the COVID-19 pandemic process and the education during this period are provided. Furthermore, the studies on the field are presented.

Chapter three contains research questions, design of the study, participants of the study, data collection procedures, and instrumentation. Data analyses, results, and discussions are presented in chapters four and five.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter includes the literature review of the study. The literature review is organized into four main sections: Technology Acceptance Models, EBA, COVID-19 pandemic and education, and studies on the field.

2.2 Technology Acceptance Models

There have been several studies that attempt to explain technology acceptance. Technology Acceptance Model is the most extensive and predictive instrument in order to test users' acceptance of new technology. Technology Acceptance Model (TAM) basically tries to estimate and clarify users' acceptance of information technology (Davis & Venkatesh, 1996). TAM was developed by Fred Davis. He states the procedure and the time that the users embrace and consume a new technology in TAM.

In order to understand TAM, it is essential to examine the theories that have been proposed before TAM. These theories are briefly described below.

2.2.1 Theory of Reasoned Action (TRA)

Davis et al. (1989) combined the Theory of Reasoned Action (TRA) with TAM so as to find more complete determinants for user acceptance. TRA forms the basis of TAM and was explained by Fishbein and Ajzen in 1975. This theory aims to predict

human behaviors. TRA is used for explaining the correlation between attitudes, beliefs, and individual intentions. These determinants are affected by subjective norms and attitudes towards behavior (Al-Emran & Shaalan, 2021). The structure of TRA is demonstrated in Figure 2.1 below.

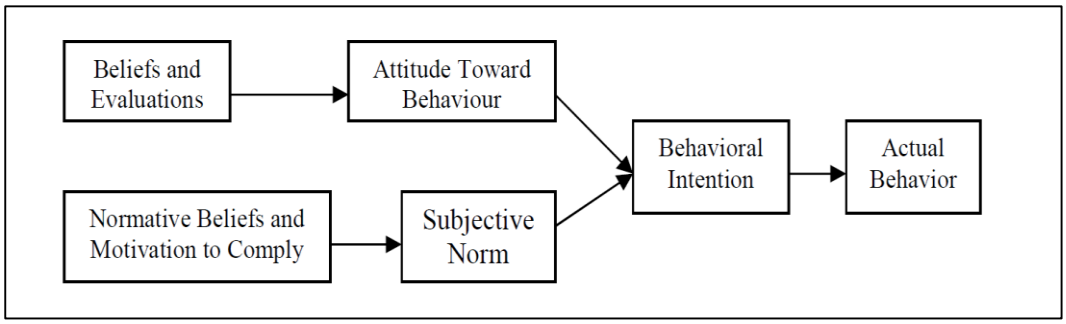


Figure 2.1. Theory of Reasoned Action

TRA claims that if a person believes that performing a behavior leads to a positive outcome, s/he exhibits a positive attitude in performing the behavior. If a person believes that performing a behavior leads to a negative outcome, s/he exhibits a negative attitude in performing the behavior (Ursavaş, 2014). In other words, attitudes affect behavioral intentions.

Davis established TAM as a modification of TRA. Beliefs are presented as perceived usefulness and perceived ease of use in TAM. Additionally, TAM demonstrates the correlation between beliefs, attitude, intention, and actual system usage (Şumuer, 2012).

Ajzen realized that TRA is more predictable for controlled situations. He proposed the Theory of Planned Behaviour (TPB) for situations where the person does not have complete control in performing the behavior in 1991.

2.2.2 Theory of Planned Behaviour (TPB)

Ajzen (1991) suggested the Theory of Planned Behaviour (TPB) to broaden TRA. Ajzen added perceived behavioral control for conception in this theory (Yucel & Gulbahar, 2013). According to Ajzen's TPB, an individual's intention in order to accomplish a given behavior is the focus of the model. Intentions control the motivational factors which affect behavior. Performing a behavior and intention to engage in this behavior have a positive correlation (Ajzen, 1991). The intention to perform a behavior depends on attitude, subjective norms, and perceived behavioral control in TPB. The structure of TPB is shown in Figure 2.2.

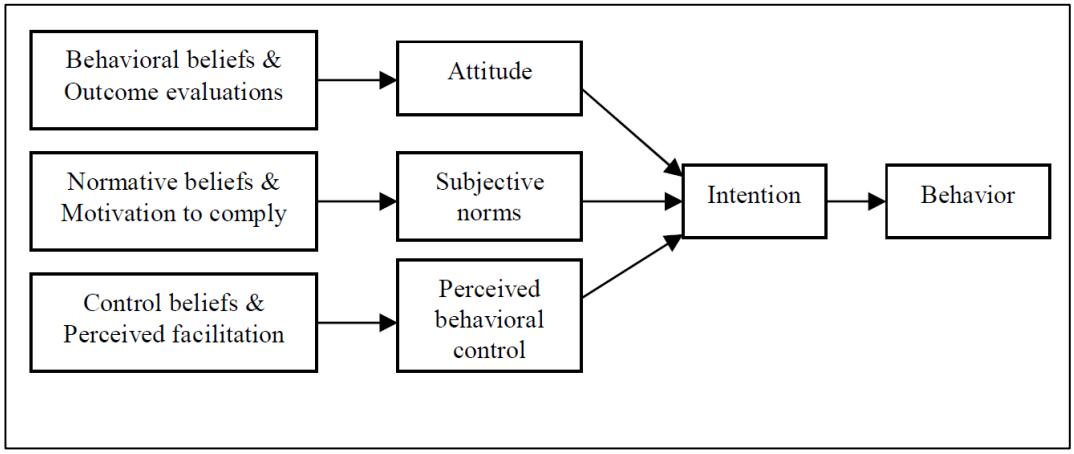


Figure 2.2. Theory of Planned Behavior

Performing a behavior depends on behavioral intention in TRA whereas it depends both on behavioral intention and behavioral control in TBP. Therefore, TPB is about performing a behavior voluntarily.

Taylor and Todd (2001) compared TAM and TBP to decide which model is more feasible for predicting technology usage. They suggest that both of these models have strengths, however, TAM is more preferable for predicting usage.

2.2.3 Technology Acceptance Model (TAM)

Davis (1989) adopted Fishbein and Ajzen's TRA and proposed Technology Acceptance Model for defining users' behavioral intention. The behavioral intention was established by Ajzen and Fishbein (1980, p. 42) as a measure to predict the possibility whether a person would perform the intended behavior. Behavioral intention (BI) is affected by perceived usefulness (PU) and perceived ease of use (PEOU) in this model. Research indicates that PU and PEOU have an effect on BI, on the other hand, some researchers state that PEOU has more effect on PU than the effect on BI (Keil et al., 1995).

Davis (1989) stated that attitude toward use (A) and perceived usefulness (PU) control the behavioral intention (BI). PU and PEOU have an effect on A in TAM. Besides, PEU has effect on PU (Şumuer, 2012). The structure of TAM is presented in Figure 2.3.

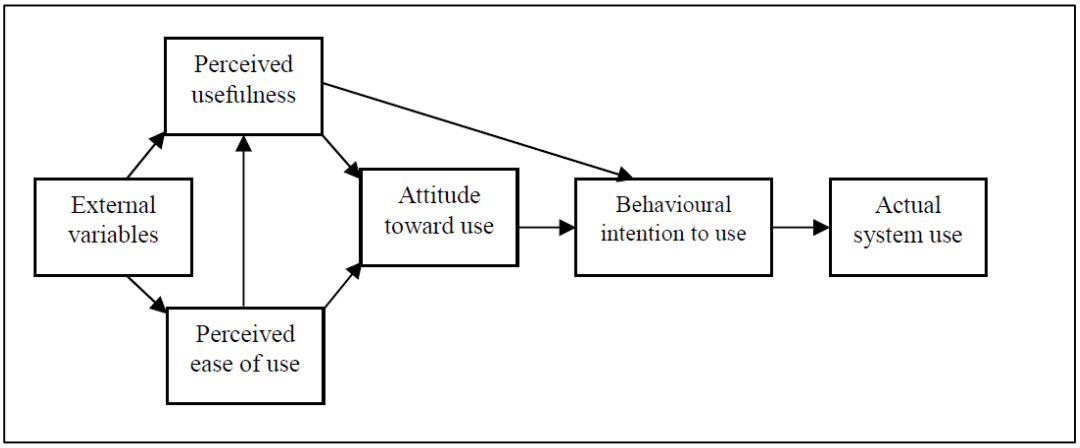


Figure 2.3. Technology Acceptance Model

2.2.3.1 Perceived Usefulness and Perceived Ease of Use

Perceived usefulness is defined as the degree which a person is convinced of that benefiting from a particular system would improve his or her work performance

(Davis, 1989, p. 320). Besides, perceived ease of use is defined as the degree to which a person is convinced that a particular system would be exploited without effort (Davis, 1989, p. 320). TAM explains the relationship between technology usage and BI. In other words, TAM claims that users' BI to use a system affects technology usage. This model shows that PU influences BI and attitude towards usage. Moreover, PU is a strong determinant for user satisfaction. Researchers state that users would be more satisfied when the system improves their performance (Calisir & Calisir, 2004).

Venkatesh and Davis (2000) claim that PU is a significant factor for TAM. PU has a direct effect on BI and PEU. Likewise, PEOU is another significant factor in TAM. This factor is related to users' perception of technology. It could be said that computer usage is influenced by users' ease of use perceptions if they have been trained before (Iivari, 2009). On the other hand, it is claimed that training is not associated with ease of use and it is associated with usefulness (Bedard et al., 2003). Besides, Agarwal & Prasad (1999) express that training influences users' perception but they have no significant evidence about the effect of usefulness or ease of use.

It is claimed that both PU and PEOU affect BI (Lee et al., 2003). However, PEOU is an unsteady measure for predicting BI instead of PU. There are several highlighting reasons for this condition. Users' experience and the complexity of the system are the two of these reasons (Subramanian, 1994). Another reason for PEOU's instability is the gender factor which has an effect on PEOU (Venkatesh et al., 2003).

2.2.4 Technology Acceptance Model 2

Venkatesh and Davis (2000) offered a new and extended version of TAM called Technology Acceptance Model 2 (TAM 2). If this theory shown in Figure 2.4 is examined., it could be seen that TAM 2 is similar to TAM. PU and PEOU are kept in TAM 2 and social influence processes and cognitive instrumental processes are

added (Husin et al., 2017). Subjective norm, voluntariness, and image are classified as the social influence processes whereas job relevance, output quality, result demonstrability, and perceived ease of use are defined as cognitive instrumental processes (Husin et al., 2017). Experience and voluntariness are related to the subjective norm and intention to use in this model. The structure of TAM 2 is demonstrated in Figure 2.4.

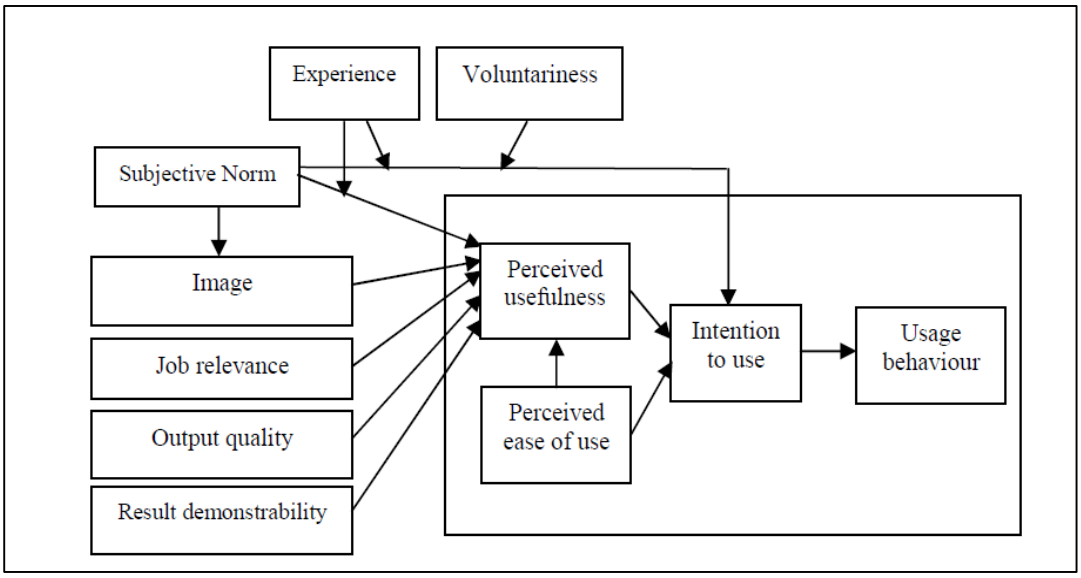


Figure 2.4. Technology Acceptance Model 2

2.2.5 Decomposite Theory of Planned Behaviour (DTPB)

Taylor and Todd (1995) suggested the Decomposite Theory of Planned Behaviour (DTPB). This theory is based on TPB and TAM. Taylor and Todd widened and detailed the TPB with this theory. DTPB has more factors than TPB. Thus, DTPB gives detailed information about usage behavior. Perceived ease of use, perceived usefulness, and compatibility factors are used for explaning attitude in this theory. Peer influence and superior's influence are used for explanining subjective norms. Besides, self-efficacy, resource facilitating conditions, and technology facilitating

conditions are used for explaninig perceived behavioral control. Moreover, DTPB claims that attitude, subjective norm, and perceived behavioral control both affect intention and usage behavior. The structure of DTPB can be seen in Figure 2.5.

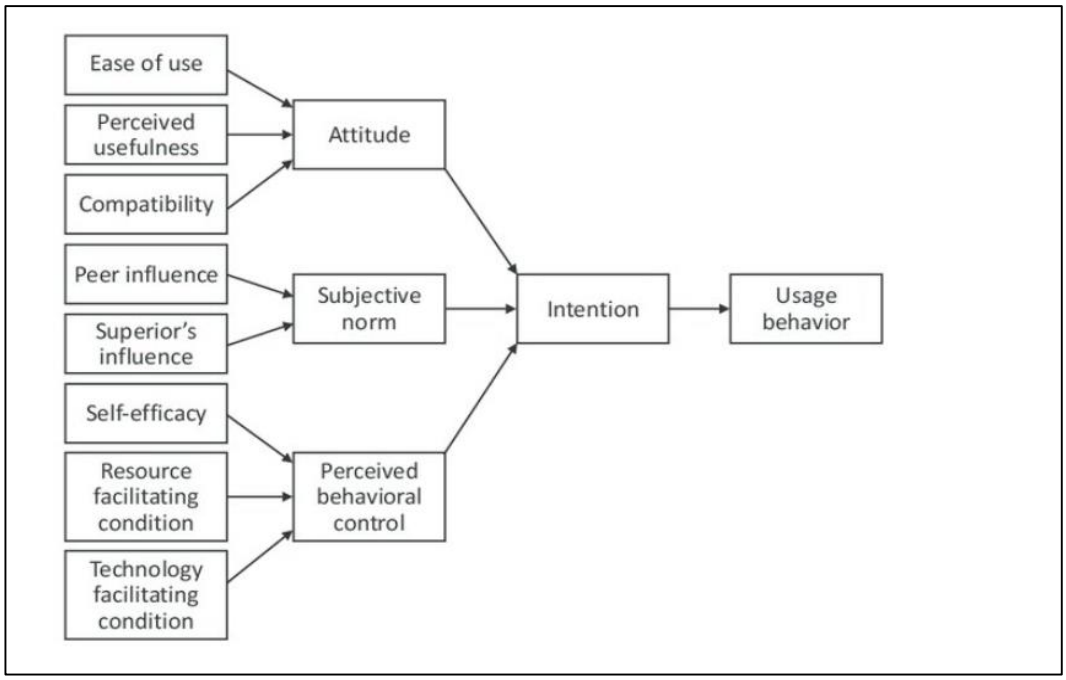


Figure 2.5. Decomposite Theory of Planned Behaviour

2.2.6 Unified Theory of Technology Acceptance and Use of Technology (UTAUT)

Venkatesh et al. (2003) proposed the Unified Theory of Technology Acceptance and Use of Technology (UTAUT) as a widened model of TAM. This model is designed for evaluating similar technologies for their success. The main aim of UTAUT is to define BI based on the factors such as voluntariness of use, experience, age, and gender. Moreover, variables performance expectancy, effort expectancy, social influence, and facilitating conditions are included in UTAUT. Their research showed that this new model tries to explain the acceptance of technology with more variables than the previous models. The structure of UTAUT is demonstrated in Figure 2.6.

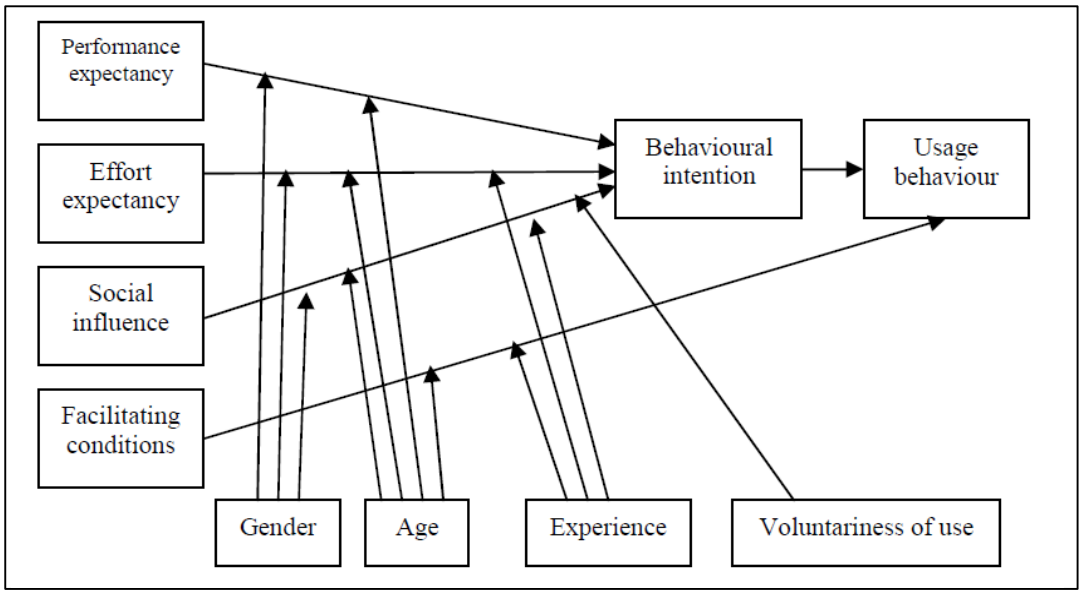


Figure 2.6. Unified Theory of Technology Acceptance and Use of Technology

2.2.6.1 External Variables

2.2.6.1.1 Perceived Enjoyment

PU, PEOU, and BI are presented as major variables of TAM (Davis, 1989). On the other hand, several external variables affect PU, PEOU, and BI. One of them is perceived enjoyment (PE). PE is defined as "the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system usage." (Davis et al., 1992). In other words, people tend to participate in behavior provided that it is enjoyable. There is a positive correlation between technology usage and perceived enjoyment (Teo et al., 1999).

2.2.6.1.2 Facilitating Conditions

Another variable that affects PU, PEOU, and BI is facilitating conditions (FC). It is defined as " the control beliefs relating to resource factors such as time and money and IT compatibility issues that may constrain usage." by Taylor and Todd (1995). They stated that time and money were the two factors of FC. In other words, if more time or money was accessible, technical information would increase.

Facilitating conditions are defined as skill training, information or materials available, and administrative support for the educational framework (Teo, 2010). Among the types of supports, the most critical one is technical support for teachers (Teo, 2009).

Another study analyzing FC claimed that FC has no significant effect on the intention to use but it has an effect on usage behavior (Ursavaş, 2014).

2.2.6.1.3 Social Influence

Social influence (SI), known as subjective norms (SN), is defined as a "Person's perception that most people who are important to him think he should or should not perform the behavior in question." by Fishbein and Ajzen (1975). This variable is related to colleagues' and superiors' influence. There could be pressure on users by the expectations of their colleagues and superiors even if there is no obligation to use the intended technology. This pressure could affect users' behavior at the beginning phases of technology use (Venkatesh et al., 2000).

Davis did not include the SI factor in TAM. However, Venkatesh et al. (2003) added this factor to TAM 2.

Ursavaş (2014), explained the significance of SI on the technology usage of teachers. If a teacher uses new technology as a teaching tool, the teacher faces two conditions. The first condition is related to the observation of the colleagues about the usage of

this new teachnology and reactions of colleagues. The second condition is the directions of superiors.

2.2.6.1.4 Self Efficacy

Self Efficacy (SE) is defined as " the belief that one has the capability to perform a particular behavior." (Bandura, 1977). This variable has a positive correlation with self-confidence in the technology context. High self-efficacy could be related to being successful in using technology. Holden and Rada (2011) examined self-efficacy based on computer self-efficacy and technology self-efficacy. The study demonstrates that computer self-efficacy does not have a significant influence on PEOU. On the other hand, technology self-efficacy affects PEOU.

A study considering pre-service teachers' technology acceptance in Turkey showed that computer self-efficacy has a direct effect on behavioral intention to use technology (Teo et al., 2012).

2.2.6.1.5 Age, Gender, Professional Experience, Subject

The effects of age, gender, professional experience, and subject on teachers acceptance of EBA for online teaching will be examined in this study. There are many studies related with investigating the moderating effects of gender for TAM. One of these studies demonstrated that gender moderated the effect of PEOU and SI on BI (Tarhini et al., 2014). Moreover, they found out that age moderates the relationship between PEOU and BI.

Venkatesh et al. (2003) indicated that adding gender as a moderating variable helped to increase the explanatory power of the model (Ursavaş, 2014).

2.3 Online Learning

New versions of communication have emerged together with the evolution of the Internet. A form of exchanging information that the society has embraced through the years is online learning (Moore, Dickson-Deane & Galyen, 2011). Considering the literature, it is difficult to give a particular definition of online learning. Some researchers define online learning based on the technology instrument or context with which it is employed (Lowenthal, Wilson, & Parrish, 2009). The relationship between previous definitions and online learning by considering the technology used have an effect on the definition, too (Rekkedal et al., 2003; Volery & Lord, 2000). However, most researchers describe online learning as access to learning practices in accordance with the technology used (Benson, 2002; Carliner, 2004; Conrad, 2002). Benson (2002) explains that online learning is a modern model or/and enhanced type of distance learning.

Urdan & Weggen (2000) argues that the degrees of complexity of online learning differ from basic to sophisticated. Basic online learning program involves text, visuals, tests, records and practices whereas sophisticated would contain animations, simulations, audio and video materials, discussion and mentoring. Wentling et al. (2000) claims that knowing the technologies and how to use them are essential for learning outcomes. They suggest that even if the online learning platforms vary considering the details for user interface and interactivity, the technologies to present online instruction would start to resemble each other. Hence, we should focus on the opportunity online learning has provided to teach and learn during the COVID-19 pandemic (Pokhrel & Chhetri, 2021). They argue that the mission of online learning during the pandemic is to keep students and teachers safe.

Online learning has both advantages and disadvantages. One of the advantages is accessibility. Teachers and students could access learning materials during the pandemic with the help of the online learning platforms (Mukhtar et al., 2020). Moreover, they claim that having an online learning platform eased the administrative tasks such as marking attendance and recording lessons. However,

there are some disadvantages of online learning, too. One of them is the lack of immediate feedback. It is difficult for teachers to assess students' perception during online lessons. Another disadvantage is not comprehending content when not face-to-face with the teacher. (Alexander, Truell & Zhao, 2012). They argue that this may lead to the need to contact with the teacher for students and this kind of need was reported as potentially frustrating for teachers.

2.4 COVID-19 Pandemic and Education

World Health Organization (WHO) declared the COVID-19 pandemic in March, 2020. Following this announcement, face-to-face education at all levels was shuttered and online education started in many countries. The mid-term break, which started on March 16, was extended in primary and secondary education institutions in Turkey. Education continued through the EBA, EBA TV, and video conferencing platforms till the end of the education term. Teachers and students were brought together using various video chat environments. The 2020-2021 academic year started with distance education and gradually switched to hybrid education. After, a blended method was used together with distance education and face-to-face education. Teachers necessarily used the EBA platform and technology in education during the rest of the pandemic period.

The Ministry of Education declared that 16.946 hours of educational TV broadcast was made on EBA TV channels between March 23, 2020, and May 21, 2021. EBA platform was visited 22.766.107.409 times. 270.088.746 hours of live lessons were lectured by teachers in this period (Sayılarla Uzaktan Eğitim, 2021).

Ross-Hain (2020) explained the historical background of school closures and distance education in her study. She stated that schools have been closed for many reasons worldwide. Natural disasters, weather, conflicts, violence, health crisis, refugee situations, and construction are some examples of these closures. School closures lead educators to distance education. Distance education was carried out not

only today but also in the past years. For example, during the Second World War, educational materials were sent to French students by mail or post (Ross-Hain, 2020).

Zambia started a radio program called “Learning at Taonga Market” for out-of-school students in 2000. This radio program aimed to reach the students who had no chance to go to school or left the school (Heyyman et al., 2012). By strengthening this radio program during the pandemic, Zambia Goverment delivered solar radios and used this radio program in distance education and enabled teachers to contact with the students (Barron et al., 2021, p.20).

Latin and Carribbean countries used learning platforms in COVID-19 pandemic, too. These countries especially focused on supporting teachers during the pandemic. For example, the "Comunitad Atenea" platform was established as a platform where teachers can upload and share materials (Barron et al., 2021, p.23). Apart from this, there was a platform established by teachers in Uruguay that provides resources for teachers. A Brazilian organization and Facebook started a project to train teachers in distance education during the COVID-19 pandemic. More than 2 million teachers were trained to improve their digital and pedagogical skills in this project (Barron et al., 2021, p.24).

The COVID-19 pandemic affected education systems all over the world. Universities and schools were locked down for decreasing the infection. This situation led teachers and students to accept technology as a part of the educational system. This has become a necessary situation rather than a voluntary one. The obligation of using technology has revealed several challenges for teachers and students. These challenges would be mentioned in the next section.

2.5 Studies on the Field

Turan (2011) examined the factors that affect elementary school teachers' technology acceptance. The study analyzed 11 different technology acceptance variables. Data was collected from 345 elementary school teachers with the help of an acceptance scale. The results showed that PU and PEOU have a positive effect on attitude. SE and FC have a significant positive relationship between PEOU. SN and PU have a positive and significant relationship between behavioral intention.

Solak (2012) investigated teachers' attitudes towards using smartboards with TAM. The study aimed to examine the effects of PU, PEOU, and SN (subjective norms) on intention to use. Moreover, the study investigated the moderating effects of age, gender, profession, institution, and professional experience. Smartboard Acceptance and Intention of Use Scale was used on 230 teachers. The study discovered that PU, PEU, and SN had a direct influence on the intention to use for instructors to utilize the smartboard. Moreover, considering the gender, occupation, and the institution that the teachers work, there is no significant difference in PU, PEU, SN, and IU. Furthermore, age and occupational experiences do not have an effect on PU, SN, and IU. However, they have a significant effect on PEOU.

Ursavaş (2014), studied modeling and examining teachers' ICT acceptance. The purpose of the study was to research teachers' ICT acceptance with the TAM variables. Teachers' Technology Acceptance and Use Scale (TTAUS) was used so as to collect data from 2147 participants. The results demonstrated that teachers use ICT to increase their performance. Teachers' self-efficacy towards the use of ICT directly affects the use of these technologies. Teachers with high self-efficacy adopt ICT more easily. Perceived ease of use and teachers' experience has a positive correlation.

Tarhini et al. (2014) studied moderating effects of age and gender on the variables affecting e-learning acceptance. Participants of the study were chosen from Brunel University in England. 604 university students using Web-Based learning

participated in the study. The study indicates that PEOU, PU, SN, and SE affect BI while using e-learning systems. Moreover, the effects of PEOU, PU, and SE on BI are moderated by age, and that the effects of PEOU and SN on BI are moderated by gender. Nevertheless, the results indicated that gender has no moderating effect on PU or SE and BI.

Tokel and Isler (2015) attempted to explain the technology acceptance of virtual worlds as a learning space. Data were collected from 46 preservice teachers from Middle East Technical University. Second Life platform was used in this study. Students took teaching methods courses at the Second Life METU virtual campus for a semester. A questionnaire was formed to examine the PEOU, PU, PE, and BI of the students. The results demonstrated that PU is the most significant predictor of students' behavioral intentions for using virtual worlds. PE is the second significant predictor for BI. Moreover, PE is a predictor for PEOU and PU. On the other hand, PEOU is a significant predictor of PU.

Jatmikowati et al. (2020) studied with early childhood teacher education program students in Indonesia. The study attempted to investigate students' behavioral intention to use e-learning with the help of the variables of the Technology Acceptance Model during the pandemic. The study involves PEOU, PU, A, BI, SE, SN, and system accessibility (SA) variables of TAM. Data collected from 67 university students. The questionnaire has a demographic section that includes age, gender, school years, and teaching experience. However, the university program had only female students. The study demonstrated that SE and PU are important to explain BI. SE has effect on BI, on the other hand, the attitude has not a meaningful effect on BI. SE, SN, and system accessibility are the determinants of PEOU. PEOU has no direct effect on BI and attitude. Attitude does not affect as they are obliged to do it.

Sangeeta and Tandon (2020) analyzed the factors affecting the adoption of online teaching by school teachers during the COVID-19 pandemic. 643 teachers participated in this study from North India. The results demonstrated that

performance expectancy and facilitating conditions influence behavioral intention and attitude positively. Social influence has a strong correlation with behavioral intention. Though, social influence has a negative impact on attitude. Attitude affects behavioral intention and actual use.

Lazim et al. (2021) studied university students' acceptance for online learning during the COVID-19 pandemic. Data was collected from 333 undergraduate university students. The study was conducted in a private university in Malesia. Data was collected with a survey questionnaire. The results showed that PEOU has a meaningful correlation with PU. Moreover, PEOU has a meaningful correlation with attitude towards online teaching. On the other hand, PU has a meaningful correlation with attitude towards online teaching. In addition, PU has a meaningful correlation with the acceptance of online learning behavior. Finally, attitude towards online learning has a meaningful correlation with online learning behavior.

Aslam et al. (2021) investigated difficulties that faculty members faced with online teaching during the COVID-19 epidemic. 82 faculty members participated in this study from public universities in Pakistan. A close-ended questionnaire was used in order to examine faculty members' technology acceptance. Faculty members' attitudes towards technology usage were examined with three factors: PU, PEOU, and attitude to use. In addition to the questionnaire, researchers made online interviews with 15 participants. Results showed that attitude towards online teaching is positively correlated with PU and PEOU. Moreover, PEOU has a more meaningful effect on faculty members' attitudes towards Information and Communication Technology (ICT) acceptance than PU. The faculty members encountered some challenges in this period. The first challenge was observing students and making them participated in online lessons. The second challenge was the lack of guidance of online teaching for faculty members. The third challenge was the lack of communication between faculty members and students. The faculty members could not get enough feedback from students. Moreover, the study proposed that both faculty members and students should be assisted with training sessions to become comfortable with online assessment methodologies.

Cardullo et al. (2021) studied K-12 teachers' self-efficacy for online teaching during the COVID-19 pandemic. The study aimed to investigate the correlation between the factors of the technology acceptance model and the teachers' self-efficacy on online teaching during the pandemic period. Data were collected with a questionnaire and open-ended questions. The qualitative data showed that online teaching has both advantages and disadvantages. One of the advantages of online teaching is being safe and healthy for students and teachers. Moreover, teachers and students' computer proficiency enhanced since they frequently used the related learning management system. On the other hand, students have various problems concerning the internet connection, lack of interaction and communication, lack of parental support or device. Quantitative data showed that teachers' motivation and educational self-efficacy are improved by the gratification taken through the learning management system.

2.5.1 Studies on EBA

Arslan (2016) investigated teachers' perceptions toward mathematics contents in the EBA platform. The results of this mixed method study showed that teachers did not use the platform frequently. Moreover, the number of teachers uploading content to EBA was extremely low. Participants stated that the mathematics course content was effective in concretizing concepts and enriching the course. The participants indicated that they were sufficiently knowledgeable about EBA. However, one-on-one interviews revealed that the majority of teachers were unaware of the mathematics course content in EBA. As a result of the research, it was observed that teachers lack sufficient information regarding EBA.

Aksoy (2017) investigated secondary school teachers' purpose of using EBA platform and the obstacles that users face with using the platform. The study conducted in Kahramanmaraş city and 164 teachers participated in this study. Data were collected with semi-structured interview forms. The results showed that the majority of the teachers did not prefer to use the EBA platform. The researcher stated

that teachers were familiar with videos, presentations, and achievement tests. Teachers used the platform for teaching, and benefiting from the e-contents. When the problems teachers faced with using the platform were examined, hardware and infrastructure problems were found to be the most widespread. It was seen that the content-related problems were in the second place, the interaction problems ranked third, and the software problems were in the last place. Moreover, most of the teachers encountered issues such as lack of internet access in the classrooms or slow internet connection. When the teachers' views on the effectiveness and efficiency of EBA in terms of education were analyzed, it was found that the highest average was "partially effective and efficient". Teachers stated that many students could not use EBA efficiently because of the shortage of internet and devices at students' home. The teachers expressed their opinions about the reasons why other teachers could not use EBA competently. These reasons were related with the lack of technological understanding and insufficient in-service training on EBA.

Kuloğlu (2018) examined the EBA platform usage of 105 English teachers. A questionnaire was used to collect quantitative data, while an interview form was conducted to obtain qualitative data. It was concluded that English teachers' usage of EBA was less frequent than expected. Teachers mainly used the EBA to reach content, but they did not develop or share their own. Teachers generally benefited from the lesson module in the platform. The least preferred modules in the platform were contest and news modules. More than half of the participants stated that they had enough information about the EBA modules. Teachers mentioned in-service training, colleagues, and EBA introductory seminars as sources of information regarding the platform. The majority of the teachers had no information about course content developing system in the platform. The teachers rated the course content as moderately sufficient.

Keskin Yorgancı (2019) studied secondary school mathematics teachers' perceptions toward and use of the EBA. 312 teachers were recruited and data were gathered using questionnaires and in-person interviews. The results revealed that although teachers had a positive attitude towards EBA, they believed that EBA

content was generally insufficient and only the EBA Course section was partially sufficient. 84% of the teachers were knowledgeable about the EBA platform. However, teachers did not prefer the use of EBA to a large extent. While more than half of them used it occasionally, only 17% of teachers used it on a regular basis. The researcher stated that this result addressed that EBA was insufficient to meet teachers' needs. The contribution of teachers for enriching EBA contents was insufficient. It has been understood that they stayed away from contributing to the solution of this problem and they were largely ignorant of how they might contribute. Teachers highlighted the importance of academicians participating actively in the process of developing EBA content together with teachers.

Atalay (2019) analyzed the secondary school teachers' and students' perceptions toward EBA platform in social studies lessons. The study adopted a mixed method and data were collected with a questionnaire and interviews. 65 students and 2 teachers participated in this study. The results demonstrated that both students and teachers found EBA platform easy to use. Students indicated that they wanted EBA to have educational games to reinforce the topics in addition to tests and exercises. Students stated that the use of EBA in the course allowed the subjects to progress faster. According to teacher feedbacks, the videos and activities boost students' long-term learning. These findings indicated that the EBA platform has a significant effect on students' permanent learning and success levels.

Elçiçek (2019) investigated how often teachers used the EBA platform. The study was conducted in Mardin city and 1166 teachers attended. The results indicated that teachers used EBA more as a one-way source of information and documents, and they did not make great use of EBA's sharing features. Male teachers were more likely to use the platform than female teachers. Teachers who have a social media account were more likely to use EBA than teachers who did not have a social media account. It was determined that teachers aged between 20 and 30 used it more frequently than teachers aged between 31 and 40. EBA was used by primary school teachers less than it is exploited by instructors at other levels of education.

Erman (2020) studied secondary school teachers' technology acceptance and self-efficacy towards the use of the EBA platform. The study was conducted in Kocaeli province and involved 433 teachers. Teachers' self-efficacy and acceptability of technology were examined using two separate scales. The findings suggested that teachers' self-efficacy level toward using the EBA platform was acceptable. Moreover, the findings indicated a significant correlation between teachers' self-efficacy and their computer use. There was no significant difference between teachers' age, gender, professional experience, branch, computer usage time, and internet usage time. Teachers' self-efficacy levels had effect on teachers' technology acceptance variables (PU, PEU, attitude towards use, BI, FC, SE, SN, compatibility).

Aztekin (2020) studied the teachers' attitudes and awareness of the EBA platform. 423 teachers participated in this study from Ankara city. The data was collected with a questionnaire. The results indicated that teachers had a positive attitude and awareness of EBA. It was concluded that the teachers had a strong understanding of the purpose of developing EBA, but their perceptions of the content power of EBA were at a moderate level. The level of awareness of teachers towards EBA varied according to their gender, age, professional experience, educational background, and whether they received pre-service and in-service technology training. The results showed that there was a significant difference in the sub-dimensions of goal comprehension and module recognition of EBA awareness levels between male and female teachers. The level of EBA' awareness of advanced age group teachers was lower than younger teachers. Teachers with 21 years or more professional experience had lower awareness levels than teachers with 1-5, 6-10, 11-15 years of professional experience. the EBA awareness levels of graduate and undergraduate teachers were close and similar to each other. EBA awareness of teachers who received in-service technology training was found to be significantly higher than those who did not.

Kandemir (2020) used the Unified Theory of Acceptance and Utilization of Technology to examine teachers' use of educational environments (UTAUT-2). 376 teachers participated from different branches from Gaziantep city. Data were collected with a questionnaire to investigate the performance expectancy, effort

expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit, and behavioral intention variables. The results showed that teachers age, gender, branch, school type, professional experience, and level of technology literacy had a significant effect on their use of these instructional platforms. Male teachers had higher perception in technology use, organizational and technical infrastructure than female teachers. Additionally, habit, hedonic motivation, SI and FC variables were important predictors for using these environments. The researcher indicated that teachers in the 50-59 age group do not enjoy using social learning platforms because they found the usage of technology or the interface of educational platforms confusing.

Türker and Dündar (2020) researched high school teachers' perceptions regarding distance education in pandemic process. 60 teachers participated in this study. The data were collected using online forms due to pandemic conditions. The results indicated that the major obstacles to the effective and efficient use of EBA in distance education process were; infrastructure problems, and teachers' inadequacy in information technology. Many participants pointed out that EBA could not be used effectively due to certain reasons including kids' indifference in the classes, parents' lack of interest in the process, and a lack of healthy teacher-student communication in the classroom environment. 10% of the teachers stated that the contents of all school levels and branches should be enriched.

Gökdemir (2020) investigated social studies teachers' perceptions towards the EBA platform. Data were acquired via an online questionnaire from 254 teachers The results expressed that teachers did not use the EBA platform sufficiently. They accessed only specific parts of the platform. The platform was primarily utilized for downloading documents and accessing e-content module. Male teachers perceived EBA to be more effective and efficient than female teachers. Teachers underlined that e-content, video, visual, e-book, news, audio and e-journal modules were the most productive modules in the platform.

Başaran et. al. (2020) studied the effectiveness of distance learning during the COVID-19 pandemic. 80 teachers, 80 students, and 80 parents participated in this study. Data were collected with semi-structured interview forms. The results revealed that participants considered the system successful in terms of maintaining the education. The results showed that many students attended live classes regularly. On the other hand, it was stated that some students' attendance was below expectation or they could not attend in live lessons. They stated that they could not attend distance education courses due to various reasons such as infrastructure problems in the EBA, the high number of siblings at home, and there was only one device to engage. It was concluded that the parents did not monitor the students enough during the distance education process and they were not interested in students' participation for the lessons. It was observed that there were limitations in communication between teacher-student and teacher-parents. Teachers mentioned the lack of feedback from students during the distance education. Participants emphasized there was no strong communication as in face-to-face education.

Akça (2021) conducted a study on physical education teachers' habits of using the EBA platform in Aydın province. 242 teachers participated in this study. The researcher collected data using an EBA Attitude Questionnaire. The findings indicated that teachers were sufficiently informed about the EBA platform and were familiar with the modules that might be used in their courses. However, 54.1 % of the teachers had lack of ability to implement the activities on the EBA platform. 36.8 % of the teachers did not have any in-service training. Moreover, 89.7 % of the teachers did not upload any content on this platform. The researcher stated that teachers were aware of aim and significance of EBA. On the other hand, teachers did not utilize the platform due to their lack of skills to use EBA.

Bayar (2021) evaluated the burnout experiences of EFL (English as a foreign language) teachers using EBA live classes during the epidemic phase. The study adopted a mixed-methods approach and collected both quantitative and qualitative data. 413 teachers participated in the study. The results of the study indicated that instructors were significantly impacted by burnout in terms of emotional tiredness.

According to the researcher, teachers were concerned about their health in relation to lecturing online lessons for a long period of time. Moreover, female teachers had greater burnout than male participants considering female teachers had more responsibilities in terms of social gender roles. Female teachers were not only responsible for teaching but also for household chores, child care, and so on.

Güneş (2021) used a mixed method study to investigate the perspectives of visual arts teachers on the EBA platform with 108 teachers from Diyarbakır province. The results showed that teachers believed they were capable of using the EBA platform. They used the EBA live lesson application and found that the EBA interface design was useful. However, teachers did not think that EBA contained enough e-content for visual arts lesson, and they did not believe that EBA was useful for visual arts lessons. Moreover, the majority of teachers had trouble connecting to EBA, and they thought that face-to-face training was more effective than the EBA live lesson.

Balcı (2021) conducted a mixed -method study on the perspectives of EFL students and teachers on EBA live classes during the COVID-19 epidemic. 325 students and 81 teachers attended this study. According to the findings of the study, the EBA platform possessed both advantages and disadvantages from the teachers' perspective. The results showed the advantages as, short (30-minute) live lesson sessions, drawing students' attention with a variety of topics, allowing hesitant students to participate in live classes, and engaging students in epidemic. On the other hand, teachers mentioned several disadvantages including platform connectivity issues, insufficient student attendance, student presence during live lessons, and adding live lessons on the platform. Teachers thought that arranging and adding live lessons were wasting their time. Students' presence in live lessons was found to be contentious as students frequently turned off their cameras or microphones throughout the session.

Erman (2021) examined students' and teachers' attitudes about history lessons on the EBA platform. This mixed method study involved 297 teachers and 427 students from Ankara province. The results showed that gender, school type, professional

experience, education level, and the frequency of using EBA platform had no significant effect on teachers' assessment degree of the platform. The researcher stated that the contents were appropriate but they need to be enriched. The advantages of the platform were described as assisting students in reinforcing topics, ensuring that learning was persistent, and enabling students to successfully engage with lessons. On the other hand, there were several disadvantages including lack of technological infrastructure, low quality media content, and complicated interface of the EBA platform. The researcher recommended that the EBA's material should be enhanced with quality videos, animations and games; and the interface should be more user-friendly.

2.6 Summary

The technology acceptance model has been used for users' acceptance of information systems for many years. This chapter attempted to explain the technology acceptance models and the variables of these models. Perceived usefulness, perceived ease of use, perceived enjoyment, facilitating conditions, self-efficacy, social influence, and behavioral intention variables were clarified.

COVID-19 pandemic unexpectedly caused the schools to be locked down and distance education substituted face to face education. Teachers and students met on the EBA platform which was supported by the Ministry of National Education during the pandemic process. This study attempts to understand teachers' views toward use of EBA during the COVID-19 pandemic process based on the TAM.

CHAPTER 3

METHOD

This chapter attempts to explain the method of the study. It covers the research questions and hypothesis, the research design of the study, the context of the study, the selection of participants, instrumentation, data collection procedures, data analyses, and summary.

3.1 The Research Questions and Hypotheses

This study attempts to answer the following two research questions and hypotheses derived from them:

What is the relationship among teachers' perceived usefulness, perceived ease of use, perceived enjoyment, facilitating conditions, self-efficacy, social influence, and behavioral intentions toward using EBA for online teaching during the COVID-19 pandemic?

H1: PE will have positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H2: PE will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H3: PE will have a positive effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

H4: FC will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H5: SE will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H6: SE will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H7: SE will have a positive effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

H8: SI will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H9: SI will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H10: SI will have a positive effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

H11: PU will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H12: PEU will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H13: PEU will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

Do teachers' age, gender, branch, and professional experience affect their acceptance of EBA for online teaching during the COVID-19 pandemic?

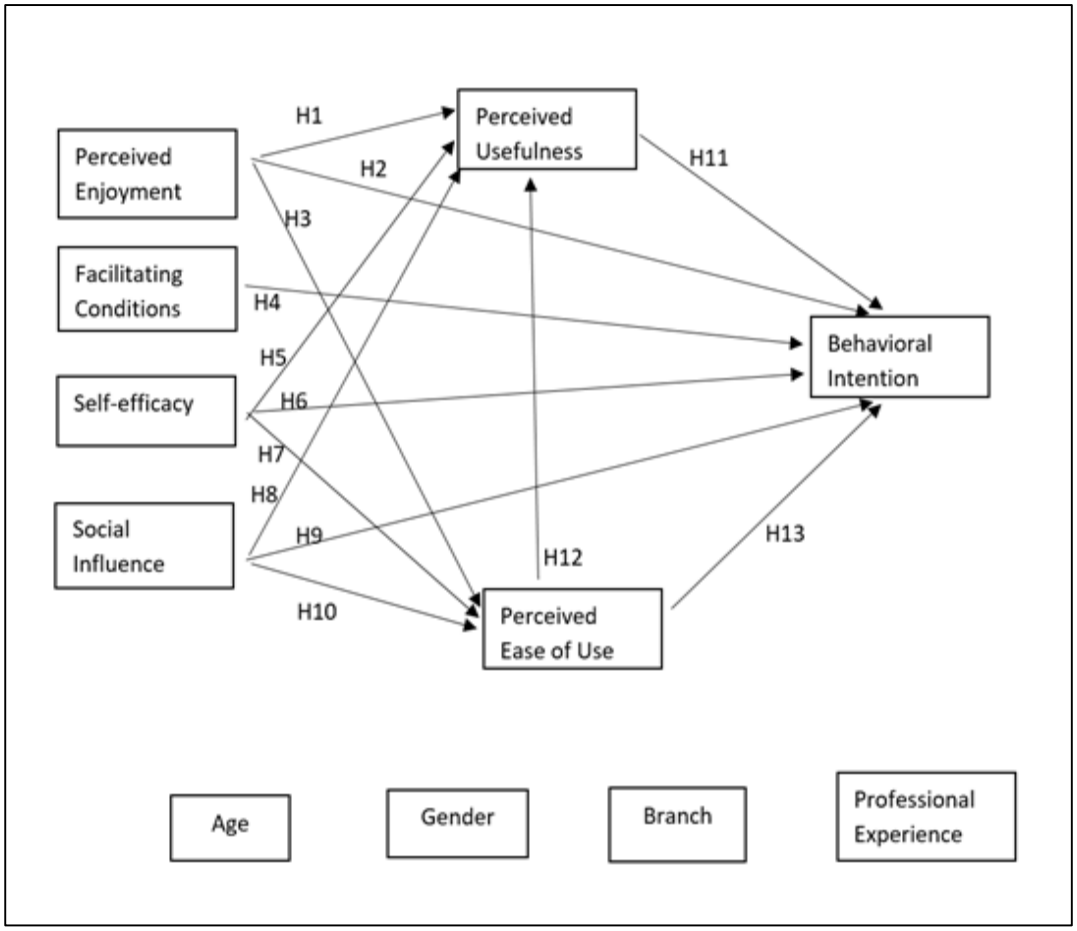


Figure 3.1. Hypotheses

3.2 The Research Design of the Study

This study aimed to examine the factors affecting II. Abdülhamid Han secondary school teachers' use of EBA during the COVID-19 pandemic process based on the Technology Acceptance Model (TAM). Since the study was conducted in only one secondary school, the study adopted the case study method. The case study was described as "a research strategy which focuses on understanding the dynamics present within single settings" (Eisenhardt,1989). Simons (2009) stated that "the main purpose is to generate an in-depth understanding of a specific topic (as in a thesis), program, policy, institution or system to generate knowledge and/or inform policy development, professional practice and civil or community action."

Case study is not sampling research as suggested by the major researchers in the field according to Tellis (1997). Nevertheless, case study method should be conducted so as to maximize what can be studied for the suitable time interval of the research. This study adopted both qualitative and quantitative data to gain a deep understanding of the factors affecting teachers' use of EBA in the pandemic process. Quantitative data were collected with a questionnaire. The TAM factors were analyzed with the help of this questionnaire. Qualitative data were collected with interview forms via Zoom meetings. The interview questions were related with the factors in the questionnaire.

3.3 Participants

This study was conducted at Ankara Etimesgut II. Abdulhamid Han Secondary School. Targeted participants for the quantitative research was all the teachers at school. There were 56 teachers officiating in this school and 51 of the teachers (91%) voluntarily participated in this study. Working in the same school may have positively affected the percentage of teachers' participation. Teachers from 13 different branches, which were Mathematics, Turkish, Science and Technology, Social Studies, English, Religious Culture and Moral Knowledge, Physical Education and Sports, Visual Arts, Music, Guidance and Psychological Counseling, Design and Technology, Information Technologies, and Pre-School, participated in the study. Since there are 4 kindergarten classes in this secondary school, preschool teachers were included in the research, too.

Responses needed for factor analysis may differ depending on the number of the variables and participants but Hair et al. (2005) indicated that the number of observations required for factor analysis should be at least 50. There were 53 responses to the questionnaire. The researcher analyzed and noticed that two of the participants responded twice mistakenly. Therefore, 51 responses were considered valid. 38 female teachers and 13 male teachers answered the questionnaire. Since the participants were limited with one school, only one teacher from each branch was selected for the interviews.

Table 3.1 The Distribution of The Teachers by their Gender

Gender	Frequency	Percent
Female	38	74,5
Male	13	25,5
Total	51	100,0

The age range of the participants was between 23 and 53 and their professional experiences ranged from 1 year to 20+ years. Moreover, there were 13 different branches in this school.

3.4 Context of The Study

The participants were selected from II. Abdülhamid Han Seconday school. The study was conducted during the COVID-19 pandemic. Therefore, the teachers already have been using the EBA platform. Some of the teachers had in-service training about the platform before the pandemic. However, the rest of them learned by themselves. When the online learning process started, videos which were explaining the use of the platform were shared by school administrators. Besides, help videos were provided in the platform itself.

Teachers had used the platform for almost a year (including three semesters). They conducted 15 to 30 online lessons per week via this platform. Moreover, they spent extra time assigning homework or searching content from this platform. The teachers monitored the students by examining the reports menu. Reports menu imformed teachers about whether the students did their homework. Moreover, teachers displayed the students' exam scores on the platform with the help of this menu.

3.4.1 Education Information Network (EBA)

The FATİH project was introduced by the cooperation of the Turkish Ministry of National Education and the Ministry of Communications in 2010. This project aimed to enhance the use of technology in schools. In other words, modern classes were formed by the help of the Internet and interactive smartboards. Teachers had in-service training within the scope of this project. E-contents were documented in order to use technology in education. All e-contents were gathered in the EBA platform (Timur et al.,2017).

EBA is an educational platform that is funded by the cooperation of the Innovation and Educational Technologies General Directorate and the Turkish Ministry of National Education. (Timur et al.,2017). The platform has a test broadcast from 2012 to 2015. After 2015, the platform started broadcasting (Pala et al., 2017). EBA is an online social and educational platform that provides e-contents for all class levels. EBA platform has several objectives. Some of the objectives are:

- To provide rich content for different branches
- To popularize the informatics culture
- To exchange information with the social network structure
- To gather teachers on the same platform
- To give opportunities for students who have different styles of learning like visual learner, aural learner, verbal learner, logical learner, social learner, and solitary learner (Pala et al., 2017).

EBA platform aims to offer various educational content to users. EBA contents were designed for grade levels from preschool to 12th grade. The platform allows teachers to prepare e-documents, share lecturing videos, e-tests, and e-exams. Teachers could use the content in their classrooms through interactive smartboards or send assignments to their students via this platform. Moreover, the platform enables users to send messages to each other, share messages on the main page and start debates or votes in order to get interaction.

Android-based mobile EBA application was released in 2016 and so EBA has become more accessible regardless of location (Demir, 2018). New design of EBA was implemented at the end of 2016. By the new appearance of the design was simplified, complicated menus became more useful. These changes improved the usability of EBA (Kandemir, 2020).

EBA aims for the equality of opportunity in education. Thus, the platform provides free membership to users. The platform only requires a device connected to the Internet.

3.4.1.1 Login Page

Login page of EBA consists of two parts. The weekly lecture schedule is located on the left side of the page. This syllabus illustrates the technical specifications for the EBA TV broadcast stream. The user selects the grade level at the top of the syllabus to view the lessons, topics of the lessons, and their schedule. The login page is shown in Figure 2.7.

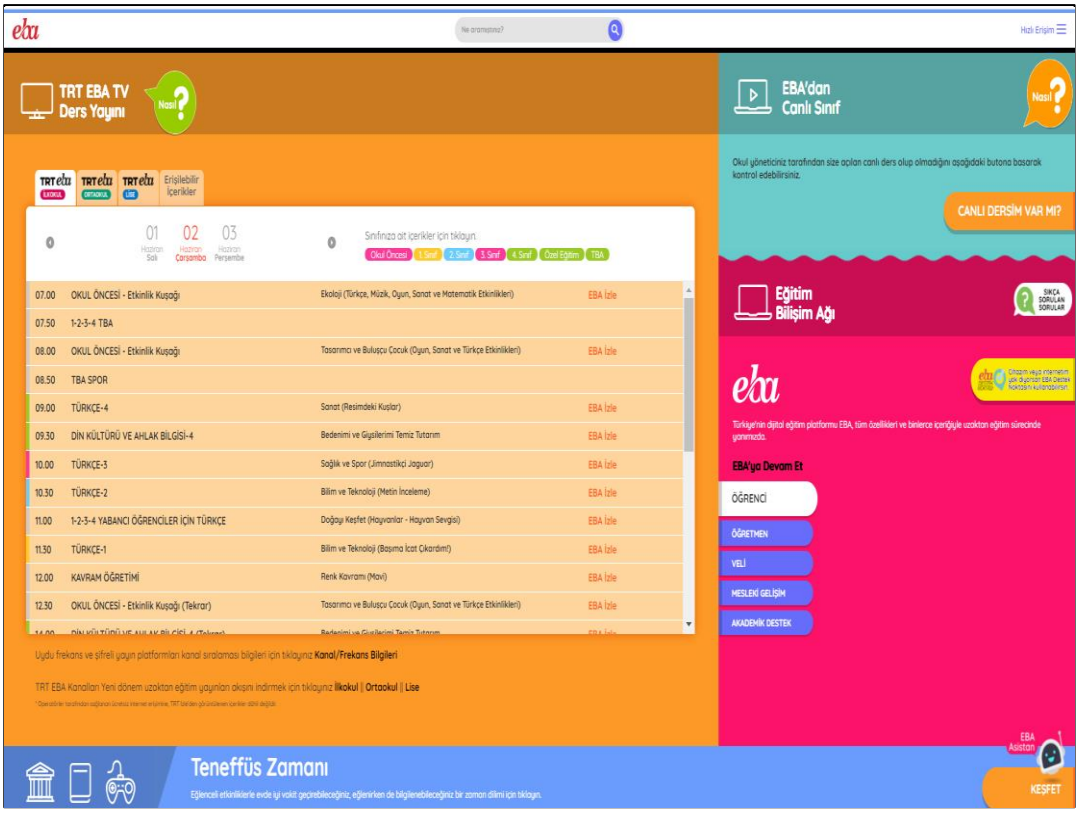


Figure 3.2. EBA login page

EBA TV is a television channel that broadcasts free for students that are unable to access EBA platform via computer, telephone, or tablet. The content of the EBA TV channel is created by MEB. The aim of the channel is to promote equality of opportunity in education.

The right part of the login page enables users to log in to the platform. Users can select the appropriate option based on their status as a student, teacher, parent, career development for teachers, or academic support. The website then redirects users to the second login page, where the users provide their username and password.

There is an EBA assistant icon at the right bottom of the page. Users can click that icon in order to ask questions about EBA and EBA TV and establish a dialog with live chat.

The interface of EBA is customized for teachers, students, and parents. Some parts are restricted to selected users. Teachers can access the system using their MEBBS (National Education Ministry Informatics System) password, their e-devlet (e-state) password, or their EBAKOD password. The final option, EBAKOD, is a type of two-d code. EBA generates unique codes that are only valid for three minutes. After logging into the application, users can generate these codes. This procedure ensures the security of users by requiring two-factor authentication. Thus, other students in the classroom will not be able to see the teachers' passwords. Figure 2.8 illustrates the EBA password screen.

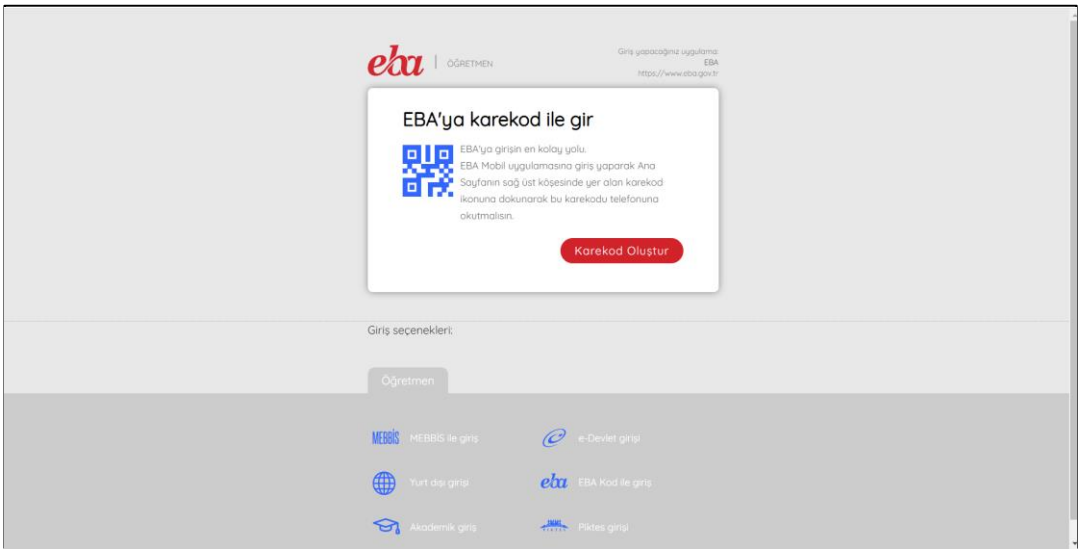


Figure 3.3. EBA password page

3.4.1.2 Main Page

Teachers can view messages, notices, and a settings menu at the right top of the main page. They have access to student, teacher, and school administrator messages. Additionally, teachers can compose text messages or upload files to communicate with other teachers, students, or groups. The next button displays information about online lessons and career courses that teachers are enrolled in.

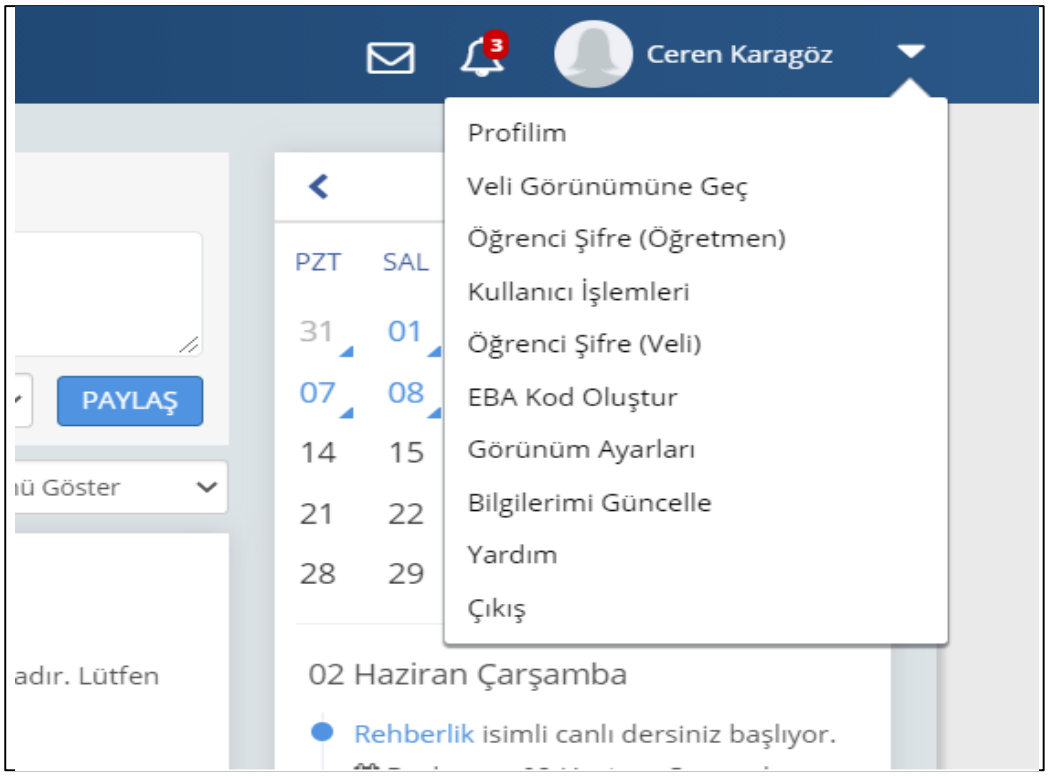


Figure 3.4. EBA Settings Menu

The settings button includes various features. Teachers can check their EBA scores and their own grading in comparison to other teachers working in the same school. This score is earned by the sharing of content, tests, and exams, as well as the frequency of loging into the platform. This option allows teachers to change their personal information and create EBACODE. Figure 3.4 illustrates the settings menu.

If the teacher has a child of school age, they can see the profile of their child's by switching to the parent view and create new passwords for them. Moreover, teachers can give one-time passwords to their students.

The help menu is divided into four sections. These sections have been prepared differently for the student, the teacher, the parent, and the school administration. After selecting the appropriate part, the page's headings appear below. Each heading is intended to address a specific aspect of the EBA platform's use.

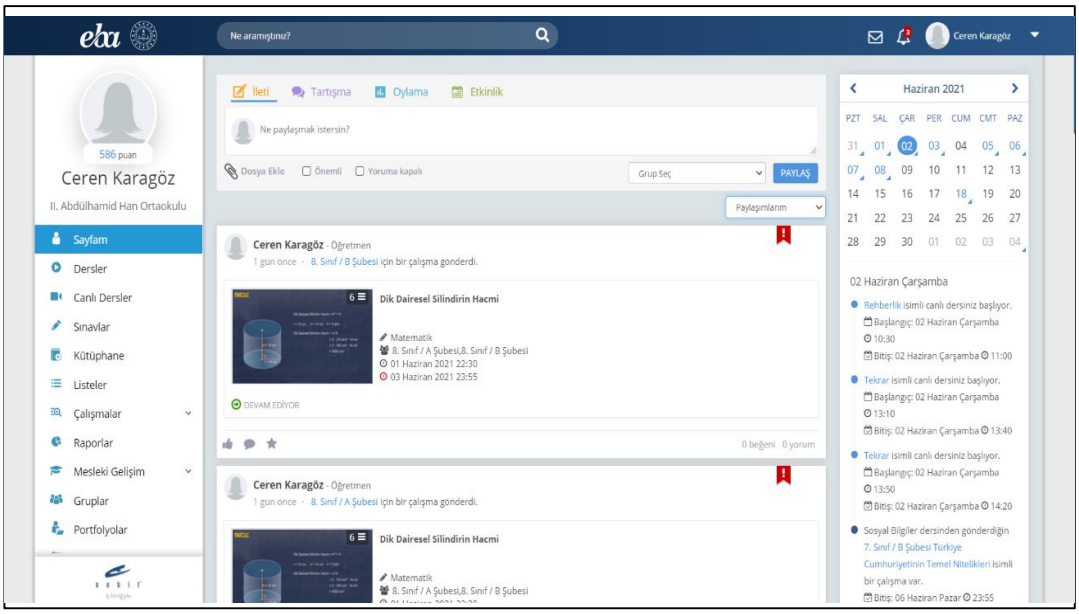


Figure 3.5. EBA Main Menu

The left part of the main menu is reserved for EBA modules and these modules are explained in detail at the next section. EBA main menu is demonstrated in Figure 3.5.

3.4.1.3 EBA Modules

3.4.1.3.1 My Page

My Page module allows teachers and students to interact with one another. Open messages can be written by teachers and shared on the main page. They can deliver these messages to classes or the entire school. Teachers can also attach files or photographs to these messages. Moreover, teachers can use the My Page module to start a discussion or vote for interaction. They can also view other teachers' posts published on the website.

3.4.1.3.2 Lessons

This module contains materials for teachers. Teachers can select the grade level, lesson, unit, and topic of the lesson at the top of the page. Teachers can share lecture videos, exercises, and assessments with their students or they can assign these materials with a due date.

The pdf versions of the lecture books are located at the bottom of the page. Additionally, this module includes interactive books and exercise books. Teachers can download exercise books in pdf format for using in their lessons. This module enables teachers to share video lessons from EBA TV with their students.

The Lessons module contains the platform's primary source material. This module includes sample exam questions for each unit. Moreover, thirty question unit tests are available for sharing at the end of each unit.

3.4.1.3.3 Live Lessons

Teachers can view their live lesson list with this module. This page enables teachers to integrate live lessons with external links into their classrooms, too. There are instructional videos for teachers who are unfamiliar with the process of adding live lessons at the top of the website. Teachers could plan Zoom, Google Meet, or Skype meetings and include the meeting links on the live lesson adding page.

3.4.1.3.4 Exams

This module includes all the tests, exercises, skill-based tests, exam questions, and sample questions for high school entrance exams published by the Ministry of National Education. Teachers can share these as assignments for students. Moreover, this module allows teachers to create their online tests or exams.

3.4.1.3.5 Library

The library module is divided into six sections: fun and play, science and technology, health and physical education, Turkish and foreign languages, culture and art, nature and environment, and guidance services. Each section includes sub-headlines, as well as films, e-magazines, pdf files, and audio recordings.

3.4.1.3.6 Lists

This module enables teachers to create and share content lists with their students or colleagues. Teachers can quickly find the content they require with the help of this module. The lists are updated with new exams, quizzes, videos, and activities. Lists can be classified regarding their grade level, subject, or lesson.

3.4.1.3.7 Studies

This module is divided into two sections. The first section is dedicated to digital studies including the content that teachers exchange with their students. Teachers can view the percentage of content that students have finished.

The second section focuses on oral and written research. Teachers can prepare studies with a deadline by uploading files. Moreover, they can share these studies with their students and later on evaluate them.

3.4.1.3.8 Reports

Teachers can use this module to track how much of the shared content is completed by students. Teachers have three report options in the reports module: study reports, individual study reports, and overall performance reports. All the studies that teachers discuss with students are documented in study reports. Individual study reports enable teachers to select a grade level and unit to view a class' performance.

Reports on overall performance provide an overview of the class. Teachers can assess the performance of a class in each unit of the lesson. Performance is classified into four categories: low, medium, good and very good.

3.4.1.3.9 Professional Development

EBA is a platform for education, not just for students, but also for teachers. On the EBA platform, teachers can access a variety of courses. Additionally, teachers can apply for extra courses via MEBBS and participate in online courses through the EBA platform.

Teachers can join a variety of different groups using the professional development module. Teachers can use these communities to exchange knowledge, discuss pedagogical advances, and share videos and documents.

This module includes a library section that contains books on literature and professional development. These books are available for teachers to download to their devices.

3.4.1.3.10 Groups

Teachers can create groups and share content with these groups. In addition to this, they can see the members of the groups and follow the group's sharings.

3.4.1.3.11 Portfolio

This module shares detailed information for the student profiles. Teachers can select a student and see the EBA score of the student. Students' academic grades for each year can be monitored by this module. In addition to the student performance, assignments students completed and teachers' comments about students can be observed by the portfolio module.

3.4.1.3.12 Files

EBA platform provides 2 GB uploading space. Teachers can upload files or add links and share them with students or colleagues.

3.4.1.3.13 Calendar

Teachers can see their live lessons and the homeworks that they assigned.

3.4.1.3.14 Content Production

Teachers can produce and share content in accordance with the conditions determined by the EBA. These contents can be provided as external links, videos, documents, images, or audio.

3.4.1.3.15 Question and Exam System

Teachers can examine the questions provided by the EBA platform, create new questions and exams, and share with students and colleagues with this module.

3.5 Instrumentation

The quantitative data were collected with the "Examination of the Factors Affecting Teachers' Use of EBA During the COVID-19 Pandemic Based on the Technology Acceptance Model" questionnaire given in Appendix C. This questionnaire was formed from different studies and translated into Turkish. Perceived usefulness, perceived ease of use, perceived enjoyment, facilitating conditions, self-efficacy, social influence, and behavioral intention factors were presented in the questionnaire (Al-Emran & Shaalan, 2021). PU, PEU, and BI factors were modified from Davis (1989). PE factor was modified from Venkatesh and Bala (2008). FC and SI factors

were modified from Sangeeta and Tandon (2020). SE factor was modified from Tarhini et al. (2014). Information related with the factors is summarized in Table 3.2.

Table 3.2 Factors of the Questionnaire

Factors	Questions	Modified From
Perceived Usefulness	Q1,Q2,Q3,Q4,Q5,Q6	Davis (1989)
Perceived Ease of Use	Q7,Q8,Q9,Q10	Davis (1989)
Perceived Enjoyment	Q11,Q12,Q13	Venkatesh and Bala (2008)
Facilitating Conditions	Q14,Q15,Q16,Q17	Sangeeta and Tandon (2020)
Self-Efficacy	Q18,Q19,Q20,Q21,Q22	Tarhini et al. (2014)
Social Influence	Q23,Q24,Q25	Sangeeta and Tandon (2020)
Behavioral Intention	Q26,Q27,Q28	Davis (1989)

Qualitative data were collected with interview forms. There were 8 questions in the forms. The questions were based on the factors in the questionnaire. The interview questions aimed to gain deep insight for the questionnaire. The researcher conducted interviews via the Zoom platform.

3.6 The Researchers Role

The researcher had an observer role in this study. She was a part of the design, implementation and data collection process. She contacted with all the participants

and explained the study's purpose. She did not interfere with the participants; she only guided the process of this study.

3.7 Data Collection Procedures

The researcher got the necessary permissions for each factor on the questionnaire which were modified. She applied to Middle East Technical University Human Subjects Ethics Committee (HSEC) and got approval for this study and instruments of the study. After getting approval from HSEC, the researcher applied to the Turkish Ministry of Education for research permission. The permission document is provided in Appendix A.

Both the quantitative and the qualitative data were collected online in order not to risk the teachers' and the researcher's health because of the COVID-19 pandemic. The questionnaire was uploaded to anket.metu.edu.tr. The researcher provided essential information to teachers via the official WhatsApp group of the school so that they could fill in the questionnaire.

The qualitative data were collected with zoom meetings. The researcher selected random teachers from each branch and asked them if they want to participate in the interview section of the study. 11 volunteers were accepted to interview with the researcher.

3.7.1 Quantitative Data Collection Procedures

The research did not require any in-service training since teachers were already using the EBA platform during the COVID-19 pandemic. The researcher briefly expressed the aim of the study before conducting the questionnaires. Moreover, the researcher reminded that participation was completely voluntary and teachers were informed about the data obtained would be used by the researcher only for the relevant study.

She stated that the answers and personal information would be kept strictly confidential and the data would only be used in scientific publications.

The researcher deactivated the questionnaire two weeks after the announcement. The data were transferred to SPSS to be analyzed.

3.7.2 Qualitative Data Collection Procedures

One-to-one interviews were conducted via Zoom platform to collect the qualitative data. The researcher arranged the time of the zoom meetings with each teacher with phone calls. She briefly explained the aim of the study and asked permission to record the interviews at the beginning of each interview. She informed the teachers about personal information would be kept strictly confidential. The researcher reminded that if a teacher felt uncomfortable with any question in the study, the researcher would end the interview.

The researcher listened to the answers carefully and did not interrupt the conversations. She encouraged the teachers when it was needed to give more information about the questions. The interviews were 6 to 10 minutes long. The interview questions were provided in Appendix C.

3.8 Analysis of the Data

The quantitative and qualitative data analysis process will be explained in this section.

3.8.1 Analysis of Quantitative Data

Descriptive statistics, internal consistency of scales, and multiple regression were used in order to analyze the quantitative data. The statistical analysis was managed with the Statistical Package for the Social Sciences (SPSS) 28.0 program.

3.8.1.1 Descriptive Statistics

The participants' demographic data and responses for each item in the questionnaire were organized with descriptive statistics. The frequency of participants for gender, age, branch, and professional experience and the percentages of the frequencies were provided. Mean and standard deviation values were calculated and demonstrated with tables.

3.8.1.2 Internal Consistency of the Scales

A Cronbach Alpha coefficient between 0.60 and 0.80 indicates that the scale is moderately reliable, and the coefficient between 0.80 and 1.00 indicates that the scale is highly reliable (Kayış, 2009; Kılıç, 2016).

3.8.1.3 Multiple Regression Analysis

Multiple regression is a type of regression based on correlation. It is used to investigate the relationship between variables. There are three types of multiple regression: standard or simultaneous, hierarchical or sequential, and stepwise (Pallant, 2010). This study adopted the hierarchical type of multiple regression. The researcher examined the assumptions of the regression so as to conduct a multiple regression. The assumptions were sample size, multicollinearity, outliers and normality.

3.8.2 Analysis of Qualitative Data

The qualitative data analysis was based on Creswell's (2007) qualitative data analysis spiral. The data were analyzed in four main steps as data management, reading and memoing, describing classifying and interpreting, and representing and visualizing.

3.8.2.1 Data Management

The interviews were conducted with Zoom meetings and data were recorded. The researcher transcribed all of the interview records and transformed them into a Microsoft Word file. She grouped the records by their record date and the participants' name into computer files.

3.8.2.2 Reading and Memoing

The researcher read and reread the transcripts and took memos on the essential parts. She mainly took memos in order to manage the data in possible groups and highlight the essential parts of the text for this step.

3.8.2.3 Describing, Classifying, and Interpreting

Creswell (2007) indicated that developing the data codes was the fundamental part of analyzing the qualitative data. Therefore, the researcher reread the interviews and categorized proper words, sentences, or paragraphs related to the study. She assigned the labels for these categories and managed the data under the labels. The researcher reread the interviews to prevent miscodings.

The data were labeled with the parallel subjects in the scale about the acceptance of the teachers' EBA platform during the pandemic. After labeling and coding the data, the researcher categorized the data into the themes. These themes represented the important issues determined by the study.

3.8.2.4 Representing and Visualising

The researcher interpreted the themes and the data. She made descriptions and implications and reported them in the study. The findings were visualized with concept maps as to ensure better understanding for the data.

3.9 Validity and Reliability

3.9.1 Validity and Reliability of Quantitative Phase

Table 3.3 Cronbach's Alpha Coefficients

	Cronbach's Alpha	N of Items
PU	0,912	6
PEU	0,868	4
PE	0,949	3
FC	0,681	4
SE	0,792	5
SI	0,853	3
BI	0,797	3

As it could be seen from Table 3.3, FC had lowest Cronbach alpha value with 0,681 and PE had the highest Cronbach alpha value with 0,949.

A Cronbach Alpha coefficient between 0.60 and 0.80 indicates that the scale is moderately reliable, and the coefficient between 0.80 and 1.00 indicates that the scale is highly reliable (Kayış, 2009; Kılıç, 2016). Providing this information, it could be said that the scale was reliable.

A valid instrument can accurately measure what needs to be measured, as well as reveal data from the variables used in the study. Two arguments can be used to assure measurement validity. Firstly, the items were obtained from valid and reliable measurement scales. Furthermore, Pearson Product Moment Correlations were used to test the validity of the questionnaire using SPSS. By comparing each item questionnaire score to the total score, the validity test was performed. The validity of the items esd demonstrated by an item-by-item questionnaire that had a significant

correlation with the total score. The value of the significance can be used to determine whether an item of the questionnaire was valid or not. The correlations for validity can be seen in Table 3.4.

Table 3.4 Correlations for Validity

Correlations

Total

	PU1	PU2	PU3	PU4	PU5	PU6
Pearson Correlation	.680**	.599**	.816**	.757**	.762**	.665**
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000

	PEU1	PEU2	PEU3	PEU4
Pearson Correlation	.583**	.664**	.682**	.745**
Sig. (2-tailed)	0.000	0.000	0.000	0.000

	PE1	PE2	PE3
Pearson Correlation	.851**	.845**	.789**
Sig. (2-tailed)	0.000	0.000	0.000

	FC1	FC2	FC3	FC4
Pearson Correlation	.576**	.592**	.539**	.454**
Sig. (2-tailed)	0.000	0.000	0.000	0.001

	SE1	SE2	SE3	SE4	SE5
Pearson Correlation	.615**	.515**	.535**	.434**	.491**
Sig. (2-tailed)	0.000	0.000	0.000	0.001	0.000

	SI1	SI2	SI3
Pearson Correlation	.583**	.370**	.289*
Sig. (2-tailed)	0.000	0.008	0.040

	BI1	BI2	BI3
Pearson Correlation	.316*	.471**	.359**
Sig. (2-tailed)	0.024	0.000	0.010
N	51	51	51

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

Table 3.4 (Cont'd)
*. Correlation is significant at the 0.05 level (2-tailed).

Since the Sig. (2-tailed) significant values for all questions are less than .05, it can be assumed that all items are valid.

Internal validity threats are reduced by using a representative sample and providing adequate guidance during the data collection phase. The study's timeframe is arranged to be neither too short nor too long, limiting the risks to the study's validity. Furthermore, the mixed methods design was utilized because of the research question's complexity. It is acknowledged that using only one method and strategy would limit the research's validity.

The study's external validity was increased by providing specific demographic information about the sample (e.g., gender, age, and experience). As a result, researchers can assess the findings' generalizability in their own setting.

3.9.2 Validity and Reliability of Qualitative Phase

Validity and reliability were analyzed with the terms of Guba & Lincoln (1989). There are four titles: credibility, transferability, dependability, and confirmability.

The researcher followed three steps to ensure credibility. She spent time with the participants before the interviews in order to build trust between the researcher and the participant. In other words, the researchers and the participants had a dialogue and chat before starting the interview during the Zoom meeting. Afterwards, the researcher encouraged the participants to express their thoughts freely for the interviews allowing them to give honest answers. Finally, the researcher shared her findings, results, and analysis with another researcher.

The researcher selected the participants purposefully in order to ensure transferability. She selected different participants from each branch.

The researcher analyzed the qualitative data using interview records, interview notes, interview transcripts, and data analysis documents to ensure the findings' dependability and confirmability.

3.10 Summary

This chapter explained the research questions and the design of the study. The study adopted both qualitative and quantitative data so as to analyze the factors affecting teachers' use of EBA in the pandemic process. The participants (n=51) were selected from II. Abdülhamid Han Secondary School. Quantitative data were collected with a questionnaire. Qualitative data were collected with interview forms via Zoom meetings.

The context of the study, instrumentation, and data collection procedures were explained throughout this chapter. Analysis of the data and the validity and reliability issues were discussed. The results of the analysis are presented in the following chapter. The summary of the methodology used during the study is illustrated in Figure 3.6.

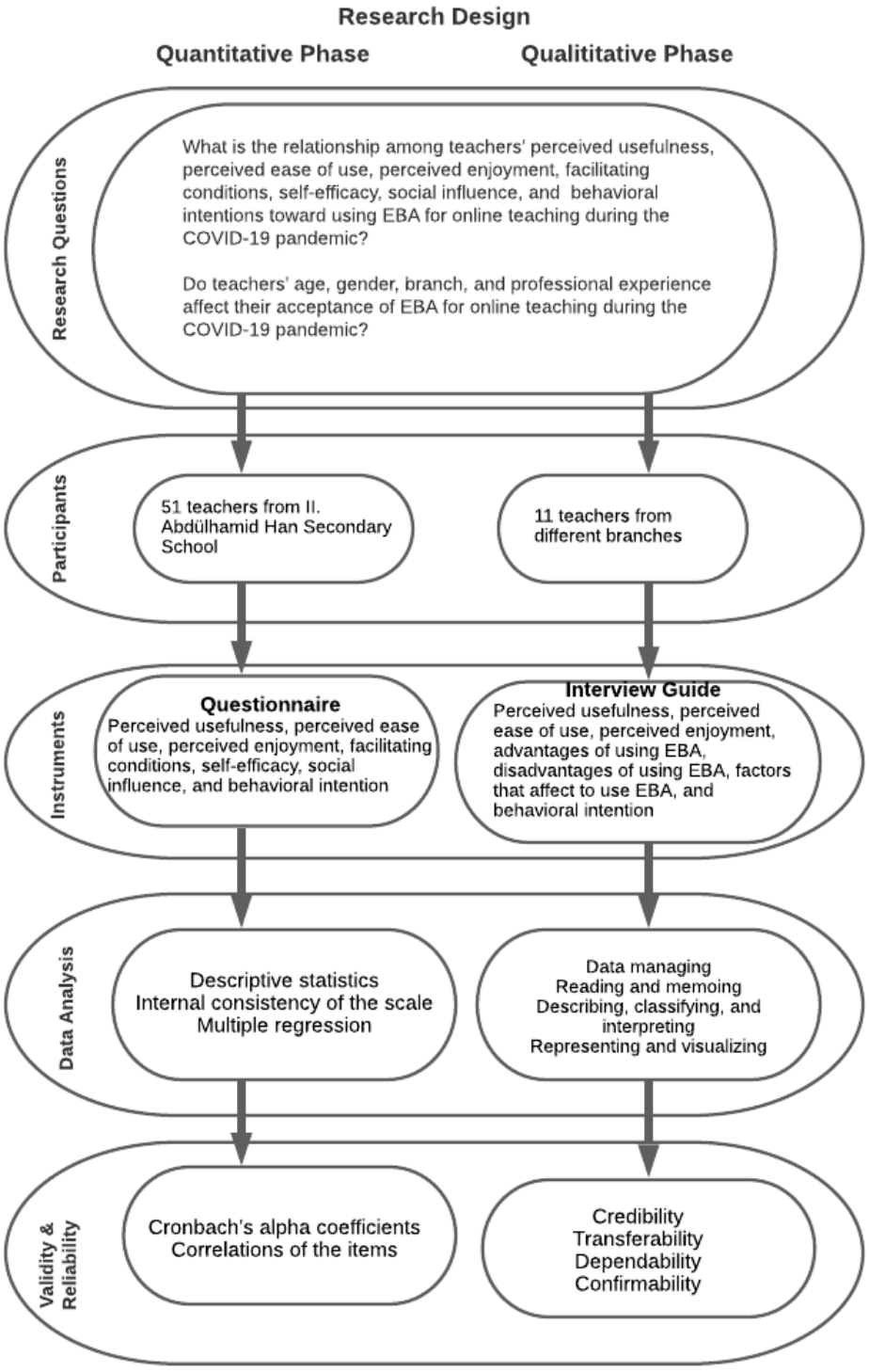


Figure 3.6. Summary of the Methodology

CHAPTER 4

FINDINGS

This chapter demonstrates the findings of the study. Quantitative data were presented with demographics of the participants, descriptive statistics, reliability of the scales, and the analysis of the model and the interviews.

4.1 The Findings of the Quantitative Phase

4.1.1 Demographics of The Participants

The participants of the study consisted of 51 teachers from II. Abdülhamid Han Secondary School. 38 of the participants (74.5%) were females and 13 of them were males (25.5%). This distrubiton can be seen in Table 4.1.

Table 4.1 Distribution of the Participants by Gender

	n	%
Female	38	74.5
Male	13	25.5
Total	51	100.0

The ages of the participants ranked between 23 to 53 with the mean of 36.05 and standard deviation of 5.91 as presented in Table 4.2.

Table 4.2 The Age of the Participants

	n	M	SD	Minimum	Maximum
Age	51	36.05	5.91	23	53

The ages of the participants were categorized into four groups. 9% of the participants were between the age of 23 to 30, 70.6% were aged between 31 to 40, 15.7% were aged between 41 to 50, and 3.9% were 50 and higher as demonstrated in Table 4.3.

Table 4.3 Distribution of the Participants by the Age

Age	n	%
23-30	5	9.8
31-40	36	70.6
41-50	8	15.7
50+	2	3.9
Total	51	100.0

The participants' professional experience was ranked 1 to 31 years, with the mean of 12.1373 and a standard deviation of 6.00007 (Table 4.4).

Table 4.4 The Profesional Experience of The Participants

	n	M	SD	Minimum	Maximum
Experience	51	12.1373	6.00007	1	31

The participants of the study were grouped by their professional experience. 9.8% percent of the participants had experience between 0-5 years. 39.2% had between 6-10 years, 27.5% had between 11-15 years, 13.7% had between 16-20, 9.8% had 20+.

The distribution of the participants by the professional experience is given in Table 4.5.

Table 4.5 Distribution of the Participants by the Professional Experience

Experience (years)	n	%
0-5 years	5	9.8
6-10 years	20	39.2
11-15 years	14	27.5
16-20 years	7	13.7
20+ years	5	9.8
Total	51	100.0

13 different branches were included in this study. 11.8% of the teachers' branch was English, 9.8% was Social Studies, 11.8% was Mathematics, 17.8% was Turkish, 11.8% was Science and Technology, 5.9% was Religious Culture and Moral Knowledge, 3.9% was Guidance and Psychological Counseling, 2.0% was Visual Arts, 9.8% was Design and Technology, 5.9 % was Physical Education and Sports, 5.9 % was Pre-School, 2.0% was Music, and 2.0% was Information Technology. The distribution of the teachers by their frequency and branch is given in Table 4.6.

Table 4.6 The Distribution of The Teachers by their Branches

Branches	Frequency	Percent
English	6	11.8
Social Studies	5	9.8
Mathematics	6	11.8
Turkish	9	17.6
Science and Technology	6	11.8
Religious Culture and Moral Knowledge	3	5.9
Guidance and Psychological Counseling	2	3.9
Visual Arts	1	2.0
Design and Technology	5	9.8
Physical Education and Sports	3	5.9
Pre-School	3	5.9
Music	1	2.0
Information Technologies	1	2.0
Total	51	100.0

4.1.2 Descriptive Statistics

Table 4.7 demonstrates the means and the standard deviation of the participants' answers to each item related to perceived usefulness, perceived ease of use, perceived enjoyment, facilitating conditions, self-efficacy, social influence, and behavioral intention. The means of the items are higher than 3.00, and the standard deviations ranged between 0.572 to 1.160.

Table 4.7 Descriptive Statistics of the Factors

Construct	Items	n	Mean	Standard Deviation
Perceived Usefulness (PU)	PU1.Using the EBA Platform improved my academic performance.	51	3.59	0.898
	PU2. Using the EBA platform in my classes allowed me to progress at my own pace.	51	3.75	0.868
	PU3. Using the EBA platform in my lessons enhenced the effectiveness of my teaching.	51	3.35	1.055
	PU4.Using the EBA platform in my classes has increased my productivity	51	3.49	1.027
	PU5. Using the EBA platform with my course made it easier for me to communicate with students.	51	3.31	1.140
	PU6. In general, I find the EBA platform useful to support teaching.	51	4.06	0.759
Perceived Ease of Use (PEU)	PEU1. It was easy for me to learn to use the EBA platform.	51	4.22	0.673
	PEU2. I find the EBA platform easy to use.	51	4.25	0.627
	PEU3. I find the interaction on the EBA platform clear and understandable.	51	4.08	0.744
	PEU4. It was easy for me to become skillful in using the EBA platform.	51	4.14	0.722
Perceived Enjoyment (PE)	PE1. I find using the EBA platform enjoyable.	51	3.67	0.952
	PE2. Using the EBA platform is pleasant.	51	3.55	0.966
	PE3. I have fun using the EBA platform.	51	3.53	0.966
Facilitating Conditions (FC)	FC1. I have been provided with the resources necessary to use the EBAplatform by my school.	51	3.33	1.160
	FC2. I have the necessary knowledge to use the EBA platform.	51	4.16	0.703
	FC3. Using the EBA platform is compatible with other technologies I use.	51	3.94	0.645
	FC4. I get help from my school when I face difficulties while using the EBA platform.	51	3.80	0.980
Self-Efficacy (SE)	SE1. I am confident of using the EBA platform even if there is no one around to show me how to do it.	51	4.14	0.664
	SE2. I am confident of using the EBA platform even if I have only the online instructions for reference.	51	3.88	0.887

Table 4.7 (Cont'd)

	SE3. I am confident of using the EBA platform as long as I have just seen someone using it before trying it myself	51	4.12	0.739
	SE4. I am confident of using the EBA platform as long as I have a lot of time to complete the job for which the software is provided	51	4.22	0.610
	SE5. I am confident of using the EBA platform as long as someone shows me how to do it	51	4.41	0.572
Social Influence (SI)	SI1. People whose opinions I value prefer that I should use the EBA platform during the epidemic	51	3.96	0.799
	SI2. My colleagues and peers think that I should use the EBA platform during epidemic.	51	4.20	0.749
	SI3. People who are important to me think that I should use the EBA platform during epidemic during epidemic	51	4.16	0.644
Behavioral Intention (BI)	BI1. Assuming I had access to the EBA platform, I intend to use it	51	4.53	0.578
	BI2. I will use the EBA platform frequently in the future	51	4.25	0.744
	BI3. I would like to participate in educational activities in the EBA platform.	51	3.94	0.925

4.1.3 The Internal Consistencies of the Scale

4.1.3.1 Normality

Table 4.8 demonstrates the tests of normality of the variables. Kolmogorov-Smirnov and Shapiro-Wilk values are presented. Skewness and kurtosis index were analyzed to determine the normality.

Table 4.8 Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PU	.147	51	.007	.962	51	.099
PEU	.223	51	<.001	.898	51	<.001
PE	.166	51	.001	.931	51	.005
FC	.139	51	.016	.949	51	.028
SE	.208	51	<.001	.911	51	.001
SI	.209	51	<.001	.896	51	<.001
BI	.175	51	<.001	.897	51	<.001

a. Lilliefors Significance Correction

“A kurtosis value between ±1.0 is considered excellent for most psychometric purposes, but a value between ±2.0 is in many cases also acceptable, depending on the particular application." (George & Mallery, 2012). As the values of the skewness and kurtosis were examined in table 4.9, data were normally distributed.

Table 4.9 Skewness and Kurtosis Values of Variables

Variables	Skewness		Kurtosis	
		SE		SE
PU	-0.258	0.333	-0.758	0.656
PEU	-0.206	0.333	0.072	0.656
PE	-0.360	0.333	-0.528	0.656
FC	-0.169	0.333	0.066	0.656
SE	-0.244	0.333	0.673	0.656
SI	-0.131	0.333	-0.088	0.656
BI	-0.271	0.333	-1.095	0.656

4.1.3.2 Correlation

Correlation values were analyzed before conducting multiple regression. Table 4.10 demonstrates the correlations between the TAM variables. The values were ranged between .767 and -.023 and acceptable. The assumption of the regression was accepted.

Table 4.10 Correlations of TAM Variables

Correlations

		PU	PEU	PE	FC	SE	SI	BI
PU	Pearson Correlation	1						
PEU	Pearson Correlation	.588**	1					
PE	Pearson Correlation	.767**	.636**	1				
FC	Pearson Correlation	.527**	.504**	.562**	1			
SE	Pearson Correlation	.392**	.572**	.445**	.561**	1		
SI	Pearson Correlation	.381**	.368**	.422**	.185	.385**	1	
BI	Pearson Correlation	.242	.272	.334*	.276	.390**	-.023	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.11 Intercorrelations of the Observed Variables

	Pearson Correlation																										
	PU1	PU2	PU3	PU4	PU5	PU6	PEU1	PEU2	PEU3	PEU4	PE1	PE2	PE3	FC1	FC2	FC3	FC4	SE1	SE2	SE3	SE4	SE5	SI1	SI2	SI3	BI1	BI2	BI3
PU1	1,0																											
PU2	,632**	1,0																										
PU3	,747**	,624**	1,0																									
PU4	,635**	,592**	,852**	1,0																								
PU5	,539**	,588**	,754**	,737**	1,0																							
PU6	,447**	,509**	,623**	,680**	,556**	1,0																						
PEU1	0,2	0,1	,370**	,423**	,458**	,327*	1,0																					
PEU2	,403**	0,3	,466**	,454**	,557**	0,3	,625**	1,0																				
PEU3	,528**	,341*	,525**	,446**	,607**	0,2	,485**	,770**	1,0																			
PEU4	,428**	,376**	,487**	,447**	,554**	,459**	,515**	,672**	,687**	1,0																		
PE1	,608**	,500**	,717**	,641**	,669**	,609**	,427**	,513**	,574**	,621**	1,0																	
PE2	,635**	,576**	,748**	,671**	,640**	,637**	,491**	,458**	,523**	,550**	,921**	1,0																
PE3	,579**	,402**	,637**	,620**	,518**	,584**	,498**	,466**	,469**	,553**	,804**	,861**	1,0															
FC1	,480**	,324*	,572**	,498**	,388**	,386**	0,1	0,2	,363**	,374**	,519**	,529**	,517**	1,0														
FC2	0,3	0,2	,301*	0,3	,336*	0,2	,434**	,678**	,549**	,626**	,348*	,283*	,405**	0,2	1,0													
FC3	0,1	0,2	0,3	0,2	0,2	,334*	,352*	,433**	,343*	,533**	,358**	,342*	,307*	0,2	,682**	1,0												
FC4	0,2	,316*	,358**	,316*	0,2	,365**	0,1	0,0	0,1	0,3	,293*	,348*	,302*	,692**	0,1	,361**	1,0											
SE1	0,3	0,2	,329*	,281*	,444**	0,3	,380**	,394**	,464**	,586**	,295*	,286*	,321*	0,2	,638**	,533**	,319*	1,0										
SE2	0,2	0,2	,281*	0,1	0,3	0,1	,278*	,486**	,439**	,463**	,308*	0,2	,308*	0,1	,704**	,547**	0,2	,708**	1,0									
SE3	0,1	0,1	0,2	0,3	0,2	,451**	,471**	,452**	0,3	,457**	,341*	,328*	,359**	0,2	,618**	,644**	,336*	,496**	,449**	1,0								
SE4	0,3	0,1	0,3	,307*	0,2	0,1	0,3	,324*	0,3	0,2	,298*	0,3	,379**	0,0	,432**	0,2	0,1	,419**	,307*	,342*	1,0							
SE5	0,1	0,3	,318*	,330*	,319*	,404**	0,2	,315*	0,2	0,2	,367**	,343*	,358**	0,1	,383**	,392**	0,1	,428**	,295*	,404**	,600**	1,0						
SI1	,451**	0,2	,444**	,414**	,409**	,432**	,425**	0,3	,409**	,322*	,587**	,599**	,442**	0,3	0,1	0,1	0,2	0,3	0,1	0,2	0,3	0,2	1,0					
SI2	0,2	0,2	0,2	0,2	0,2	,401**	,351*	0,2	0,2	,319*	,318*	,318*	,296*	0,1	0,2	0,1	0,1	0,1	-0,1	,319*	0,1	0,1	,648**	1,0				
SI3	,287*	0,1	0,2	0,2	0,0	0,3	,290*	0,1	0,2	0,2	,283*	0,2	0,2	0,0	0,1	0,1	0,0	0,0	-0,1	0,2	0,2	0,1	,634**	,723**	1,0			
BI1	0,2	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1	0,2	0,3	0,2	0,2	0,2	0,0	0,0	0,0	0,2	0,2	0,0	0,1	0,2	0,0	-0,2	-0,1	1,0		
BI2	0,2	0,2	,342*	0,2	,305*	0,1	0,2	0,2	0,2	0,2	,376**	,358**	,365**	0,2	,304*	,282*	0,1	,414**	,471**	0,2	,361**	,406**	0,2	-0,1	-0,1	,656**	1,0	
BI3	0,0	0,2	0,2	0,1	0,2	-0,1	0,1	0,3	0,2	,282*	,295*	0,2	0,2	0,1	0,2	,362**	0,2	,306*	,381**	0,0	0,1	,311*	0,1	-0,3	-0,1	,583**	,574**	1,0

The intercorrelation values were presented in table 4.11. Katz (2011) indicated that if the values are higher than 0.9 that will lead to a multicollinearity problem. All the values were under 0.9 except one value. Only the correlation between PE1 and PE2 was 0.921. The researcher removed PE2 and repeated the regression. However, the R square value was decreased. The correlation of PE1 and PE2 items is high since they have a close meaning. For these reasons, the researcher decided to keep the item.

4.1.3.3 Mahalonobis and Cook's Distance

Mahalonobis distance value was 20.195 and the value was lower than 22.458 which was controlled from the Chi-Square table. Cook's distance value was .181, the value was lower than 1 (Cook et al., 1985). The Mahalonobis distance value and Cook's distance value were accepted. The essential values are given in Table 4.12.

Table 4.12 Mahalonobis and Cook's Distance

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Mahal. Distance	.584	20.195	5.882	4.098	51
Cook's Distance	.000	.181	.024	.033	51

a. Dependent Variable: BI

4.1.4 Multiple Regression

Hierarchical multiple regressions were conducted to interpret the hypotheses of this study. First regression was attempted to explain H2, H4, H6, H9, H11, and H13. The regression has assessed the influence of PU, PEU, PE, FC, SE, and SI on BI.

As it was shown in Table 4.13, the highest R square value was .252 at Model 6, which means this model explains the 25.2 percent (.252x100) of the total variance. The R Square Change value was .065 that measure explained an additional 6.5 % than Model 5. The model summary table was analyzed and Model 6 was selected.

Table 4.13 First Regression's Model Summary Table

Model Summary[g]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,242[a]	,058	,039	,63043	,058	3,043	1	49	,087
2	,290[b]	,084	,046	,62814	,026	1,358	1	48	,250
3	,345[c]	,119	,063	,62275	,034	1,836	1	47	,182
4	,358[d]	,128	,053	,62605	,010	,506	1	46	,481
5	,432[e]	,187	,097	,61132	,059	3,242	1	45	,078
6	,502[f]	,252	,150	,59284	,065	3,850	1	44	,056

a. Predictors: (Constant), PU
b. Predictors: (Constant), PU, PEU
c. Predictors: (Constant), PU, PEU, PE
d. Predictors: (Constant), PU, PEU, PE, FC
e. Predictors: (Constant), PU, PEU, PE, FC, SE
f. Predictors: (Constant), PU, PEU, PE, FC, SE, SI
g. Dependent Variable: BI

The researcher analyzed the Anova table of the regression. As it was given in Table 4.14, the significance value was .038 which was lower than .05 and significant $F(6,44)=2.475$ ($p<.05$).

Table 4.14 First Regression's Anova Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Total	20,684	50			
6	Regression	5,220	6	,870	2,475	,038[g]
	Residual	15,464	44	,351		
	Total	20,684	50			

a. Dependent Variable: BI

b. Predictors: (Constant), PU, PEU, PE, FC, SE, SI

The researcher finally examined the Coefficients table in Model 6 (Table 4.15). All the variables were calculated for the equation. As it was shown in Sig. column, only one variable was statistically significant. SE value was lower than .05 with .025. other variables which were PU, PEU, PE, FC and SI were higher than .05.

Table 4.15 First Regression's Coefficients Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
6	Constant	3,372	,926		3,640	<,001
	PU	-,015	,169	-,019	-,091	,928
	PEU	-,031	,208	-,029	-,151	,881
	PE	,245	,159	,349	1,540	,131
	FC	-,072	,180	-,072	-,401	,690
	SE	,513	,222	,414	2,314	,025
	SI	-,394	,201	-,299	-1,962	,056

a. Dependent Variable: BI

Second regression was conducted to explain H1, H5, H8, and H12. The regression has assessed the influence of PEU, PE, SE, and SI on PU. The researcher began with the Model Summary table in Table 4.16. Model 4 had the highest R Square value.

This means Model 4 explains the 60.7 percent (607x100) of the total variance. The model summary table was analyzed and Model 4 was selected.

Table 4.16 Second Regression's Model Summary Table

Model Summary[e]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,588[a]	,345	,332	,65806	,345	25,834	1	49	<,001
2	,778[b]	,605	,589	,51638	,260	31,577	1	48	<,001
3	,778[c]	,605	,580	,52184	,000	,000	1	47	,984
4	,779[d]	,607	,573	,52612	,002	,239	1	46	,627

a. Predictors: (Constant), PEU
b. Predictors: (Constant), PEU, PE
c. Predictors: (Constant), PEU, PE, SE
d. Predictors: (Constant), PEU, PE, SE, SI
e. Dependent Variable: PU

The Anova table of the regression was analyzed and presented in Table 4.17. The significance value was <.001 which was lower than .05 and significant F(4,46) =17.769 (p<.05).

Table 4.17 The Second Regression's Anova Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Total	32,406	50			
4	Regression	19,673	4	4,918	17,769	<,001[e]
	Residual	12,733	46	,277		
	Total	32,406	50			

a. Dependent Variable: PU
b. Predictors: (Constant), PEU, PE, SE, SI

The Coefficients table (Table 4.18) was controlled. All the variables entered into the equation. As it was shown in Sig. column, only one variable was statistically significant. PE value was lower than .05 with <.001. Other variables which were PEU, SE, and SI were higher than .05.

Table 4.18 Second Regression's Coefficients Table

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
4	Constant	,322	,795		,405	,687
	PEU	,224	,181	,163	1,238	,222
	PE	,567	,109	,645	5,188	<,001
	SE	-,014	,180	-,009	-,080	,937
	SI	,085	,174	,051	,489	,627

a. Dependent Variable: PU

The researcher conducted the final regression. This regression was attempted to explain H3, H7, and H10. The regression has assessed the influence of PE, SE, and SI on PEU. Table 4.19 demonstrates that the highest R square value was .510 at Model 3, which means this model explains the 51 percent (.510x100) of the total variance. The model summary table was analyzed and Model 3 was selected.

Table 4.19 Third Regression's Model Summary Table

Model Summary[d]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,636[a]	,404	,392	,45708	,404	33,261	1	49	<,001
2	,713[b]	,509	,488	,41949	,104	10,176	1	48	,003
3	,714[c]	,510	,478	,42346	,001	,104	1	47	,749

a. Predictors: (Constant), PE
b. Predictors: (Constant), PE, SE
c. Predictors: (Constant), PE, SE, SI

Table 4.19 (Cont'd)
d. Dependent Variable: PEU

The Anova table of the regression was analyzed. As it was shown in Table 4.20, the significance value was <.001 which was lower than .05 and significant F(3,47)= 16.280 (p<.05).

Table 4.20 Third Regression's ANOVA Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	8,758	3	2,919	16,280	<,001[d]
	Residual	8,428	47	,179		
	Total	17,186	50			

a. Dependent Variable: PEU
b. Predictors: (Constant), PE, SE, SI

Finally, the researcher controlled the Coefficients Table (Table 4.21). There were two variables that the significance value was lower than .05 (p<.05). PE value was <.001 and SE value was .004. The SI variable was higher than .05.

Table 4.21 Third Regression's Coefficients Table

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
3	Constant	1,271	,613		2,074	,044
	PE	,297	,077	,464	3,872	<,001
	SE	,397	,133	,351	2,988	,004
	SI	,045	,140	,037	,322	,749

a. Dependent Variable: PEU

H1: PE will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

Hypothesis 1 was tested in second regression, F(4,46) =17.769 (p<.05). The coefficients table (Table 4.18) showed that the value of Beta= .645, and the significance value was <.001 (p<.05). This result showed that PE has a significant effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H2: PE will have a positive effect on Behavioral Intention toward using EBA for online teaching during the COVID-19 pandemic.

One of the hypotheses tested in the first regression was Hypothesis 2, F(6,44)=2.475 (p<.05). It could be seen from the coefficients table (Table 4.15) that the value of Beta was .349, and the significance value was .131 (p>.05). These findings demonstrate that PE has no significant effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H3: PE will have a positive effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

Third regression, F(3,47)= 16.280 (p<.05), involved three hypotheses and Hypothesis 3 was one of them. The coefficients table (Table 4.21) established that the values of Beta= .464, and the significance value was <,001 (p<.05). This result indicated that PE has a significant effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

H4: FC will have a positive effect on Behavioral Intention toward using EBA for online teaching during the COVID-19 pandemic.

Another hypothesis tested in the first regression was Hypothesis 4, F(6,44)=2.475 (p<.05). It could be seen from the coefficients table (Table 4.15) that the value of Beta was -.072, and the significance value was .690 (p>.05). These findings show that FC has no significant effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H5: SE will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

Hypothesis 5 was tested in second regression, F(4,46) =17.769 (p<.05). The coefficients table (Table 4.18) showed that the value of Beta= -.009, and the significance value was .937 (p>.05). This result showed that SE has no significant effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H6: SE will have a positive effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

One of the hypotheses tested in the first regression was Hypothesis 6, F(6,44)=2.475 (p<.05). It could be seen from the coefficients table (Table 4.15) that the value of Beta was .414, and the significance value was .025 (p<.05). These findings show that SE has a significant effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H7: SE will have a positive effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

Third regression, F(3,47)= 16.280 (p<.05), involved three hypotheses and Hypothesis 7 was one of them. The coefficients table (Table 4.21) established that the values of Beta= .351, and the significance value was .004 (p<.05). This result indicated that SE has a significant effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

H8: SI will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

Hypothesis 8 was tested in second regression, F(4,46) =17.769 (p<.05). The coefficients table (Table 4.18) showed that the value of Beta= .051, and the significance value was .627 (p>.05). This result showed that SI has no significant effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H9: SI will have a positive effect on Behavioral Intention toward using EBA for online teaching during the COVID-19 pandemic.

Hypothesis 9 was tested in the first regression, $F(6,44)=2.475$ ($p<.05$). It could be seen from the coefficients table (Table 4.15) that the value of Beta was -.299, and the significance value was .056 ($p>.05$). These findings show that SI has no significant effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H10: SI will have a positive effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

Third regression, $F(3,47)= 16.280$ ($p<.05$), involved three hypotheses and Hypothesis 10 was one of them. The coefficients table (Table 4.21) established that the values of Beta= .037, and the significance value was .749 ($p>.05$). This result indicated that SI has no significant effect on PEU toward using EBA for online teaching during the COVID-19 pandemic.

H11: PU will have a positive effect on Behavioral Intention toward using EBA for online teaching during the COVID-19 pandemic.

One of the hypotheses tested in the first regression was Hypothesis 11, $F(6,44)=2.475$ ($p<.05$). It could be seen from the coefficients table (Table 4.15) that the value of Beta was -.019, and the significance value was .928 ($p>.05$). These findings show that PU has no significant effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

H12: PEU will have a positive effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

Hypothesis 12 was tested in second regression, $F(4,46) =17.769$ ($p<.05$). The coefficients table (Table 4.18) showed that the value of Beta= .163, and the significance value was .222 ($p>.05$). This result showed that PEU has a significant effect on PU toward using EBA for online teaching during the COVID-19 pandemic.

H13: PEU will have a positive effect on Behavioral Intention toward using EBA for online teaching during the COVID-19 pandemic.

First regression, F(6,44)=2.475 (p<.05), involved six hypotheses and Hypothesis 13 was one of them. The coefficients table (Table 4.15) established that the values of Beta=- .029, and the significance value was <,881 (p>.05). This result indicated that PEU has no significant effect on BI toward using EBA for online teaching during the COVID-19 pandemic.

The status of all hypotheses is provided in Table 4.22 below.

Table 4.22 The Hypotheses Table

Number of the Hypothesis	Status
H1	Accepted
H2	Rejected
H3	Accepted
H4	Rejected
H5	Rejected
H6	Accepted
H7	Accepted
H8	Rejected
H9	Rejected
H10	Rejected
H11	Rejected
H12	Rejected
H13	Rejected

4.1.5 Age, Gender, Branch, and Professional Experience

4.1.5.1 Mann Whitney U Test

The researcher conducted a Mann Whitney U test to assess whether teachers' genders affect their acceptance of EBA for online teaching during the COVID-19 pandemic. Table 4.23 demonstrated the significance values. The values were .794, .703, .767, .143, .561, .557, and .544, all the values were higher than .05 ($p<.05$). In other words, the gender of the teachers had no significant effect on their acceptance of EBA for online teaching during the COVID-19 pandemic.

Table 4.23 The Mann Whitney U Test Statistics

Test Statistics[a]

	PU	PEU	PE	FC	SE	SI	BI
Mann-Whitney U	235,000	230,000	233,500	180,000	221,000	221,000	219,500
Wilcoxon W	326,000	971,000	974,500	921,000	962,000	312,000	960,500
Z	-,260	-,381	-,297	-1,465	-,581	-,587	-,606
Asymp. Sig. (2-tailed)	,794	,703	,767	,143	,561	,557	,544

a. Grouping Variable: Gender

4.1.5.2 Kruskal Wallis Test

The Kruskal Wallis tests were conducted so as to assess the effect of the teachers' age, branch, and professional experience on their acceptance of EBA for online teaching during the COVID-19 pandemic.

The test statistics of the teachers' age is demonstrated in Table 4.24 and the significance values were 0.256, 0.976, 0.498, 0.214, 0.410, 0.229, and 0.987. The values were higher than .05 and were not significant ($p>.05$). Therefore, the age of

the teachers had no significant effect on their acceptance of EBA for online teaching during the COVID-19 pandemic.

Table 4.24 The Test Statistics of Age

Test Statistics[a,b]

	PU	PEU	PE	FC	SE	SI	BI
Kruskal-Wallis H	4,048	,212	2,377	4,486	2,886	4,324	,136
df	3	3	3	3	3	3	3
Asymp. Sig.	,256	,976	,498	,214	,410	,229	,987

a. Kruskal Wallis Test
b. Grouping Variable: Age

Table 4.25 represented the Kruskal Wallis test statistics of teachers' professional experience. The significance values were 0.962, 0.947, 0.465, 0.774, 0.156, 0.531, and 0.874. The values were higher than .05 (p>.05). As a result, the professional experience of the teachers had no significant effect on their acceptance of EBA for online teaching during the COVID-19 pandemic.

Table 4.25 The Test Statistics of Professional Experience

Test Statistics[a,b]

	PU	PEU	PE	FC	SE	SI	BI
Kruskal-Wallis H	,610	,736	3,584	1,792	6,647	3,164	1,385
df	4	4	4	4	4	4	4
Asymp. Sig.	,962	,947	,465	,774	,156	,531	,847

a. Kruskal Wallis Test
b. Grouping Variable: Professional Experience

The final Kruskal Wallis test was conducted to assess the relation between the teachers' branches and the acceptance of EBA for online teaching during the COVID-19 pandemic. Information related with that test is provided in Table 4.26. The significance values were 0.169, 0.023, 0.439, 0.343, 0.307, 0.520, and 0.093.

The values were higher than .05, except that the value of PEU, which was 0.023 ($p<.05$). Consequently, the branch of the teachers had no significant effect on their acceptance of EBA for online teaching during the COVID-19 pandemic. The branch of the teachers had only an effect on PEU.

Table 4.26 The Test Statistics of Branch

Test Statistics[a,b]

	PU	PEU	PE	FC	SE	SI	BI
Kruskal-Wallis H	16,515	23,585	12,086	13,363	13,903	11,102	18,834
df	12	12	12	12	12	12	12
Asymp. Sig.	,169	,023	,439	,343	,307	,520	,093

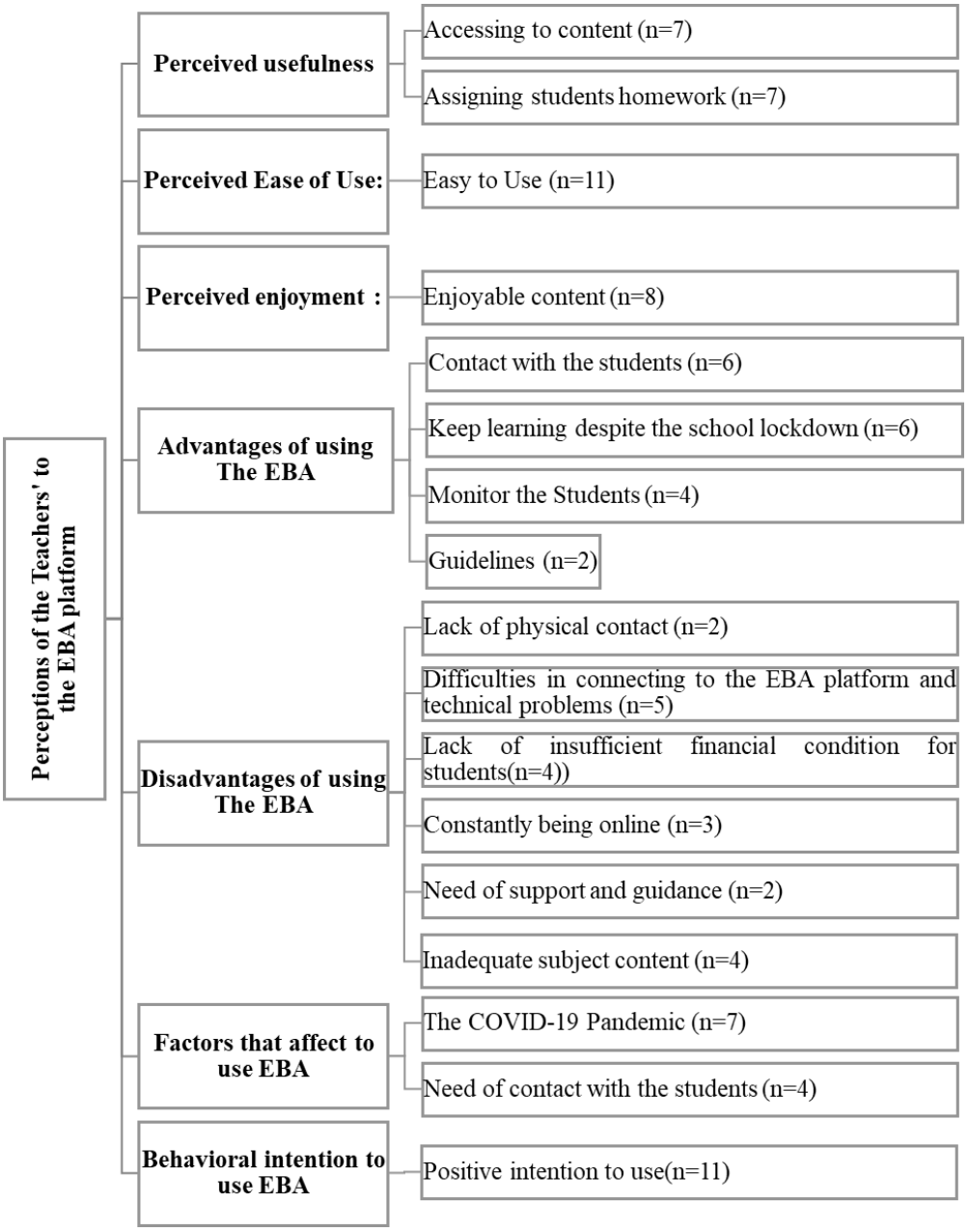
a. Kruskal Wallis Test

b. Grouping Variable: Branch

4.2 The Findings of the Qualitative Phase

The findings of the qualitative phase are presented together with the questions in the interview forms. Teachers' opinions and perceptions are demonstrated under each question. The researcher summarized the answers with the themes. The summary of the qualitative analysis is presented in Table 4.27.

Table 4.27 Summary of the Qualitative Analysis



4.2.1 How did using the EBA platform in your lessons affect your in-class performance?

The interviews found that the majority of the teachers (n= 8) believed that the EBA platform had a good impact on their class performance. The researcher found three codes for perceived usefulness theme: (a) accessing to content, (b) assigning students homework, and (c) inadequate subject content.

Accessing to Content

The EBA platform consists of various e-content such as lecture videos, tests, exams, and e-books. Teachers had been using the EBA platform in their classes before the COVID-19 pandemic. Teachers mentioned the benefits of access to content in the platform (n=7).

One of the teacher stated:

> ...Using the EBA platform for online lessons has benefited me positively in many ways. We were able to find resources, the ones we could not find, from there.
>
> ...Ders içinde EBA platformunu kullanmak birçok yönden olumlu bir şekilde fayda etti. Bazı kaynakları, bulamadığımız kaynakları oradan kullanabildik.

Another teacher said:

> I usually benefit from the images on EBA. I benefit from videos and events. It makes the lesson more fun. Since the lesson becomes more fun, I think it is more effective for students in terms of understanding and attracting attention. Moreover, I teach lesson more easily thanks to the exercises and questions in addition to the activities on EBA. It also saves time instead of dealing with question preparation and so on. I take advantage of the tests, activities, exercises that are available and found there. In this respect, it makes teaching the lesson easier, I think.

EBA’daki görsellerden faydalanıyorum genel olarak. Videolardan, etkinliklerden faydalanıyorum. Bu dersi daha eğlenceli hale getiriyor. Ders daha eğlenceli olduğu için de öğrencilere daha etkili olduğunu düşünüyorum anlaşılması ve dikkat çekmesi açısından. Ayrıca, oradaki etkinliklerin haricinde alıştırmalar ve sorular sayesinde daha kolay işliyorum dersi. Soru hazırlama vesaire ile uğraşmak yerine zamandan da kazandırıyor. Orada hazır olan, bulunan testlerden, etkinliklerden, alıştırmalardan faydalanıyorum. Bu yönden ders işlenişini kolaylaştırdığını düşünüyorum.

Assigning Students Homework

Teachers agreed that the platform is useful for assigning homework to students (n=7). There are many tests, exams, and interactive exercises on the platform. Teachers used these contents in their lessons before and during the pandemic process. They said:

(*)...Homework issue on EBA was very good for me. It had a positive effect in that sense while sending educational videos on EBA...

(**)...Students were a little hesitant to use digital platforms, but facing this situation during the pandemic made them see that the digital world can add a lot to them. Apart from the studies and homeworks we sent, they tried to exercise by themselves. Hence, EBA contributed a lot to our lessons.

(*)...EBA üzerinde ödev konusu benim için çok iyi oldu. EBA'daki eğitici videolar falan gönderirken o manada olumlu etkisi oldu.

(**)...Öğrenciler dijital platformları kullanmakta biraz çekimser davranıyorlardı ama pandemi sürecinde bu durumla yüzyüze kalmaları dijital dünyanın onlara çok fazla şey katabileceğini görmelerini sağladı. Bizim yolladığımız çalışmalar dışında, ödevler dışında kendileri çalışmalar yapmaya çalışıyorlar. O yüzden, EBA’nın çok fazla katkısı var derslerimize.

Inadequate Subject Content

Some of the teachers (n=4) indicated that the platform did not have enough content for their branches. Besides, they emphasized the curriculum of their branches was suitable for face-to-face lessons or physical contact (pre-school). These teachers found the platform insufficient for their branches. One of them said:

> To tell the truth, it did not have much of a positive effect on my course performance since my field is pre-school and we teach better with tactual contact...
>
> Benim alanım okul öncesi olduğu için ders performansına çok fazla olumlu bir etkisi olmadı açıkçası. Biz daha çok dokunsal temasla yaptığımız için her işimizi...

Codes of perceived usefulness are illustrated in Figure 4.1 below.

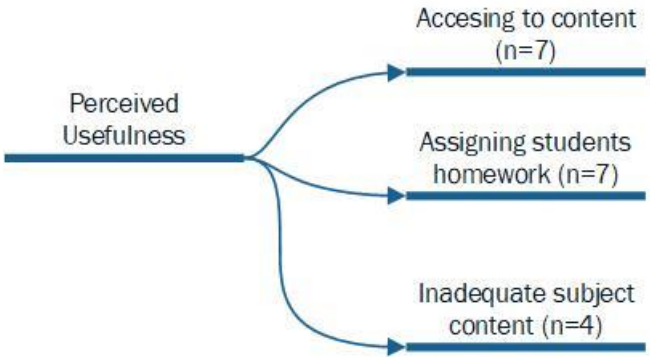


Figure 4.1. The perceived usefulness of EBA

4.2.2 Did you find it difficult to learn to use the EBA platform?

The interviews revealed that all of the teachers (n=11) found the EBA platform's interface simple to use. Hence, the researcher categorized perceived ease of use theme under two codes: easy to use and need of support and guidance.

Easy to Use

Teachers indicated that the navigation of the menus and the interface of the platform were quite clear and comprehensible. Two of the teachers mentioned that they watched the videos teaching how to use the EBA platform. Besides, other two teachers had in-service training about the use of the platform. One of the teachers stated:

> (*)...I found it easier to use. The reason for this is that by watching the videos on EBA, it was already explained what to do step by step. I achieved a very comfortable use by following these steps. It gives the necessary explanatory and eases if the videos on EBA are watched.
>
> (**)...I attended in-service training. Very detailed information was provided in the in-service training. This information was very useful for me.
>
> (*)...Kullanmayı daha kolay başardım. Bunun nedeni de EBA'daki videoları izleyerek neler yapılması gerektiğini adım adım orada zaten belirtmiş. Bu adımlamaları takip ederek çok rahat bir kullanım gerçekleştirmiş oldum. Gerekli açıklayıcılığı, gerekli kolaylığı EBA'daki videolar izlenildiği takdirde veriyor zaten.
>
> (**)...Hizmetiçi eğitime katıldım. Hizmetiçi eğitimde çok ayrıntılı bilgiler vermişlerdi. Onlar benim için çok faydalı oldu.

Need of Support and Guidance

Some of the teachers (n=2) emphasized that school administrators and information technologies teachers provided help for the issues which the teachers had difficulties. One of them said:

> ...Our computer teacher at our school helped me when I had difficulties. Before the pandemic started, that was before we started the second semester last year, we learned things we did not know about EBA. We took the courses required for us...

> ...Zorlandığım noktalarda okulumuzda bulunan bilgisayar öğretmenimiz, yardımcı oldu. Pandemi başlamadan önce yani geçen yıl ikinici döneme girmeden önce, EBA ile ilgili bilmediğimiz şeyleri öğrendik. Bize verilmesi gereken kursları aldık...

Codes of perceived ease of use are provided in Figure 4.2.

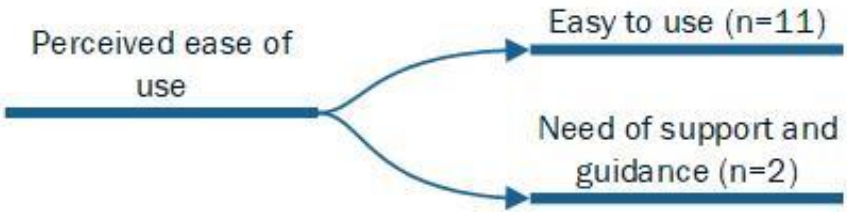


Figure 4.2. The perceived ease of use of EBA

4.2.3 Did you find the EBA platform fun to use?

The analysis of interviews showed that most of the teachers (n=8) found the EBA platform fun to use. The perceived enjoyment theme focused on two codes: enjoyable content and inediquate subject content.

Enjoyable Content

Teachers mostly agreed about the enjoyable content for the EBA platform. The videos, experiments, and interactive exercises were suitable for students' age and the curriculum. Moreover, teachers mentioned positive feedbacks about the enjoyable content from students. The students also considered the platform as enjoyable. One of the teachers said:

> I think it is fun because there are a lot of activities, events, videos, songs appropriate for every grade level, both for myself and for English. When I send homework to my students, I also research to see what is in this content for myself, too. There are some really fun things. We get feedback from children, too such as “Teacher, the assignment you sent was very nice”. There

are also feedbacks saying that “I had a lot of fun while doing it”, “I refreshed my knowledge”. Therefore, I think it is fun.

Eğlenceli olduğunu düşünüyorum çünkü her sınıf seviyesine uygun aktivite, etkinlik, video, şarkı kendi adıma da İngilizce adına da çok fazla şey var ulaşabileceğim. Öğrencilerime ödev yollarken de kendim de araştırıyorum bu içerikte ne var diye. Gerçekten eğlenceli şeyler var. Çocuklardan da dönüt alıyoruz. Öğretmenim yolladığınız ödev çok güzeldi. Yaparken çok eğlendim, bilgilerimi tazeledim şeklinde dönütler de geliyor. O yüzden, eğlenceli olduğunu düşünüyorum.

Inadequate Subject Content

On the other hand, four of the teachers did not find the platform enjoyable. Two of the teachers expressed the lack of content for their branches. One of the teachers said:

Overall it's fun, but having more articles related to my field might make it more fun. It is just that the lack of material limits the fun part a bit.

Genel olarak eğlenceli fakat alanımla ilgili daha fazla makale olması daha eğlenceli kılabilir bunu. Sadece materyalin olmaması birazcık eğlenceli kısmını kısıtlıyor.

Codes of perceived enjoyment can be seen in Figure 4.3.

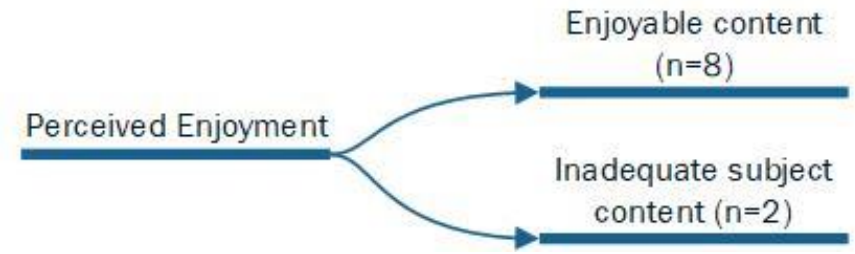


Figure 4.3. Perceived enjoyment of EBA

4.2.4 Were there any factors that would facilitate your utilization during your use of EBA?

Analysis of the interviews emphasized that all the teachers were familiar with the platform before the pandemic process. As a result, teachers did not face difficulties while using the platform. Some of the teachers mentioned that the instructions in the platform were helpful for using the platform. The facilitating conditions theme was focused on two codes: (a) easy to use and (b) the guidelines.

Easy to Use

Teachers (n=11) agreed that the EBA platform was easy to use. This situation facilitated using the platform during the pandemic process. One of the teachers mentioned:

> Obviously, the instructions of the EBA program are very well planned. There are links that can help us when we are lacking in every sense. A user manual was included, too. In that sense, I am sure it helped everyone. I do not see any shortcomings in EBA in that regard. In terms of ease of use, the instructions are very well prepared.
>
> Açıkçası, yönergeleri çok güzel planlanmış EBA programının. Her anlamda eksik kaldığımız yerlerde yardımcı olabileceğimiz linkler falan aktarılmış. Kullanma kılavuzuna kadar konulmuş. O anlamda eminim ki herkese yardımcı olmuştur. O konuda ben bir eksiklik görmüyorum EBA 'da. Kullanım kolaylığı açısından yönergeleri çok güzel yapılmış.

The Guidelines

The interviewed teachers stated that the design of the platform was simple and clear. The guidelines on the platform was helpful for teachers. One of them articulated:

> ...It made it a little easier for us to get answers when we asked a question in the help section of EBA, to guide us, or to have explanations on the home page about how to use some subjects...

... EBA'nın yardım bölümünde soruyu sorduğumuz zaman cevap alabilmemiz, bizi yönlendirmesi ya da bazı noktaların nasıl kullanılacağı ile ilgili giriş sayfasında açıklamaların olması biraz daha kolaylaştırdı...

Codes of facilitating conditions are presented in Figure 4.4.

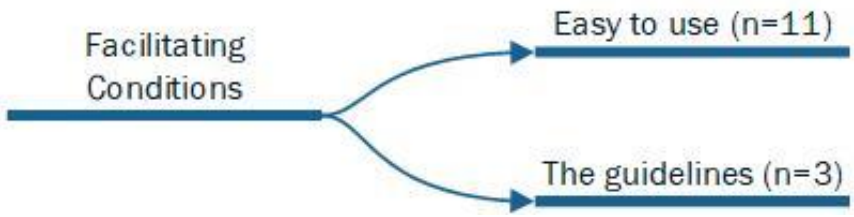


Figure 4.4. Facilitating Conditions of EBA

4.2.5 Do you think there are advantages to using the EBA platform during the pandemic?

The researcher examined the interviews and concluded the advantages of using the EBA theme with three codes: (a) contact with students, (b) keep learning despite the school lockdown, and (c) monitor the students.

Contact with Students

The results of the analysis showed that six of the teachers mentioned the importance of the EBA platform to contact the students. The EBA maintained communication between teachers and students in a formal educational platform. They said:

(*) I said it a while ago. While we cannot reach any student, how would we reach them if this platform did not exist? Were we going to make a five-minute or ten-minute video call with 3-4 people on WhatsApp and teach the lessons in that way?

(**) Of course, it would be difficult to teach online completely without reaching the student in any way. EBA has a great contribution in distance education in terms of not interrupting the dialogue with children and being in

touch. Of course, EBA never served as the substitute of face-to-face education because we had students who could not reach EBA.

(*) Biraz önce de söyledim. Hiçbir öğrenciye ulaşamazken, eğer bu platform olmasaydı, biz nasıl ulaşacaktık? WhatsApp'tan 3-4 kişi beşer dakikalık, onar dakikalık görüntülü görüşme mi yapıp öyle mi ders işleyecektik?

(**) Tabii ki tamamen uzaktan hiçbir şekilde öğrenciye ulaşmadan eğitim vermek zor olacaktı. EBA 'nın büyük katkısı var uzaktan eğitimde çocuklarla diyaloğu kesmemesi açısından, bağlantı halinde olmak açısından. Tabii ki yüz yüze eğitimin yerini hiçbir zaman tutmadı EBA çünkü ulaşamayan öğrencilerimiz de vardı.

Keep Learning Despite the School Lockdown

After the declaration of the COVID-19 pandemic, schools were locked down. The EBA platform was used in order to maintain education. Six of the teachers expressed the importance of the EBA on students learning during the school lockdown peirod. They said:

(*) We did not spend this training period in vain with the help of EBA. If this were not the case in terms of accessibility to students, how else could we deliver education to our children?

(**) Thanks to EBA, we were able to teach our lessons, including a ten-minute break for thirty minutes lesson, very easily.

(*) Bu eğitim sürecini aslında EBA sayesinde boş geçirmemiş olduk. Öğrencilere ulaşılabilirlik açısından eğer böyle olmasaydı, çocuklarımızaa eğitim-öğretimi başka türlü nasıl götürebilirdik ki?

(**) EBA sayesinde bütün sınıflarımızda otuzar dakikalık on dakika teneffüs dahil derslerimizi çok rahatlıkla işleyebildik.

Monitor the Students

Teachers indicated that the EBA platform helped to monitor students' progress during the distance learning process (n=4). The platform has a reports module that demonstrates the students' individual progress for tests, exams, and lessons. Teachers said that:

> (*) I think it is very useful because, thanks to EBA, we can more easily check whether the homework has been done or not. We use WhatsApp, too. However, it is very difficult to follow the homework with WhatsApp. Thanks to EBA, we can see that how many students attended the live lessons, how many students could not attend, who did the homework, who did not do the homework. In this regard, for checking the homework, I think it makes it especially easy to follow during the pandemic process.
>
> (**) Yes, I think so because you can send homework to children there, you can report them. You can see who did or did not do the homework. When we give homework to children from the book, it is very difficult to control it, but it is much easier to control it in a computer environment through a program like EBA.
>
> (*) Çok faydalı olduğunu düşünüyorum çünkü, EBA sayesinde ödevlerin yapılıp yapılmadığını daha kolay kontrol edebiliyoruz. WhatsApp'ı da kullanıyoruz. Ancak, oradan ödevleri takip etmeniz çok zor oluyor. EBA sayesinde canlı dersler de aynı şekilde kaç kişi katılmış, kaç kişi katılamamış ödevleri kim yapmış, hangi öğrenciler yapmış. Bu konuda, ödevlerin takibi konusunda özellikle kolaylık sağladığını düşünüyorum pandemi sürecinde.
>
> (**) Evet, düşünüyorum çünkü çocuklara ordan ödev gönderebiliyorsunuz, raporlayabiliyorsunuz. Kim yapmış yapmamış bakabiliyorsunuz. Çocuklara eğer kitaptan ödev verdiğimiz zaman onu kontrol etmesi çok zor ama yani bilgisayar ortamında EBA gibi bir program üzerinden onu kontrol etmek çok daha kolay.

Codes of advantages of using the EBA are visualized in Figure 4.5.

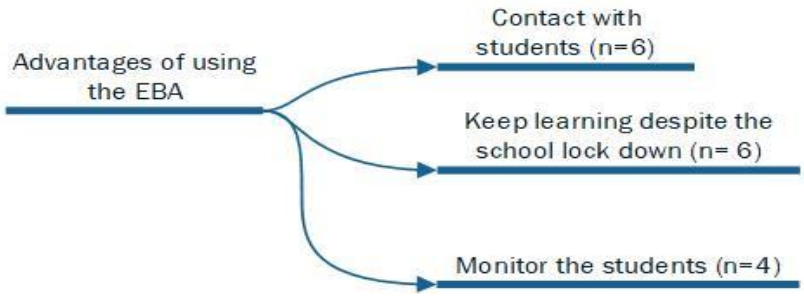


Figure 4.5. Advantages of using the EBA

4.2.6 Do you think there are disadvantages to using the EBA platform during the pandemic?

The interviewed teachers stated five disadvantages; inadequate subject content, constantly being online, lack of insufficient financial conditions for students, difficulties in connecting to the EBA platform and technical problems, and lack of physical contact.

Inadequate Subject Content

The interviews showed that most of the teachers were satisfied with the content in the platform. However, Visual Arts, Physical Education and Sports and Pre-School teachers mentioned inadequate subject content. One of them said:

> I think that the lack of visual materials is a shortcoming. E.g; There is a video about art branches for visual arts. However, there are only a few seconds of introductions. In other words, there are videos with no content. Hence, this is a bad situation for our field. There is not much material.
>
> Görsel materyallerin olmamasının bir eksiklik olduğunu düşünüyorum. Örneğin; görsel sanatlarla ilgili sanat dalları hakkında video var. Fakat, sadece birkaç saniyelik tanıtımlar var. Yani, içeriği boş videolar var. Dolayısıyla da bu bizim alanımızda kötü bir durum. Fazla materyal yok.

Constantly being Online

Some of the interviewees addressed being online constantly (n=3). They said that:

> (*)...In places where there is no internet environment, we cannot use EBA in any case. First of all, you must have internet.

(**) The fact that the student is in front of the internet intensely, pushes the child to take lessons in front of the internet, in front of the screen instead of seeing the child live in the system, of course, is a disadvantage.

> (*)...İnternet ortamının olmadığı yerlerde zaten EBA'yı kullanamıyoruz. Her şeyden önce internet olması gerekiyor...

> (**) Yoğun bir şekilde internet karşısında olması öğrencinin çocuğu sistemde canlı olaraktan görmek yerine sürekli internet karşısında, ekran karşısında ders alma durumuna itiyor olması tabii ki bir dezavantaj olarak karşımıza çıkar.

One of the teachers mentioned the physiologic effects of constantly being online in the home.

> Since we were in a home environment, the problems in our private life, such as having children at home, and the fact that we had to use EBA while taking care of them, interrupted a bit. For reaching children or being efficient. We had some difficulties in this sense, both within ourselves and in terms of being productive for the students. On the other hand, being in front of the computer all the time reduced our productivity. In terms of health, it also tired us a little psychologically. I think there is a problem in this direction. For both students and teachers, too.

> Ev ortamında olduğumuz için birazcık bizim kendi özel hayatımızdaki sorunlar, mesela evde çocukların olması, onlarla ilgilenirken EBA'yı kullanmak zorunda kalmamız biraz sekteye uğrattı. Çocuklara ulaşmakta ya da verimli olmakta. Hem kendi içimizde hem de öğrencilere verimli olmak

konusunda, biraz bu yönde sıkıntı yaşadık. Diğer taraftan, sürekli bilgisayar başında olmak verimimizi düşürdü. Sağlık açısından da bizleri biraz psikolojik olarak da yordu., gerdi. Bu yönde sıkıntı olduğunu düşünüyorum. Hem öğrenciler hem öğretmenler açısından.

Lack of Insufficient Financial Conditions for Students

The interviews demonstrated that some teachers noted lack of insufficient financial conditions for students. They indicated that these students did not have opportunities for using the EBA platform due to the lack of internet or device.

(*)...Our students, who have financial difficulties or cannot access the internet, could not use the EBA platform. Except for EBA TV, they could not use EBA. I think there is a disadvantage in this respect.

(**) While the students with the opportunity benefit from all of the EBA, the students who do not have the opportunity do not log in enough. I think it may have created inequality in this sense.

(*)...Maddi yönden sıkıntı olan ya da internete ulaşamayan öğrencilerimiz EBA platformunu kullanamadı. EBA TV hariç EBA'yı kullanamadılar. Bu yönde bir dezavantaj olduğunu düşünüyorum.

(**)...İmkanı olan öğrenciler EBA 'nın tamamından faydalanırken, imkanı olmayan öğrencilerin yeterince girmemesi. Bence bu anlamda bir eşitsizlik yaratmış olabilir.

Difficulties in Connecting to the EBA platform and Technical Problems

Teachers emphasized the difficulties and connection problems with the EBA platform (n=5). They indicated that the platform could not handle the load of the traffic and connection problems occured.

(*) I think there is some problem with the infrastructure. At first, when the load was too much, the users were logged out of the EBA system. I think the platform couldn't handle the load of the traffic in the first stages. The

infrastructure improved afterwards, but it had serious problems at first, I think. When I talked to my colleagues, I saw a lot of colleagues with the same problem. We sometimes still experience this with students, I think. While lecturing, a student suddenly is logged out of the class. Student states that EBA did it.

(**) Connection issues and technical issues. About the homework issueI just mentioned, I sometimes got feedback from the students that they did not seem to complete their homework even though they had done it. I think that there are technical problems in this matter or the number of students attending the lesson does not appear despite the fact that the students attended the live lesson.

(***)...They make arrangements in hours, but only for class hours. When there is congestion, the connection is lost, you cannot log in to the platform. We are experiencing difficulties in that sense.

(*) Biraz altyapısında bir sıkıntı olduğunu düşünüyorum. İlk başlarda çok fazla yük bindiği zaman EBA programı sistemden atmalar yaşandı. O yoğunluğu ilk aşamalarda kaldıramadı bence. Daha sonra o altyapı düzeldi ama ilk başlarda ciddi anlamda sıkıntı yaşadığını düşünüyorum. Diğer öğretmen arkadaşlarımla da konuştuğum zaman aynı sorunu yaşayan çok fazla arkadaş gördüm. Bazen hala yaşıyoruz bence öğrencilerle de bunu. Ders anlatırken birden öğrenci dersten düşüyor. EBA'nın attığını söylüyor.

(**) Bağlantı sorunları ve teknik sorunlar. Az önceki bahsettiğim ödev konusunda bazen öğrencilerden ödevleri yaptığımız halde tamamlandı gözükmüyor gibi geri dönüşler aldım. Bu konuda ya da öğrenciler canlı derse katılmış olmasına rağmen orada sayısının gözükmemesi vesaire bu tarz teknik aksaklıklar olduğunu düşünüyorum.

(***)...Saatlerde düzenleme yapıyorlar ama ders saatlerinde. Yığılma olduğunda bağlantı kopuyor, giremiyorsunuz. O anlamda sıkıntılar yaşıyoruz...

Lack of Physical Contact

Two of the teachers pointed out a lack of physical connection which is the nature of their branches. The Pre-school teacher especially mentioned the need for contacting to her students.

> I am a preschool teacher. Since we teach with 5-year-olds and above, we usually use tactile contact a lot. Unfortunately, using EBA in distance education caused us some problems because we did not touch them.
>
> Ben okul öncesi öğretmeniyim. 5 yaş ve üzerilerle beraber ders yaptığımız için, biz genellikle dokunsal teması çok kullanıyoruz. Maalesef, uzaktan eğitimde EBA'yı kullanmak, onlara dokunmadığımız için bazı yönlerden sıkıntılar yarattı bize.

Moreover, Physical Education and Sports teacher stressed the low attendance of the students to online classes on the platform. Even if students attended online lessons, they did not participate in lessons as they participated on face to face education. Furthermore, some students did not want to open their camera or microfon in lessons. Hence, the teacher could not be able to monitor the students whether they were doing the exercise or not.

> The disadvantage, as I said, is related to my course. Since it is not face-to-face with the student, I cannot interfere too much in distance education. You show the move to the student, but s/he does not understand like face-to-face education. For example, we will show an exercise move. I say you will do it like this friends. When you show it in normal face-to-face education, the visual memory of the child, still a problem for some, was here more because the students cannot focus. For instance, a few of them turn off their cameras or mute their voices. Then, they say "there is no sound" teacher. This was its

disadvantage, along with such difficulties, but when we lined up the students in face-to-face education, instead of dealing with the environment, they were concentrating on one point and listening. At the moment, I sometimes ask the student whose vision is blocked, for example, Ceren, do you understand? There is no reply from Ceren. Enis, do you understand? There is no reply from Enis. After 2 minutes, they say that I was having breakfast. I went to drink water teacher. This was a disadvantage for us during the pandemic period. Apart from that, class participation was very low.

Dezavantajı dediğim gibi benim dersimle ilgili. Öğrenciyle görsel olarak yüz yüze olmadığı için, uzaktan eğitimde çok fazla müdahale edemiyorum. Öğrenciye gösteriyorsun ama yüz yüzede olduğu gibi anlamıyor. Mesela, bir egzersiz hareketi göstereceğiz. Arkadaşlar bunu şöyle yapacaksınız diyorum. Normal yüz yüze eğitimde gösterdiğin zaman çocuğun görsel hafızası, bazılarında yine sıkıntı oluyordu ama, burada daha fazla çünkü öğrenciler kendilerini veremiyor. Mesela, bir şey anlatırken birkaç tanesi kamerasını kapatıyor, sesini kapatıyor. Ses gelmiyor hocam diyor. Bu tür sıkıntılarla beraber dezavantajı buydu ama yüz yüze eğitimde öğrencileri sıraya dizdiğimiz zaman ister istemez sağ solla ilgilenmek yerine dikkatini tek noktaya topluyordu ve dinliyordu. Şu anda Bazen görüntüsü kapanan öğrencide, mesela Ceren anladın mı diyorum, Ceren'den ses yok. Enis anladın mı, Enis'ten ses yok. 2 dakika sonra geliyor. Hocam ben kahvaltı yapıyordum diyor. Hocam ben su içmeye gittim. Dezavantajı bu oldu bizde pandemi döneminde. Onun dışında, derse katılım çok az.

Codes related with the disadvantages of using the EBA are demonstrated in Figure 4.6.

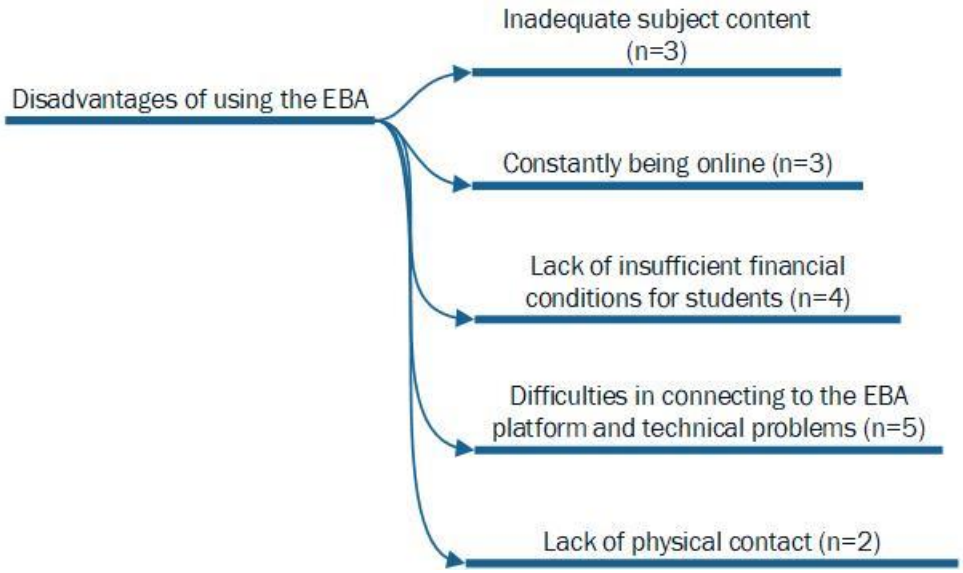


Figure 4.6. Disadvantages of using the EBA

4.2.7 What kind of factors do you think to affect your use of the EBA platform during the pandemic?

The results of the interviews showed that the majority of the teachers emphasized the COVID-19 pandemic as a factor that affected their use of the EBA platform (n=7). Teachers agreed that the platform was a need in this pandemic process in order to contact the students. Two codes were discovered for factors that affect to use the EBA theme: the COVID-19 Pandemic and the need of contact with the students.

The COVID-19 Pandemic

The lockdown of the schools has led teachers and students to distance education. Distance education, on the other hand, created a need for a platform for the continuation of education. The interviewed teachers emphasized the importance of the platform in the pandemic process.

> (*) For sure, the need for education and training. Reaching children. I think these are. Not being able to go to school during this pandemic was the biggest shortcoming, of course.

(**) The pandemic made me use EBA. I had not used EBA before the pandemic. I used EBA and other platforms to reach my students during the pandemic. I continue to use it.

(***) Having a pandemic, having an epidemic. It appeared as a necessity, and the best online platform was EBA, the platform of the Ministry of National Education, in this case, and we had to use it.

(*) Tabii ki eğitim-öğretim ihtiyacı. Çocuklara ulaşabilmek. Bunlar olduğunu düşünüyorum. Bu salgın sürecinde okula gidememek tabii ki en büyük eksiklik oldu.

(**) Pandemi EBA'yı kullanmamı sağladı. Ben pandemiden önce EBA'yı kullanmamıştım. Pandemi ile birlikte öğrencilerime ulaşmak için EBA 'yı ve diğer platformları kullandım. Kullanmaya devam ediyorum.

(***) Pandeminin olması, salgının olması. Bir ihtiyaç olarak karşımıza çıktı ve bu durumda da en iyi çevrimiçi platform Milli Eğiitim Bakanlığı'nın platformu olarak EBA karşımıza çıktı ve bunu kullanmamız gerekti.

The Need of Contact with the Students

There was no need for students to register on the EBA platform because all students were already included in the system. Therefore, teachers were able to reach all students directly through the system, share information or send messages without having students' information such as phone numbers. The interviews indicated that the platform provided the connection between students and teachers.

(*) The absence of face-to-face education, of course, and the fact that it is not open in all classes enabled us to deliver some content, how can I say, to children through EBA. It was actually an obligation. Since there are no programs used by all children and their parents like WhatsApp, I think that it was easier to reach them from EBA at least because all of them were registered on this platform.

(**) I can reach students more easily. So that's it. We cover the topics in live lessons, but I send them via WhatsApp to let them write in their notebooks, but when I send them through EBA, the homework reaches everyone. It may not reach some students who do not have WhatsApp, but when I send it via EBA, I think that all students can reach it more easily because they are registered on EBA.

(*) Burada tabii yüz yüze eğitimin olmaması, tüm sınıflarda açık olmaması bizi EBA üzerinden bazı içerikleri, nasıl diyelim, çocuklara ulaştırmamızı sağladı. Bu mecburiyetti aslında. Tüm çocuklarda, tüm velilerde WhatsApp gibi kullanılan programlar olmadığı için en azından bu platform üzerinden hepsinin kaydı olduğu için oradan kendilerine ulaşmak daha kolay oldu diye düşünüyorum.

(**) Öğrencilere daha kolay ulaşabiliyorum. Yani şöyle. Canlı derslerde konuları işliyoruz ama defterlerine yazması için WhatsApp'tan gönderiyorum ama EBA 'dan gönderdiğimde ödevi bütün herkese ulaşmış oluyor. Elinde WhatsApp'ı olan olmayan bazılarına ulaşamayabilir ama bunun üzerinden gönderdiğimde, bütün öğrencilerin EBA 'da kaydı oldu için daha kolay ulaştığını düşünüyorum.

Codes related with the factors that affect to use the EBA is provided in Figure 4.7.

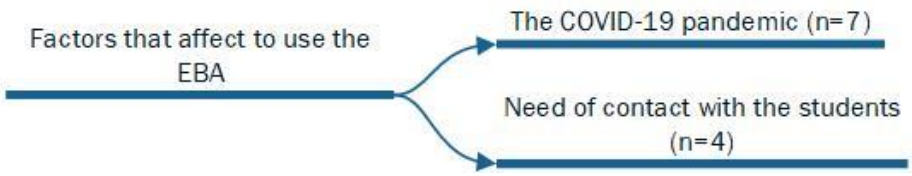


Figure 4.7. Factors that affect to use the EBA

4.2.8 What do you think about continuing to use the EBA platform after the pandemic?

All the interviewed teachers agreed on continuing to use the platform after the pandemic(n=11). One of the teachers stated that the platform is a base of safe content for teachers. The majority of the teachers mentioned that they would use the platform to reinforce the subjects with homework and activities.

Positive Intention to Use

> (*) I think that it will be beneficial to use it in terms of reinforcing the topics lectured and covered, assigning homework after the pandemic, or in the form of preliminary preparation.
>
> (**) We should use EBA as an assistant tool in a 40-minute period at schools or in lessons where we have more lesson hours. I think that we should use EBA as an extra resource, while sharing homework or when the extras in our lessons are not enough.
>
> (***) It is for sure that when the education returns to normal and face to face, other things can be done to support students with homework and activities through EBA.
>
> (*) Pandemi sonrasında da derslerde yapılan, işlenen konuları pekiştirme açısından ödevlendirme açısından kullanımının yararlı olacağını düşünüyorum ya da ön hazırlık şeklinde.
>
> (**)...okullardaki o 40 dakikalık sürede ya da ders saatimizin daha fazla olduğu derslerde de EBA 'yı yardımcı bir araç olarak kullanmalıyız. Ödev paylaşım olsun ya da derslerimizde ki ekstra yetmediği, yetişmediği sürelerde EBA 'yı ekstra kaynak olarak kullanmamız gerektiğini düşünüyorum.
>
> (***) Elbette ki eğitim normale, yüz yüzeye döndüğü zaman da oradan ödev ve etkinlik öğrencilere destek amaçlı başka şeyler de yapılabilir.

4.3 Summary

This chapter consisted of the analysis results of quantitative and qualitative data. Demographics and descriptive statistics were analyzed. The assumptions of the multiple regression were implemented and multiple regression was conducted. The researcher examined the regression tables and determined whether the hypothesis was accepted or rejected.

The result showed that H1, H3, H6, and H7 were accepted, the other hypotheses were rejected. Results demonstrated that PE had positive affect on PU and PEU. Besides, SE had positive affect on PEU and BI.

The researcher conducted the Mann Whitney U test and Kruskal Wallis test to examine the effect of gender, age, branch, and professional experience on the TAM variables. The results revealed that there were no significant effects of age, gender, and professional experience on teachers' acceptance of the EBA platform for online teaching during the COVID-19 pandemic. Moreover, teachers' branches had no significant effect on teachers' acceptance of the EBA platform for online teaching during the COVID-19 pandemic, However, the branches had a significant effect on PEU.

CHAPTER 5

DISCUSSION AND CONCLUSION

This chapter explains the results of the study interpreted with the literature. Implications and suggestions for future studies are mentioned under the relevant sections.

5.1 Summary

The study aimed to examine the factors affecting teachers' use of EBA during the COVID-19 pandemic process based on the Technology Acceptance Model (TAM). A questionnaire was used to assess the technology acceptance of the teachers. 51 teachers participated in the questionnaire. The quantitative part of the study was examined with the SPSS program and multiple regression was conducted. Preliminary analysis was implemented so as to conduct the multiple regression. The normality, multicollinearity, Mahalonobis's and Cook's distances were controlled to examine the preliminary analysis assumptions. After checking the assumptions, three multiple regressions were conducted.

The qualitative data were gathered with the help of the interviews. The interviews were conducted via online meetings, on the Zoom platform, due to COVID- 19 pandemic. The interviews were performed with 11 participants from different branches. The qualitative data were analyzed based on Cresswell's framework.

5.2 Discussion

The findings related to teachers' technology acceptance are discussed under this section. The results are interpreted considering the teachers' point of view.

5.2.1 What is the relationship among teachers' perceived usefulness, perceived ease of use, perceived enjoyment, facilitating conditions, self-efficacy, social influence, and behavioral intentions toward using EBA for online teaching during the COVID-19 pandemic?

The researcher examined this question with 13 hypotheses. Four of the hypotheses were accepted and nine of the hypotheses were rejected. The variables and the effects of the variables are clarified below.

Perceived Enjoyment (PE)

The results showed that PE had a significant and positive effect on PU and PEOU. Teo et al. (1999) stated the positive correlation between perceived enjoyment and technology use. Besides, Tokel and Isler (2015) mentioned in their study that PE was a predictor of PEU and PU. When the results of the interviews were examined, it was seen that the majority of the teachers found this platform enjoyable in terms of content and use. This perception of the teachers had positively affected the PU and PEU.

On the other hand, the results of the study showed that PE had no significant effect on BI. Sun and Zang (2008) studied TAM and their study demonstrated that PE had no significant effect on BI. The researchers found this situation interesting.

Facilitating Conditions (FC)

The study investigated the effect of FC on teachers' behavioral intention (BI) toward using EBA for online teaching during the COVID-19 pandemic. Analysis of the data showed that FC had no significant effect on BI.

Lee et. al (2003), examined many TAM studies and made inferences related with these studies. Their study showed that FC had no significant effect on PU and PEU. Therefore, the researcher did not analyze the effect of FC on PU or PEU.

Venkatesh et al. (2008) analyzed the competing roles of behavioral intention, facilitating conditions, and behavioral expectation. The results demonstrated that FC had no significant effect on use in this context,. The researchers presented the FC and BI as a predictor of behavioral expectation. BI and FC could be used as a predictor in another context.

The answers of the interviews stressed that teachers had already used this platform before the pandemic. This situation could influence the effect of facilitating conditions on BI. As a result, it was not difficult to use for most of the teachers. Hence, they did not require assistance. We could explain our finding considering that they had to use it in an unplanned way because of the pandemic.

Self-Efficacy (SE)

The multiple regressions indicated that SE had a significant and positive effect on BI and PEU toward using EBA for online teaching during the COVID-19 pandemic. On the other hand, SE had no significant effect on PU.

Jatmikowati et al. (2020) researched the students' behavioral intention to use e-learning with the variables of the Technology Acceptance Model during the pandemic. Their study suggested that SE had no effect on BI, too.

Social Influence (SI)

The regression analysis indicated that SI had no significant effect on PU, PEU, and BI toward using EBA for online teaching during the COVID-19 pandemic.

When the results of the study of Jatmikowati et al. (2020) were analyzed, they claimed that SI had no significant effect on students BI and PU to use e-learning. They mentioned that the SE variable was a more determining factor than SI on PU.

Perceived Usefulness (PU)

Venkatesh and Davis (2000) declared that PU was a significant factor in TAM. However, the findings of the study showed that PU had no significant effect on teachers' Behavioral Intention (BI) toward using EBA for online teaching during the COVID-19 pandemic.

Turan (2011) examined the elementary school teachers' technology acceptance. The study showed that PU had no significant effect on BI.

As it was mentioned in chapter two, PU was defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989). Teachers were obliged to use this platform. They had no choice. Thus, the obligation of using the EBA platform for distance education might have influenced PU and the effect of PU on BI.

Perceived Ease of Use (PEU)

The results of the study demonstrated that PEU had no significant effect on PU and BI. PEU had a significant effect on BI for many studies in the literature. However, the study of Sun and Zang (2008) showed that PEU had no significant effect on BI.

Moreover, Lee and Letho (2013) investigated the user acceptance of YouTube for procedural learning. Their results suggested that PEU had no significant effect on PU and BI. Besides, the study of Turan (2011) demonstrated that PEU had no significant effect on elementary school teachers' BI.

Kamel and Hassan (2003) claimed that the TAM was appropriate in explaining the attitudes and usage intention of users during the early stage of adoption but it failed to consider contextual influences such as culture and accessibility. Therefore, the fact that some teachers had used the EBA platform before the pandemic may have reduced the effects of the ease of use on perceived usefulness.

People perceiving a system as easy to use would assume that the system is simple, and if the level of PEU is high, that would increase the acceptance and usage.

Although most of the users found the system easy to use in the interviews, the difficulties experienced by those who met the platform for the first time and the lack of support may have negatively affected their intention to use it.

5.2.2 Do teachers' age, gender, branch, and professional experience affect their acceptance of EBA for online teaching during the COVID-19 pandemic?

The analysis of the study demonstrated that the ages, gender, branches, and professional experience of the participants had no effect on their acceptance of EBA for online teaching during the COVID-19 pandemic. However, the branch of the teacher affected the PEU variable.

Solak (2012) analyzed the teachers' attitude towards smartboards and he claimed that gender, profession, and institution had no significant effect on PU, PEU, SN, and IU. Nevertheless, age and professional experience had an effect on PEU.

Wang et al. (2008) studied gender and age differences for the acceptance of mobile learning. Their study showed that age and gender had no difference at performance expectancy and perceived playfulness on BI.

5.3 Conclusion

Teachers indicated in the interviews that EBA platform was very helpful so as to reach students during the pandemic while there was no chance for face-to-face education. Even some teachers stated that they did not know how to reach their students if there were no EBA. EBA platform ensured the continuation of education without interruption when face-to-face education was not possible. Teachers usually expressed that the platform was easy to use and the system had help videos that would enhance the usage for teachers. They emphasized that they used directive help videos when they faced with diffuculties while adding and lecturing live lessons.

Teachers mentioned that they frequently used the beneficial features of EBA while assigning homework and checking whether the assigned homework was completed or not. The most important reason for using the platform was the pandemic according to the teachers. They emphasized that the EBA platform was a need during the pandemic process.

Seven variables of the Technology Acceptance Model were examined throughout this study. Contrary to expectations, many hypotheses were rejected. PE and SE factors were interpreted as significant for this study. Teachers' PE had effect on PU and PEU, and SE had effect on PEU and BI. However, other veraibles were not prominent. When the interviews with the teachers and the results were interpreted, the reasons for rejecting the hypotheses may be related with the following conditions.

Lack of In-service Training

One of the main components of the Fatih project was the in-service training of teachers (MEB, n.d.). When the study of Akça (2021) was examined, it was seen that only 63% of the teachers received in-service training. However, it was not known how much benefit those who received in-service training gained. Aztekin (2020) stated that the EBA awareness level of teachers receiving in-service technology training was higher than those who did not. Kuloğlu (2018) emphasized that the number of in-service training recipients was low. The teachers mentioned that in-service training was not efficient because it was given remotely. Öçal and Şimşek (2017) mentioned that the short duration of in-service training and the limited opportunity to practice reduced the effectiveness of training, too.

As mentioned in the interviews, teachers generally found the platform easy to use, and they received help from the school computer teacher and administrators when they faced with difficulties. A few teachers said that they had learned the EBA platform by taking in-service training before the pandemic. The interviews showed that the teachers, who did not receive this service before the pandemic, demanded help while using the platform during distance education. Teachers generally used the platform without any in-service training. However, studies showed that they could

not use every module in the platform, because they did not know how to use it (Akça, 2021; Kuloğlu, 2018). Teachers were required to know how to use all the modules in the platform properly. This situation may have affected the PU, PEU, FC, and BI of the teachers. Practical and effective in-service training would be required in order to use the platform effectively and efficiently.

Lack of Distance Education Skills

The World Bank published a report about distance learning during the COVID-19 pandemic in 2021. The report emphasized the needs of the teachers for distance education. Teachers needed to have various facilities such as digital literacy, preparing lessons, and content for distance education. Moreover, teachers were required to learn new skills for managing time usage and content depending on progress, and providing support for distance learning (Munoz-Najar et al., 2021). The report indicated the South Korea case as an example of rapidly digitalized education. However, teachers had problems with online lessons and providing content to their students. These problems occurred from the lack of distance education skills of the teachers since the teachers did not have a chance to practice distance education before the pandemic.

After the announcement of the COVID-19 pandemic in March, 2020, the EBA platform and EBA TV were used during the pandemic in Turkey. Teachers in our country had no experience with online teaching. When the interviews were analyzed, some of the teachers mentioned the difficulties of using the EBA platform and needed help from administrators and information technologies teachers. Lack of distance education skills of the teachers was similar to the South Korea example in this case. Teachers in Turkey were not prepared for distance education as in other countries of the world before the pandemic. Hence, their skills in preparing and using materials suitable for distance education, lecturing or supporting their students might not be sufficient. All these situations may have affected the PU, PEU, SI, and BI of the teachers.

Inadequate Subject Content

Interviews revealed that few teachers stressed the inadequate subject content. Especially, visual arts and psychical education teachers emphasized the lack of insufficient content related with their fields. When the studies with the EBA platform were examined, researchers agreed on inadequate subject content. Güneş (2021) stated that the contents were insufficient in her study for visual arts teachers. The researcher indicated that this condition limited teachers' use of the platform. Erman (2021) emphasized in his study that history teachers found the content superficial and that it should be enriched. He also stated that the variety of visual media and videos should be increased. Türker and Dündar (2020) conducted a study with high school teachers. Results showed that high school teachers found the content insufficient. They stated that distance education cannot be carried out efficiently with students. The reason behind this was the lack of sufficient content in every grade level, branch and subject. Keskin Yorgancı (2019) stated that secondary school mathematics teachers found the content insufficient. The teachers emphasized that the content should be developed.

This obstacle was mentioned by some branch teachers in the interviews. These teachers expressed that this situation limited the use of EBA for them. As seen in the studies mentioned above, insufficient content was a problem of EBA that had been emphasized in previous studies. Therefore, the contents in EBA should be enriched for every branch and revised in accordance with distance education.

Inadequate subject content was addressed in the answers to the first and third questions. These questions were about PU and PEU. The fact that teachers could not find suitable content for distance education within the EBA platform may have affected their use of EBA. This may have affected teachers' finding the platform useful and entertaining, and ultimately their behavioral intention.

Connection Problems with Platform

Güneş (2021) emphasized that teachers experienced connection problems while using EBA. Apart from this, teachers stated that there was a lack of infrastructure and equipment. Because of these problems, teachers found EBA live lessons inefficient. In another study, teachers stated that internet connection problems during live lessons affected live lessons and disrupted the flow of the lesson. Moreover, they emphasized that the systemic problems occured while using the EBA were time consuming (Balcı, 2021). Erman (2021) indicated that technological infrastructure should be improved because of these problems.

When the interviews were analyzed, it was observed that teachers and students had too many connection problems on the EBA platform at the beginning of distance education. Teachers pointed out that they often lost connections during live lessons, or that the system forced teachers and students to sign out while they were in live lessons. The internet and systemic problems experienced during live lessons affected the course flow and the effectiveness of the courses. This situation may have affected the motivation of teachers and students. This may have affected PU, PEU, FC, SI and BI implicitly.

Lack of Communication

In distance education, situations such as not making eye contact and teachers' constantly monitoring the students made it difficult for students to have a high level of participation in the lessons (Gürer et al., 2016). Başaran (2020) observed that there were limitations in communication between teacher and student. It was mentioned that distance education created an abstract environment, a common problem in the views of teachers and students, and there was no strong communication as in face-to-face education.

Physical education and sports teachers, as well as pre-school teachers, stated that they would not be able to make physical contact with the students. Distance education was not appropriate according to the pre-school instructor because her students were 5 years old and her lectures were tactile. The physical education and sports teacher underlined that in face-to-face teaching, the motions he demonstrated

during the lessons were better understood. Teachers' acceptance of the EBA platform may have been weakened as a result of this experience.

Presence of Students' in Live Lessons

Examining the recent studies, it could be commented that the presence of the students was problematic. Balcı (2021) mentioned that teachers emphasized the low participation in live lessons. Some of the students did not attend live classes, others did not participate in the lessons actively. Students turned off their microphones and did not answer to teachers. The same problem was mentioned in Bayar's study (2021).

The EBA platform helped teachers add live lessons and follow their curriculum similar to school environment. However, the interviews demonstrated that the presence of students in live lessons was controversial. The situation mentioned in the above studies repeated itself in the interviews, too. A teacher mentioned in the interviews that he could not get answers when he asked questions because students turned off their cameras and microphones even though they were online. The reason for this was that the student went to eat something or dealt with other things instead of listening to the lesson in front of the device. This may have affected teachers' motivation and acceptance of the platform.

Burnout Problems

A report published by the World Bank indicated that 83% of teachers in Brazil did not feel ready for distance education, 67% were concerned and 38% feel exhausted (Barron et al., 2021, p.40). The report highlighted the teachers' burnout problems for distance education during COVID-19 pandemic. Similarly, our interviews revealed that instructors' physical and psychological health were impacted by their continual use of computers and lecturing for distant education during the pandemic period. Being unprepared to adapt to online education could create issues with the adoption of online platforms. We might assume that this situation impacted instructors' acceptance of technology.

Bayar (2021) studied teachers' burnout problems during the pandemic process. Teachers stated that the indefinite working hours in online education were tiring and their workload increased. They emphasized that this situation risked their both psychological and physical health. The results of the study showed that especially female teachers have more responsibilities than male teachers due to their gender roles.

Synchronous distance education, by its nature, required being online all the time. This might have affected the motivation of teachers and students. Teachers mentioned in their interviews that being online all the time was a difficult situation for both teachers and students. One of the teachers stated that this was tiring in terms of health and psychology. This situation may have affected teachers' acceptance of the EBA platform.

Apart from that, as mentioned in the fourth chapter, teachers could not separate their private and working lives while working at home. Having their children at home and continuing distance education made it difficult for them to focus on distance education.

When the literature and the interviews are interpreted, it could be stated that teachers had difficulty in separating distance education and private lives. This situation made teachers tired psychologically and physically and affected their acceptance of technology.

5.4 Implications for Future Studies

The implications for future studies are listed below:

- This study was implemented in only one secondary school. Future studies could be conducted with more schools.
- The sample size of the study was 51. The sample size could be increased.

- The study was conducted in the pandemic process. Due to the COVID-19 pandemic and limited time, a pilot study was not conducted. If a pilot study had been carried out, the correlation between the two questions could have been noticed and closely related questions could have been changed. Therefore, a pilot study could be conducted before implementing the study.

- The study did not give information about teachers' computer literacy. A questionnaire could be implemented before the study about teachers' computer literacy.

The suggestions for future studies are listed below:

- Comprehensive in-service training should be provided to teachers. In these trainings, starting from the basics such as computer technologies, web 2.0 tools, and the use of EBA, tools that can be used in both distance education and face-to-face education should be taught.

- In-service training such as the basis of distance education, its requirements, preparing and using content for distance education should be given. These in-service trainings should be planned and implemented with the help of academicians.

- The burnout experienced by teachers in distance education during the pandemic process should be investigated.

- Infrastructure and system problems of EBA should be improved.

- Teachers' perceptions about other educational platforms should be investigated so that the deficiencies in EBA could be eliminated.

- Considering that students are familiar with mobile games in our age, educational games might be created and integrated into EBA.

- Live classroom environments might be created with using Metaverse technology on EBA in order to increase teacher-student communication.

REFERENCES

Agarwal, R., & Prasad, J. (1999). Are Individual Differences Germane to the Acceptance of New Information Technologies? *Decision Sciences, 30*(2), 361-391.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.

Akça, T. (2021). Aydın İl Merkezinde Görev Yapan Beden Eğitimi Öğretmenlerinin Eğitim Bilişim Ağı Kullanım Alışkanlıklarının Belirlenmesi (Master's thesis, Aydın Adnan Menderes Üniversitesi Sağlık Bilimleri Enstitüsü).

Aksoy, N. (2017). EBA (eğitim bilişim ağı)nın kullanım amacı, karşılaşılan sorunlar ve çözüm önerileri (Master's thesis, Sosyal Bilimler Enstitüsü).

Al-Emran, M. (2021). Proceedings of International Conference on Emerging Technologies and Intelligent Systems: ICETIS 2021 (Volume 1) (Vol. 1). Springer Nature.

Al-Emran, M., & Shaalan, K. (2021). Recent Advances in Technology Acceptance Models and Theories. Springer International Publishing.

Alexander, M. W., Truell, A. D., & Zhao, J. J. (2012). Expected advantages and disadvantages of online learning: Perceptions from college students who have not taken online courses. Issues in Information Systems, 13(2), 193-200.

Arslan, E. (2019). Ortaokul Öğretmenlerinin ve Öğrencilerinin Eğitim Bilişim Ağı (EBA) Platformu Hakkındaki Görüşleri: Hatay İli Örneği (Doctoral dissertation, Yüksek Lisans Tezi, Çukurova Üniversitesi, Adana).

Arslan, Z. (2016). Eğitim Bilişim Ağı'ndaki matematik dersi içeriğine ilişkin öğretmen görüşleri: Trabzon ili örneği. Yayınlanmamış yüksek lisans tezi, Karadeniz Teknik Üniversitesi, Eğitim Bilimleri Enstitüsü, Trabzon.

Aslam, S., Parveen, K., Akram, H., & Saleem, A. (2021). The Challenges Of Online Teaching in Covid-19 Pandemic: A Case Study Of Public Universities in Karachi, Pakistan.

Atalay, M. (2019). Ortaokullarda Eğitim Bilişim Ağının (EBA) incelenmesi (Master's thesis, Eğitim Bilimleri Enstitüsü).

Aztekin, B. (2020). Öğretmenlerin Eğitim Bilişim Ağı (EBA)'na Yönelik Farkındalık Düzeyleri ve Tututumları Arasındaki İlişkinin İncelenmesi (Doctoral dissertation, Yüksek Lisans Tezi). Zonguldak Bülent Ecevit Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak).

Balcı, R. (2021). Efl students' and teachers' perceptions of educational informatics network live class applications during online education.

Barron Rodriguez, Maria; Cobo, Cristobal; Munoz-Najar, Alberto; Sanchez Ciarrusta, Inaki. 2021. Remote Learning During the Global School Lockdown : Multi-Country Lessons. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/36141 License: CC BY 3.0 IGO.

Başaran, M., Doğan, E., Karaoğlu, E., & ŞAHİN, E. (2020). Koronavirüs (Covıd-19) pandemi sürecinin getirisi olan uzaktan eğitimin etkililiği üzerine bir çalışma. Academia Eğitim Araştırmaları Dergisi, 5(2), 368-397.

Bayar, M. (2021). An evaluation of efl teachers' burnout experiences in educational informatics network live classes during the COVİD-19 pandemic.

Bedard, J. C., Jackson, C., Ettredge, M. L., & Johnstone, K. M. (2003). The effect of training on auditors' acceptance of an electronic work system. *International Journal of Accounting Information Systems*, *4*(4), 227-250.

Benson, A. (2002). Using online learning to meet workforce demand: A case study ofstakeholder influence.Quarterly Review of Distance Education,3(4), 443−452.

Calisir, F., & Calisir, F. (2004). The relation of interface usability characteristics, perceived usefulness, and perceived ease of use to end-user satisfaction with enterprise resource planning (ERP) systems. *Computers in human behavior*, *20*(4), 505-515.

Cardullo, V., Wang, C. H., Burton, M., & Dong, J. (2021). K-12 teachers' remote teaching self-efficacy during the pandemic. *Journal of Research in Innovative Teaching & Learning*.

Carliner, S. (2004).An overview of online learning(2nd ed.). Armherst, MA: HumanResource Development Press.

Conrad, D. (2002). Deep in the hearts of learners: Insights into the nature of onlinecommunity.Journal of Distance Education,17(1), 1−19.

Cook, R. Dennis; Weisberg, Sanford (1982). Residuals and Influence in Regression. New York, NY: Chapman & Hall.

Creswell, J. W. (2007). Qualitative inquiry & research design: Choosing among five approaches (2nd ed.). Thousand Oaks, CA: Sage.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35*(8), 982 - 1003.

Davis FD, Bagozzi RP, Warshaw PR. Extrinsic andintrinsic motivation to use computers in the workplace.Journal of Applied Social Psychology 1992;22:1111-32.

Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. International journal of human-computer studies, 45(1), 19-45.

Demir, D., Özdinç, F. ve Ünal, E. (2018). Eğitim Bilişim Ağı (EBA) portalına katılımın incelenmesi. Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 20 (2), 407-422.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review , 14* (4), 532-550.

Elçiçek, A. (2019). Eğitim bilişim ağı (EBA) web sitesinin öğretmenler tarafından kullanım sıklığının incelenmesi: Mardin İli Kızıltepe İlçesi örneği (Master's thesis, Sakarya Üniversitesi).

Erman, M. (2020). Ortaokul öğretmenlerinin teknoloji kabul düzeyleri ile eğitim bilişim ağını kullanmaya yönelik öz yeterliklerinin incelenmesi.

Erman, E. (2021). Uzaktan eğitim kapsamında hazırlanan tarih dersi elektronik ders içeriklerinin tarih öğretmenleri ve ortaöğretim öğrencileri açısından değerlendirilmesi: EBA örneği.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

George, D., & Mallery, M. (2010). SPSS for Windows Step by Step: A Simple Guide and Reference, 17.0 update (10a ed.) Boston: Pearson

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage.

Güneş, D. (2021). Ortaöğretim görsel sanatlar öğretmenlerinin EBA'ya (Eğitim Bilişim Ağı) ilişkin görüşleri: Diyarbakır ili örneği (Master's thesis, Dicle Üniversitesi, Eğitim Bilimleri Enstitüsü).

Gürer, M. D.,Tekinarslan, E., ve Yavuzalp, N. (2016). Çevrimiçi ders veren öğretim elemanlarının uzaktan eğitim hakkındaki görüşleri. Turkish Online Journal of Qualitative Inquiry, 7(1), 47-78.

Gürfidan, H., & Koç, M. (2016) Eğitim Bilişim Ağı (EBA) kullanımının öğretmen görüşleri doğrultusunda değerlendirilmesi. X. International Computer and Instructional Technologies Symposium'da sunulan bildiri. Recep Tayyip Erdoğan Üniversitesi, Rize.

Hair, J. F., Jr., Black, W. C., Babin, B. J. ve Anderson, R. E. (2005). *Multivariate data analysis (6th ed.)*. NY: Prentice Hall.

Heymann, J., Sherr, L., & Kidman, R. (Eds.). (2012). Protecting childhood in the AIDS pandemic: Finding solutions that work. OUP USA.

Holden, H., & Rada, R. (2011). Understanding the influence of perceived usability and technology self-efficacy on teachers' technology acceptance. *Journal of Research on Technology in Education*, *43*(4), 343-367.

Husin, M. H., Loghmani, N., & Abidin, S. S. Z. (2017). Increasing e-government adoption in Malaysia: MyEG case study. Journal of Systems and Information Technology.

Iivari, N. (2009). Empowering the users? A critical textual analysis of the role of users in open source software development. *AI & society*, *23*(4), 511.

Jatmikowati, T. E., Rachman, A. U., & Adwitiya, A. B. (2020). Technology Acceptance Model in using E-learning on Early Childhood Teacher Education Program's student during pandemic. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, *5*(2), 1501-1511.

Kamel, S., & Hassan, A. (2003). Assessing the Introduction of Electronic Banking in Egypt Using the Technology Acceptance Model. In M. Khosrow-Pour (Ed.), Annals of Cases on Information Technology (Vol. 5, pp. 1-25). Hershey, PA: IGI Global. https://doi.org/10.4018/978-1-59140-061-5.ch001

Kandemir, A. N. (2020). Öğretmenlerin EBA, Morpa Kampüs, Okulistik benzeri eğitim ortamları kullanımının teknoloji kabul ve kullanım birleştirilmiş modeli 2 ile açıklanması (Master's thesis, Eğitim Bilimleri Enstitüsü).

Katz, M.H.. (2011). Multivariable Analysis: A Practical Guide for Clinicians and Public Health Researchers. Multivariable Analysis: A Practical Guide for Clinicians and Public Health Researchers. 1-233. 10.1017/CBO9780511974175.

Keil, M., Beranek, P. M., & Konsynski, B. R. (1995). Usefulness and ease of use: field study evidence regarding task considerations. *Decision support systems*, *13*(1), 75-91.

Keskin Yorganci, F. (2019). Ortaokul matematik öğretmenlerinin Eğitim Bilişim Ağı (EBA) projesinden yararlanma düzeyleri ve proje hakkındaki görüşleri (Master's thesis, Eğitim Bilimleri Enstitüsü).

Kiliç, S. (2016). Cronbach's alpha reliability coefficient. *Psychiatry and Behavioral Sciences*, *6*(1), 47.

Kuloğlu, M. E. (2018). İngilizce Öğretmenlerinin Eğitim Bilişim Ağı (EBA) Kullanım Durumlarının İncelenmesi. Yüksek Lisans Tezi, Gaziantep Üniversitesi, Gaziantep.

Lazim, C. S. L. M., Ismail, N. D. B., & Tazilah, M. D. A. K. (2021). Application of technology acceptance model (TAM) towards online learning during covid-

19 pandemic: Accounting students perspective. *Int. J. Bus. Econ. Law*, *24*, 13-20.

Lee, Y., Kozar, K. A., & Larsen, K. R. (2003). The technology acceptance model: Past, present, and future. *Communications of the Association for information systems*, *12*(1), 50.

Lee, D. Y., & Lehto, M. R. (2013). User acceptance of YouTube for procedural learning: An extension of the Technology Acceptance Model. *Computers & Education*, *61*, 193-208.

Lowenthal, P., Wilson, B. G., & Parrish, P. (2009). Context matters: A description andtypology of the online learning landscape.AECT International Convention, Louisville,KY. Presented at the 2009 AECT International Convention, Louisville, KY.

Lukas, B. A., & Yunus, M. M. (2021). ESL Teachers' Challenges in Implementing E-learning during COVID-19. International Journal of Learning, Teaching and Educational Research, 20(2), 330-348.

MEB. (2015). Millî Eğitim Bakanlığı 2015–2019 stratejik planı, Ankara: Milli Eğitim Yayınları.

MEB. (n.d.). Fatih Projesi. Retrieved February 20, 2022, from http://fatihprojesi.meb.gov.tr/about.html

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same?. The Internet and higher education, 14(2), 129-135.

Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. Pakistan journal of medical sciences, 36(COVID19-S4), S27.

Munoz-Najar, Alberto; Gilberto, Alison; Hasan, Amer; Cobo, Cristobal; Azevedo, Joao Pedro; Akmal, Maryam. 2021. Remote Learning During COVID-19 : Lessons from Today, Principles for Tomorrow. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/36665 License: CC BY 3.0 IGO.

Öçal, M. F., & Şimşek, M. (2017). Matematik öğretmen adaylarının FATİH projesi ve matematik eğitiminde teknoloji kullanımına yönelik görüşleri. Turkish Online Journal of Qualitative Inquiry, 8(1), 91-121.

Pala, F. K., Arslan, H., & Özdinç, F. (2017). EĞİTİM BİLİŞİM AĞI WEB SİTESİNİN OTANTİK GÖREVLER VE GÖZ İZLEME İLE KULLANILABİLİRLİĞİNİN İNCELENMESİ. *Ihlara Eğitim Araştırmaları Dergisi*, *2*(1), 24-38.

Pallant, J. (2010). SPSS survaival manual: a step by step guide to data analysis using SPSS.

Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. Higher Education for the Future, 8(1), 133-141.

Rekkedal, T., Qvist-Eriksen, S., Keegan, D., Súilleabháin, G.Ó., Coughlan, R., Fritsch, H.,et al. (2003).Internet based e-learning, pedagogy and support systems.Norway: NKIDistance Education.

Ross-Hain, L. (2020). *Transitions In Tumultuous Times: Teachers' Experiences With Distance Learning Amidst The COVID-19 Pandemic* (Doctoral dissertation, The University of North Dakota).

Sangeeta, Tandon U. Factors influencing adoption of online teaching by school teachers: A study during COVID-19 pandemic. J Public Aff. 2020 Oct 14:e2503. doi: 10.1002/pa.2503.

Sayılarla Uzaktan Eğitim. (2021, May 25). Milli Eğitim Bakanlığı Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü. http://yegitek.meb.gov.tr/www/sayilarla-uzaktan-egitim/icerik/3226

Simons, H. (2009). Evolution and concept of case study research. In *Case study research in practice* (pp. 12-27).

Solak, Mehmet. 2012. Öğretmenlerin Akıllı Tahta Kullanımına Karşı Tutumlarının Teknoloji Kabul Modeline Göre İncelenmesi. Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü, Sakarya.

Sun, H., & Zhang, P. (2008). An exploration of affect factors and their role in user technology acceptance: Mediation and causality. *Journal of the American society for information science and technology*, *59*(8), 1252-1263.

Şumuer, E. (2012). Toward an understanding of acceptance of electronic performance support systems.

Tarhini A, Hone K, Liu X. Measuring the Moderating Effect of Gender and Age on E-Learning Acceptance in England: A Structural Equation Modeling Approach for An Extended Technology Acceptance Model. Journal of Educational Computing Research. 2014;51(2):163-184. doi:10.2190/EC.51.2.b

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information systems research*, *6*(2), 144-176.

Tellis, W. (1997). Application of a case study methodology. The qualitative report, 3(3), 1-19.

Timur, B., Yilmaz, Ş., & İşseven, A. (2017). ORTAOKUL ÖĞRENCİLERİNİN EĞİTİM BİLİŞİM AĞI (EBA) SİSTEMİNİ KULLANMALARINA YÖNELİK GÖRÜŞLERİ. *Asian Journal of Instruction*, *5*(1), 44.

Teo, T. S., Lim, V. K., & Lai, R. Y. (1999). Intrinsic and extrinsic motivation in Internet usage. *Omega*, *27*(1), 25-37.

Teo, T. (2009). The impact of subjective norm and facilitating conditions on pre-service teachers' attitude toward computer use: A structural equation modeling of an extended technology acceptance model. *Journal of Educational Computing Research*, *40*(1), 89-109.

Teo, T. (2010). A path analysis of pre-service teachers' attitudes to computer use: applying and extending the technology acceptance model in an educational context. Interactive Learning Environments, 18(1), 65-79.

Teo, T., URSAVAŞ, Ö. F. , & BAHCEKAPILI, E., (2012). An Assessment of Pre-Service Teachers' Technology Acceptance in Turkey: A Structural Equation Modeling Approach. *ASIA-PACIFIC EDUCATION RESEARCHER* , vol.21, no.1, 191-202.

Tokel, S. T., & İsler, V. (2015). Acceptance of virtual worlds as learning space. *Innovations in Education and Teaching International*, *52*(3), 254-264.

Turan, B. (2011). Bilgi ve iletişim teknolojileri kullanımının teknoloji kabul modeli ile incelenmesi ve sınıf öğretmenleri üzerinde bir uygulama.

TÜRKER, A., & Dündar, E. (2020). COVID-19 Pandemi Sürecinde Eğitim Bilişim Ağı (EBA) Üzerinden Yürütülen Uzaktan Eğitimlerle İlgili Lise Öğretmenlerinin Görüşleri. Milli Eğitim Dergisi, 49(1), 323-342.

Gökdemir, A. (2020). Sosyal bilgiler öğretmenlerinin EBA (Eğitim Bilişim Ağı)ya yönelik görüşlerinin değerlendirilmesi (Master's thesis, Sosyal Bilimler Enstitüsü).

Türker, A., ve Güven, C. (2016). Lise öğretmenlerinin Eğitim Bilişim Ağı (EBA) projesinden yararlanma düzeyleri ve proje ile ilgili görüşleri. Eğitim ve Öğretim Araştırmaları Dergisi, 5(1), 244-254.

Urdan, T. A., & Weggen C. C. (2000). Corporate e-learning: Exploring a new

frontier. WR Hambrecht + Co.

Ursavaş, Ö. F. (2014). *Öğretmenlerin bilişim teknolojilerini kullanmaya yönelik davranışlarının modellenmesi* .

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, *46*(2), 186-204.

Venkatesh, V., Morris, M. G., & Ackerman, P. L. (2000). A longitudinal field investigation of gender differences in individual technology adoption decision-making processes. *Organizational behavior and human decision processes*, *83*(1), 33-60.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.

Venkatesh, V., Brown, S. A., Maruping, L. M., & Bala, H. (2008). Predicting Different Conceptualizations of System Use: The Competing Roles of Behavioral Intention, Facilitating Conditions, and Behavioral Expectation. *MIS Quarterly*, *32*(3), 483–502. https://doi.org/10.2307/25148853

Volery, T., & Lord, D. (2000). Critical success factors in online education.InternationalJournal of Educational Management,14(5), 216–223.

Wang, Y. S., Wu, M. C., & Wang, H. Y. (2009). Investigating the determinants and age and gender differences in the acceptance of mobile learning. *British journal of educational technology*, *40*(1), 92-118.

Wentling, T. L., Waight, C., Gallaher, J., La Fleur, J., Wang, C., & Kanfer, A. (2000). E-learning: A review of literature. Urbana-Champaign: University of Illinois, 8, 113.

Yucel, U. A., & Gulbahar, Y. (2013). Technology acceptance model: A review of the prior predictors. Egitim Bilimleri Fakultesi Dergisi, 46(1), 89

APPENDICES

A. MINISTRY OF NATIONAL EDUCATION APPROVAL FORM (TURKISH)

T.C.
ANKARA VALİLİĞİ
Milli Eğitim Müdürlüğü

Sayı : E-14588481-605.99-23386183 31.03.2021
Konu : Araştırma izin

ORTA DOĞU TEKNİK ÜNİVERSİTESİ REKTÖRLÜĞÜNE

İlgi: a) 04.03.2021 tarihli ve 283 sayılı yazınız.
b) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 2020/2 nolu Genelgesi.

Üniversiteniz Fen Bilimleri Enstitüsü Yüksek Lisans Öğrencisi Ceren KARAGÖZ'ün **"Öğretmenlerin COVID-19 Pandemisi Sürecinde EBA Kullanımını Etkileyen Faktörlerin Teknoloji Kabul Modeline Göre İncelenmesi"** konulu tezi kapsamında Etimesgut ilçesine bağlı ortaokullarda uygulanacak olan veri toplama araçları ilgi (b) Genelge çerçevesinde incelenmiştir.

Yapılan inceleme sonucunda, söz konusu araştırmanın Müdürlüğümüzde muhafaza edilen ölçme araçlarının; Türkiye Cumhuriyeti Anayasası, Millî Eğitim Temel Kanunu ile Türk Milli Eğitiminin genel amaçlarına uygun olarak, ilgili yasal düzenlemelerde belirtilen ilke, esas ve amaçlara aykırılık teşkil etmeyecek, eğitim-öğretim faaliyetlerini aksatmayacak şekilde okul ve kurum yöneticilerinin sorumluluğunda gönüllülük esasına göre uygulanması Müdürlüğümüzce uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Turan AKPINAR
Vali a.
Milli Eğitim Müdürü

Ek:
Uygulama araçları (5 sayfa)
Dağıtım:
Gereği:
ODTÜ
Bilgi:
Etimesgut İlçe MEM

Bu belge güvenli elektronik imza ile imzalanmıştır.
Adres : Emniyet Mah. Alparslan Türkeş Cad. 4/A Yenimahalle
Belge Doğrulama Adresi : https://www.turkiye.gov.tr/meb-ebys
Bilgi için: Emine Konuk
Unvan : Şef
Telefon No : 0 (312) 306 89 30
E-Posta: istatistik06@meb.gov.tr
İnternet Adresi: ankara.meb.gov.tr
Faks:_____
Kep Adresi : meb@hs01.kep.tr
Bu evrak güvenli elektronik imza ile imzalanmıştır. https://evraksorgu.meb.gov.tr adresinden babc-fba4-3a0a-893d-8932 kodu ile teyit edilebilir.

B. MIDDLE EAST TECHNICAL UNIVERSITY HUMAN SUBJECTS ETHICS COMMITTEE APPROVAL FORM (TURKISH)

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

DUMLUPINAR BULVARI 06800
ÇANKAYA ANKARA/TURKEY
T: +90 312 210 22 91
F: +90 312 210 79 59
ueam@metu.edu.tr
www.ueam.metu.edu.tr

Sayı: 28620816 / 12

29 OCAK 2021

Konu : Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi : İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Doç.Dr. S.Tuğba TOKEL

Danışmanlığını yaptığınız Ceren KARAGÖZ'ün "Öğretmenlerin COVID-19 Pandemisi Sürecinde EBA Kullanımını Etkileyen Faktörlerin Teknoloji Kabul Modeline Göre İncelenmesi" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve **012-ODTU-2021** protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Prof. Dr. Mine MISIRLISOY
İAEK Başkanı

C. FINAL STATE OF THE QUESTIONNAIRE (TURKISH)

Değerli öğretmenler;

Bu çalışma Orta Doğu Teknik Üniversitesi (ODTÜ), Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü yüksek lisans öğrencisi Ceren Karagöz tarafından yürütülmektedir. Bu anket formu " Öğretmenlerin COVID- 19 Pandemi Sürecinde EBA Kullanımını Etkileyen Faktörlerin Teknoloji Kabul Modeline Göre İncelenmesi" ne yönelik öğretmen görüşlerini araştırmak için hazırlanmıştır. Çalışma bilimsel bir çalışma olmakla birlikte elde edilen veriler araştırmacı tarafından sadece ilgili araştırma için kullanılacaktır. Cevaplarınız ve isimleriniz kesinlikle gizli tutulacaktır. Çalışmadan elde edilen veriler sadece bilimsel yayınlarda kullanılacaktır. Lütfen soruları dikkatlice okuyarak cevaplandırın.

BİRİNCİ BÖLÜM

1. Cinsiyetiniz : ( ) Kadın ( ) Erkek

2. Yaşınız:

3. Branşınız:

4. Mesleki Kıdeminiz (Yıl olarak):

İKİNCİ BÖLÜM

Aşağıda verilen ifadelerin sağ tarafında yer alan; Kesinlikle Katılmıyorum, Katılmıyorum, Kararsızım, Katılıyorum, Kesinlikle Katılıyorum seçeneklerinden size uygun olan bir tanesini (X) koyarak işaretleyiniz.

		(1) Kesinlikle Katılmıyorum	(2) Katılmıyorum	(3) Kararsızım	(4) Katılıyorum	(5) Kesinlikle Katılıyorum
1	Derslerimde EBA platformunu kullanmak akademik performansımı arttırdı.					
2	Derslerimde EBA platformunu kullanmak kendi hızımda ilerlememi sağladı.					
3	Derslerimde EBA platformunu kullanmak daha etkili bir öğretme sağladı.					
4	Derslerimde EBA platformunu kullanmak verimliliğimi artırdı.					
5	Dersimle EBA platformunu kullanmak öğrencilerle iletişim kurmamı kolaylaştırdı.					
6	Genel olarak EBA platformunu öğretimi desteklemek için yararlı buluyorum.					
7	EBA platformunu kullanmayı öğrenmek benim için kolaydı.					
8	EBA platformunun kullanımını kolay buluyorum.					
9	EBA platformunda etkileşimi açık ve anlaşılır buluyorum.					

10	EBA platformu kullanımında beceri kazanmak benim için kolaydı.					
11	EBA platformunu kullanmayı eğlenceli buluyorum.					
12	EBA platformunu kullanmayı zevkli buluyorum.					
13	EBA platformunu kullanırken eğleniyorum.					
14	Derslerimde EBA platformunu kullanmam için gerekli kaynaklar okulum tarafından sağlanmıştır.					
15	EBA platformunu kullanmak için gerekli bilgiye sahibim.					
16	EBA platformu kullandığım diğer teknolojilerle uyumludur.					
17	EBA platformunu kullanırken bir sorunla karşılaştığımda okulumdan destek alırım.					
18	Etrafımda EBA platformunu nasıl kullanacağımı gösterecek biri olmasa bile, EBA platformunu kullanabileceğimden eminim.					
19	EBA platformunun kullanımına yönelik sadece çevrim içi yönergelere sahip olsam bile, EBA platformunu kullanabileceğimden eminim.					

20	EBA platformunu kullanmayı kendim denemeden önce başka birinin kullandığını gördüğüm takdirde, EBA platformunu kullanabileceğimden eminim.					
21	EBA platformunda bir görevi tamamlamam için çok vakitim olduğu sürece, EBA platformunu kullanabileceğimden eminim.					
22	Birisi bana EBA platformunu kullanmayı gösterdiği takdirde EBA platformunu kullanabileceğimden eminim.					
23	Görüşlerine değer verdiğim insanlar salgın süresince benden EBA platformunu kullanmamı bekler.					
24	Öğretmen ve yönetici meslektaşlarım salgın sürecinde EBA platformunu kullanmamı benimsemem gerektiğini düşünüyor.					
25	Görüşlerine değer verdiğim öğretmen ve yönetici meslektaşlarım, salgın sürecinde EBA platformunu kullanmam gerektiğini düşünüyor.					
26	EBA platformuna gelecekte erişimim olursa kullanmayı isterim.					

27	EBA platformunu gelecekte sıklıkla kullanacağım.					
28	EBA platformunda yer alan eğitim aktivitelerinde yer almayı isterim.					

D. FINAL STATE OF THE INTERVIEW (TURKISH)

ÖĞRETMEN GÖRÜŞME FORMU

Değerli öğretmenler;

Bu çalışma Orta Doğu Teknik Üniversitesi (ODTÜ), Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü yüksek lisans öğrencisi Ceren Karagöz tarafından yürütülmektedir. Bu araştırmanın amacı COVID-19 pandemi sürecinde EBA kullanımını etkileyen faktörlerin Teknoloji Kabul Modeline göre incelenmesidir. Bu görüşmede sizden aşağıdaki soruları cevaplandırmanız istenilecektir. Görüşmeniz yaklaşık 15 dakika sürecek ve kayıt altına alınacaktır. Çalışma bilimsel bir çalışma olmakla birlikte elde edilen veriler araştırmacı tarafından sadece ilgili araştırma için kullanılacaktır. Cevaplarınız ve isimleriniz kesinlikle gizli tutulacaktır. Çalışmadan elde edilen veriler sadece bilimsel yayınlarda kullanılacaktır. Çalışma, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp görüşmeyi sonlandırmakta serbestsiniz.

GÖRÜŞME SORULARI

1. Derslerinizde EBA platformunu kullanmanızın ders içi performansınıza nasıl bir etkisi oldu? Açıklayınız.

2. EBA platformunu kullanmayı öğrenirken zorlandınız mı?

   a. Cevabınız Evet ise kullanım aşamasında hangi konularda zorlandınız?

   b. Cevabınız Hayır ise, hangi açılardan kolay buldunuz?

3. EBA platformunu kullanmayı eğlenceli buldunuz mu?

a. Cevabınız Evet ise, neden eğlenceli olduğunu düşünüyorsunuz?
b. Cevabınız Hayır ise, eğlenceli olmadığını düşündüğünüz noktalar neydi?

4. EBA platformunu kullandığınız süre boyunca kullanmanızı kolaylaştırıcak durumlar var mıydı?

a. Cevabınız Evet ise, hangi durumlar kullanmanızı kolaylaştırdı?
b. Cevabınız Hayır ise, hangi durumlar kullanmanızı zorlaştırdı? Kullanımınızı kolaylaştırmak için neler yapılabilirdi?

5. Pandemi sürecinde EBA platformunu kullanmanın avantajları olduğunu düşünüyor musunuz? Örnek verebilir misiniz?

6. Pandemi sürecinde EBA platformunu kullanmanın dezavantajları olduğunu düşünüyor musunuz? Örnek verebilir misiniz?

7. Pandemi sürecinde EBA platformunu kullanmanızı ne tür faktörlerin etkilediğini düşünüyorsunuz?

8. Pandemi sonrası EBA platformu kullanmaya devam etme hakkında neler düşünüyorsunuz?