An Analysis of Teacher Self-Efficacy and Teacher Autonomy in Relation to A New Distance Learning Era*

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ABSTRACT

Distance learning is a new-born need for education because of emerging needs like those of the COVID 19 pandemic. Distance learning enables students and teachers to continue education as they do not have to be in the same place. The aim of the study is to find out the relationship among the teacher self-efficacy and teacher autonomy and the proficiency of EBA and its usage. In order to attempt this goal, 408 EFL teachers participated in the study. The participants work at Ministry of Education. The current study utilized quantitative approach. The Teacher sense of Self Efficacy Scale, Teacher Autonomy Scale and EBA proficiency scale were administered to the participants via online platforms. The results revealed that there is a positive correlation between teacher self-efficacy and EBA proficiency of the teachers. ($p<0.05$) Also, there is a positive relationship between teacher autonomy and EBA proficiency. ($p<0.05$) Multiple regression analysis indicates that both teacher self-efficacy and teacher autonomy explains 43% of the variance in EBA proficiency and its usage. In a nutshell, the teacher self-efficacy and teacher autonomy have a significant role in EBA proficiency scale. Based on these findings, implications for the research and recommendations for further studies are given.

Keywords: Teacher self-efficacy, teacher autonomy, distance learning, EBA

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Introduction

Technology is an indispensable part of our lives. It is an undeniable fact that it has been affecting our lives deeply for years. In fact, technology is oftentimes discussed with it advantages and disadvantages. That said, several other issues affect the lives of millions such as the wide-spreading deadly virus called COVID-19 To illustrate, the education system has changed to a great extent due to the pandemic. In fact, as a result of it, education is yet another area of our lives that has been changed to a considerable extent through the use of technology. For years we have been discussing the advantages of technology and as well as the disadvantages of the internet. Some believed that using technology in the classrooms is so helpful (Lai and Kristonis, 2006). The technology can make our lessons better because our learners are born as Zed Generations (Mamula, Radojević and Sljepčević, 2016). On the other hand, some studies emphasized the importance of traditional methods (Tang, 2013). To integrate technology to the available education system is a need considering the current state of the world. All the education intuitions are forced to use online databases to go on education. There is a beneficial online platform called EBA which was created to share and learn for free for the behalf of FATIH (please give the full form and the English version) project. Ten years later, EBA became a hero of our education system again owing to the Covid-19 pandemic process. The said platform has got educational contents.

To be able to use technology professionally means enhancing the quality of education in distance learning processes. Teachers try to adapt themselves to the new system. Before the virus, there was a distinction between experienced teachers and inexperienced ones. All the teachers became almost alike in terms of their experiences in the distance learning system though. These teachers have gained the right to decide what they can use for their teachings. Implementing technology into the lessons is so important for language learning processes as well. Technology usage gives chances to take advantage of images, videos, audios and texts for language teachers and the learners. English language teachers use technology for their lessons to promote student autonomy, to touch multiple intelligences (McKenzie, 2005). On the other hand, technology could be helpful for teachers to improve themselves (Saraç, 2005). It would be fair to state that language education is going on thanks to technological devices all around the world. Language education has adopted lots of methods and approaches such as Grammar Translation Method and Audiolingual ones. Howbeit, there is no doubt that it is now the distance learning era. That marks the new approach to the teaching and learning of foreign languages. Teachers have to depend on themselves nowadays. Who the teachers are and what their beliefs are about themselves will shape the second language education. Raising autonomous learners is seen one of these teachers' goals (Voller, 2014). There are some hypotheses that suggests there is a relation between learners' self-efficacy and learner autonomy. However, there seems to be no research on teacher autonomy and teacher self-efficacy in the distance learning in the literature. In the digital era, teachers are trying to find their own way. There is no book to read about some theories or no ways exist to consult more experienced colleagues. It is then high time to look at the term "self-efficacy" that all the teachers need. It is their right to see to what extents these variables, self-efficacy and autonomy, affect each other in that life-changing era. It is believed that bearing in mind Türkiye's literature on distance learning, the current study a promising one for foreign language education. Another era has started for education and the time is similar to what Göbeklitepe means for humanity and history, which is often handled with such a good metaphor entitled "zero point in time" (Volkan, 2018). The said time shows the zero point in language education and a sign of an opening of a new

era. It is a whole new question to see our road clearer in this new distance learning which comes with as a forceful result of the COVID-19 pandemic.

The study aims to put a light on the relation of the teachers' self-efficacy and self-autonomy with distance teaching. Teachers are the important parts of the teaching process. For years there have been lots of discussions about how self-efficacy and self-autonomy of learners influence the learning process of foreign languages (Tılfarlıoğlu and Çiftçi, 2011; Tabrizi and Saedi, 2015). The new era which comes along with the COVID-19 makes the distance teaching tools even more important for the education world (Brady and Pradhan, 2020). Digital literacy of teachers and learners are the essential factors that affect the quality of learning and teaching (Hassan and Mirza, 2021). In Türkiye teachers use EBA to continue education online. The pivotal question then is "what are the factors that predict the proficiency of EBA usage of the teachers?" The answer to the question is essential to comprehend teachers' effectiveness for language education for the upcoming years. The study's first aim is to find out the relation between teacher self-efficacy and teacher autonomy. After that, the study tries to find an answer as to whether any significant relationship exists among the teacher self-efficacy, teacher autonomy and the proficiency of EBA usage as well as whether teacher self-efficacy and teacher autonomy are the predictors of EBA usage of the teachers.

Statement of Research Questions

The current study aims to address the research questions listed below:

➢ Is there a relationship between teacher autonomy and teacher self-efficacy, teacher-efficacy and the proficiency of EBA usage, teacher autonomy and the proficiency of EBA usage?
➢ Do teacher efficacy and teacher autonomy predict the proficiency of EBA usage? If so, to what extent?

Literature Review

Teacher Autonomy

The term teacher autonomy is related to the school, education, theories, and practices. It is linked with the freedom of individuals. It indeed is basically about freedom for controlling teaching processes. Studies explain that to make a decision the teachers need to have got freedom (Blasé and Kirby, 2008). Another component of teacher autonomy is control. An ideal teacher possesses the ability to control their classrooms and the materials. Teachers control not only their classrooms but also the teaching experiences (Pearson and Moomaw,2006). So, teachers are also responsible for their professional development. In the literature, Smith (2003) defines teacher autonomy as the teacher's capacity of improving abilities, behaviors and information about anything on their own. Teachers are responsible for their developmental process in terms of career. On the other hand, learner autonomy is a term more popular than teacher autonomy. To understand teacher autonomy better, learner autonomy will need to be explained. Learner autonomy is about the students' taking responsibility over their own learning. Students have right to have their own opinion for their learning, planning the process and they feel safe to have an idea about their learning (Cotteral, 1995). The support of teachers is important for students' gaining their autonomy (Trebbi, 2008). As a matter of fact, it is found that there is a relation between teacher autonomy and learner autonomy. It can be said that the teachers can be helpful for enhancing enthusiasm for learning in their students, which is named as learner autonomy. There is a positive relationship between those terms (Thavenius,1999).

In the literature, there is no specific definition for teacher autonomy though. In this part, the definitions stated by the relevant studies are presented. Smith, Erdoğan, Lamb and Reinders, (2008) believe that there cannot be one definition for teacher autonomy. They separated the terms into dimensions. The exact definition of teacher autonomy is not clear but it could be expressed in the way that teachers have feelings about how they control themselves and the classrooms (Pearson and Hall, 1993). That said, these definitions change in time (Pearson and Mooaw, 2006). Autonomy is a term that can mean isolation when it is reviewed in the literature. In other words, teachers can use autonomy to appoint to freedom from supervision or it may mean to provide equal power to succeed tasks out of the classroom. There is a quotation in a study that expresses teacher's self-definition for autonomy. The belief describes one's own ability to reach their goals by means of being creative and productive (Sacks and Eisenstein,1979). Pitt (2010) emphasizes t autonomy is teachers' ability to not be influenced by outside factors. It is clear that autonomy means teachers' ability to make decisions on their own without being dependent to any effective factor. Autonomy is composed of mainly two things and there are lots of reasons for teachers to leave their professions. Most of the reasons include the lack of autonomy attributed to them (Pearson and Hall, 1993).

Hoyle and John (1995) define teacher autonomy as the freedom of teachers which helps to create personalized pedagogy consisting of educational details and the personal choices equally. It is also seen that freedom of teachers to plan and manage could be called as teacher autonomy. It could be said that giving the freedom to teachers is so important to make them autonomous in their teaching processes. Another researcher Little (1995) defines autonomy as having responsibility, competence, and freedom for control. An autonomous teacher can create a program and execute the same program. The latest definition of teacher autonomy emphasizes the importance of integration rather than isolation as what has been depicted earlier. It is more about making decisions for the sake of collective instead of thinking just on your own (Webb, 2002).

Teacher Self-Efficacy

Bandura (1997) defines self-efficacy in the following way: "Perceived self-efficacy is concerned not with the number of skills you have, but with what you believe you can do with what you have under a variety of circumstances (p. 37)". Verily, the term had already come up even before these times. The Social Cognitive Theory creates the basic underlying principle of the self-efficacy assuming that human behaviors are shaped thanks to internal and external reasons. (Bandura, 1977) As a result, individuals own a perception about themselves that is shaped by the old experiences, successes and failures. The consistency of their choices is linked with self-efficacy beliefs. Someone's own awareness of their potential ability to accomplish a task is called as self-efficacy rather than considering others' performances (Tschannen-Moran and Hoy, 2007). Teacher self-efficacy can be defined as the beliefs of teachers' capacity to empower the students' achievement even for the not expected ones (Tschannen-Moran and Hoy, 2001).

Bandura (1997) categorizes the sources of self-efficacy as mastery experiences, vicarious experiences, verbal experiences, verbal persuasion, and physiological arousal. Human-beings can evaluate their abilities to reach their own goals. Mastery experiences are related to people's old experiences that still shape the current situations of the people. The second one is vicarious experiences which are related to the observant that observe other ideal self-image. As the third one, verbal persuasion is about the role of receiving social feedback. The last category is physiological arousal which is about the being healthy in physical and psychological terms.

Distance Learning

Distance education is implemented by technological devices because there has to be some limitations to carrying on education face to face in the classrooms (Eygü and Karaman, 2013). Sadeghi (2019) states that distance education gives freedom to teachers in terms of numerous environmental factors. At the very beginning, distance education was carried out through televisions and radios and letters were used. Later, since the emergence of technological improvements, it has been mediated by the computer-based programs which enable a flexible and interactive learning environment to the educators and learners (İşman, 2011).

Distance education has entered our lives so fast because all the countries experienced challenges in relation to education with the school closures during the pandemic. All the countries use different kind of applications to help distance education. The countries implemented lots of procedures throughout the related processes. Online teaching tools get popular as well as radio and TV (Bozkurt ,2020). China chooses to use an e-learning platform which is called Rainbow Classroom. In the USA, there are free and paid teachings on EDx and Coursera. This shows that countries around the world turn to digital and online platforms with a view to letting education continue for all.

Distance education has its own positive sides such as fiscal advantages and the flexible learning hours letting education continue even under hard circumstances (Akinbadewa and Sofowora, 2020). On the other hand, when learners and teachers are not at the same place it makes instruction to be carried out harder (Thompson and McDowell, 2019). There are several problems in this regard. Not all the learners have internet access because of their socio-economic profiles or due to technical problems. Also eLearning cannot reach its aim all the time because people still do not have the necessary awareness of the importance of distance education. The reasons change from the regional factors to inadequacy of the existing technologies (Gökdaş and Kayri, 2005).

In the COVID-19 period, new studies were conducted on distance education. One of them investigated teacher perspectives about distance education. Arora and Srinivasan (2020) found that teachers have positive attitudes toward distance education and they are also aware of the reasons that make the process more difficult such as problems to access the Internet. Another study is about the perspectives of students on the pandemic education process. The students have positive thoughts for the process thanks to flexible learning hours (Lall and Singh, 2020). Another study emphasizes the importance of e-learning during the pandemic because it gives the students a chance to study independently (Xie andYang ,2020).

Education during distance education in Turkey

In Türkiye, as was the case all around the world, the schools were closed since face to face education was considered dangerous respecting the spread of the virus among people. The state preferred to use distance learning to reach students for all lessons staying away from high risks. Republic of Türkiye Ministry of National Education (MoNE) further developed the already accessible distance learning platform, Educational Informatics Network (EBA). Turkish Radio and Television and Corporation (TRT) support distance learning by broadcasting videos and required activities (Özer, 2020). TRT is a great chance for the students who do not have internet at home. Through the relevant TV channels, primary, secondary and high school students can take advantage of the daily lessons. Also, these channels support reviewing lessons as the programs replay the lessons given daily in the same order. EBA as a portal is strengthened too. The state provides free 8GB internetto the stakeholders. Thanks to free internet, students could connect EBA

and participate in the lessons. Moreover, EBA also enables the teachers to have online lessons via Zoom. EBA Assistant is an artificial intelligence instrument so it can answer the questions of the participants. It is a great way to inform the people who want to join EBA with ease.

Method

The main aim of the current study is to find out the relation among the teacher self-efficacy and teacher autonomy and the usage of a distance learning tool, the Education Information Network (EBA) in the new learning process of Türkiye. It is a quantitative descriptive research design that aims to explain the relationship among the variables. A descriptive study describes the data as numerically to answer the research questions (Kelleghan, Madaus and Airasian, 2012). In this study, to gather data, three questionnaires are used. The questionnaire is a mostly used instrument for data collection to investigate rather than observing directly. Therefore, the questionnaires are executed by online platforms. In other words, the data is collected through the surveys using Google docs via online social contacts and after the normalization of the country, the researcher visited the schools to reach the target population through hard copies of the mentioned tools. The findings of the current study are analyzed by SPSS.

Participants

408 volunteering EFL teachers participated in the study. The participants are the state school English teachers who use EBA program which is the only portal used in the COVID 19 period. The participants of the study are the English teachers who work at Ministry of Education in Gaziantep. These teachers work at primary, secondary and high schools. There is no age limitation in the study. When the genders of the teachers participating in the study are examined it seems that 86% are women and 14% are men. The participants are 351 females and 57 males. When the age distributions are examined, it appears that 23% of them are 22-26 of years old, 27.2% of them are 27-31 years old, 27.1% of them are 32-36 years old, 16.2% of them are 37-41 years old and 6.4% of them are 42 years old and above. When the years of service are examined it is understood that 38.5% are 1-5 years, 38.2% are 6-10 years, 14% are 11-15 years and 9.3% are 16 years and above. When the types of schools where teachers work are examined, it is figured out that 24.5% of them are primary school, 58.8% of them are secondary school and 16.7% of them are high school.

The convenience sampling method is used to collect data which will answer the research questions best. The research wants to contribute language learning and teaching so English Language Teachers are the participants. The participants for the study are selected according to the convenience sampling. The convenience sampling is the mostly used sampling type. It addresses participants available for the researcher. In that regard, the participants filled in the questionnaires with the kind request of researcher. The questionnaires delivered via online platforms as stated before and in the form of hardcopies taking into account the Covid-19 pandemic restrictions. To reach all the teachers who use EBA program in Gaziantep district, the state schools are reached via social chatting tools such as WhatsApp and other tools.

Instruments

To collect data, three types of questionnaires are used. To measure teacher self-efficacy, Tschannen-Moran and Hoy's Teacher Efficacy Instrument (2001) is used. It includes three sections: efficacy for student engagement, efficacy for instructional strategies and efficacy for classroom management. The teacher autonomy is measured by Teaching Autonomy Scale (TAS) by Pearson and Moomaw (2006), which is a further developed version of Pearson and Hall's

(1993). It includes two subsections which are called teacher autonomy and general curriculum autonomy. To measure the proficiency level of the teachers, a questionnaire is used which consists of 43 questions (Geçer, Topal, and Solmaz, 2018).

EBA Proficiency Scale

The scale is developed by Geçer, Topal and Solmaz (2018). Before performing the exploratory factor analysis, first of all, the suitability of the data set for factor analysis was examined. It is seen that the KMO value is .971 and the Bartlett's Sphericity test result is significant. These findings show that the data set is suitable for factor analysis. After the execution of factor analysis, it was seen from the results that the scale was more suitable for single-factor use. Analysis results showed that the scale consisted of a single factor structure with an eigenvalue of 29 and explaining 66% of the total variance. To determine the reliability of the scale consisting of 43 items collected under one factor, Cronbach's alpha value for internal consistency coefficient was found to be .98. This value indicates that the scale can be described as highly reliable. The information obtained is from the smallest to the largest on the scale (I absolutely cannot (1), I can't (2), I can partially (3), I can (4), and I definitely can (5) interpreted on a five-point scale.

Teacher Autonomy

Teacher autonomy is measured by Teaching Autonomy Scale (TAS) by Pearson and Moomaw (2006), which is the further developed version of Pearson and Hall (1993). The model resulted in a significant reduction of chi-square and indicated a better fit of the data to the model, $\chi2(129, N = 171) =195.38$, p = .01, CFI = .92, RMSEA = .05, adjusted good-ness of fit index = .85, normed fit index = .80, expected cross-validation index (ECVI) = 1.64, 90% confidence interval for ECVI = 1.44 to 1.88. Pearson and Hall (1993) used exploratory factor analysis with oblique rotation, which yielded an instrument with good internal consistency reliability (α = .80) with two factors—curriculum autonomy and general teaching autonomy. We defined curriculum autonomy by the items that measured selection of activities and materials and instructional planning and sequencing. Also, we defined general teaching autonomy by the items that measured classroom standards of conduct and personal on-the-job decision making. Both dimensions were internally consistent (α =.81 and .85, respectively), well defined by the items, and correlated (r = .28). It uses a 4-point, Likert-type scale, ranging from 1 (definitely false) to 4 (definitely true) to eliminate a neutral response. It recodes items that were is stated positively to reflect high scores on the attribute.

Teacher Self Efficacy Scale

The teacher self-efficacy scale is developed by Tschannen-Moran and Hoy (2001). There are 12 statements, and the scale originally consists of 9-point Likert type 1 (nothing) to 9 (a great deal). In the study, 5- point Likert type study is used. It ranges from 1 (nothing) to 5 (a great deal). To analyze the validity and reliability of the scale, a pilot study with 60 participants was conducted. The results show that the scale is valid and reliable as the Tschannem-Moran and Hoy's scale. To perform the exploratory factor analysis, first of all, the suitability of the data set for factor analysis was examined. It is seen that the KMO value is .783 and the Bartlett's Sphericity test result is significant. It is found that there are three factors that explain the 65% of the total variance. They are called as instructional strategies, classroom management, and student engagement. The reliability of teacher self-efficacy scale is measured as 0.946. Reliabilities for the teacher efficacy sub-scales were 0.91 for instruction, 0.90 for management, and 0.87 for engagement. Inter-

correlations between the subscales of instruction, management, and engagement were 0.60, 0.70, and 0.58, respectively (p<0.001).

Data Collection and Data Analysis

First of all, the demographic features of the teachers are analyzed compared to the Teacher Self Efficacy and Teacher Autonomy and EBA proficiency descriptively. Pearson correlation was conducted to identify whether any statistically significant relationship existed between teacher self-efficacy and teacher autonomy. Regression analysis is conducted to determine the extent to which self-efficacy and autonomy can predict the proficiency of EBA usage. Since the main assumption of running regression – normality of distribution and correlation between each pair of variables was observed to be significant.

Skewness and Kurtosis Values

Table 1. Skewness and kurtosis values

Scales and Subscales	Skewness	Std. D	Kurtosis	Std. error
Teacher Self-Efficacy Scale (TSES)	-0.32	0.121	-0.945	0.241
▪ Student Engagement	-0.317	0.121	-0.765	0.241
▪ Instructional Strategies	-0.514	0.121	-0.713	0.241
▪ Classroom Management	-0.361	0.121	-0.905	0.241
Teacher Autonomy	-0.454	0.121	-1.133	0.241
▪ General Teaching Autonomy	-0.328	0.121	-1.113	0.241
▪ Curriculum Autonomy	-0.467	0.121	-1.106	0.241
EBA Proficiency Scale	-0.512	0.121	-0.498	0.241

The skewness and kurtosis values of the normal distribution in numerical variables were found by calculating and are shown in Table 1. According to the rules of normal distribution, skewness values should be between ±1.5 (Tabachnick, Fidel and Ullman, 2007). In this context, it was observed that all scales exhibited a normal distribution.

Ethics committee approval process

The ethics application for the study was made on 04/08/2020 and the research was carried out with the approval of Gaziantep University Ethics Commission dated 19/08/2020 and numbered 35954.

Descriptive Statistics

Table 2. Descriptive statistical findings regarding the scales applied to teachers

Scales and Subscales	N	Mean	S.D.	Min.	Max.
Teacher Self-Efficacy Scale (TSES)	408	3.74	.81	2.17	5.00
Student Engagement	408	3.63	.93	1.00	5.00
Instructional Strategies	408	3.87	.85	2.00	5.00
Classroom Management	408	3.71	.88	2.00	5.00
Teacher Autonomy Scale (TAS)	408	2.80	0.72	1.33	4.00
General Teaching Autonomy	408	2.82	0.82	1.33	4.00
Curriculum Autonomy	408	2.79	0.72	1.33	4.00
EBA Proficiency Scale	408	3.78	.89	1.58	5.00

Descriptive statistical findings regarding the scales applied to the teachers were examined and are shown in Table 2. Teacher Self-Efficacy Scale mean score of the teachers participating in the study was 3.74, standard deviation value was 0.81, the lowest calculated score was 2.17, and the highest score was 5. The proficiency score of the teachers in student participation is 3.63, the standard deviation value is 0.93, the lowest calculated score is 1 and the highest score is 5. Teachers' efficacy score in instructional strategies is 3.87, standard deviation value is 0.85, the lowest calculated score is 2 and the highest score is 5. The teachers' efficacy score in classroom management is 3.71, the standard deviation value is 0.88, the lowest calculated score is 2 and the highest score is 5.

Teacher Autonomy Scale mean score of the teachers participating in the study was 2.80, standard deviation value was 0.72, the lowest calculated score was 1.33, and the highest score was 4. Teachers' general teaching autonomy score is 2.82, standard deviation value is 0.82, the lowest calculated score is 1.33, and the highest score is 4. Teachers' curriculum autonomy score is 2.79, standard deviation value is 0.72, the lowest calculated score is 1.33, and the highest score is 4. The mean score of the teachers participating in the study on the EBA Proficiency Scale is 3.78, the standard deviation value is 0.89, the lowest calculated score is 1.58, and the highest score is 5.

The relationship between teacher autonomy, teacher self-efficacy and EBA proficiency

Table 3. Relationship between teacher self-efficacy, teacher autonomy EBA proficiency scale

Variables		TSES	SE	IS	CM	EBA PS
TAS	r	.582**	.492**	.534**	.565**	.521**
	p	0	0	0	0	0
GTA	r	.554**	.456**	.517**	.544**	.467**
	p	0	0	0	0	0
CA	r	.559**	.480**	.509**	.540**	.521**
	p	0	0	0	0	0
EBA PS	r	.631**	.519**	.578**	.629**	1
	p	0	0	0	0	0

** Correlation is significant at the 0.01 level (2-tailed).
TAS. Teacher Autonomy Scale. GTA: General Teaching Autonomy CA: Curriculum Autonomy, TSES: Teacher Sense of Self Efficacy Scale SE: Student Engagement IS: Instructional Strategies, CM: Classroom Management

The correlation levels between Teacher Self-Efficacy Scale, Teacher Autonomy Scale and their sub-scales scores were examined and are shown in Table 3. Pearson Moment Correlation is used to investigate the relationship between the teacher autonomy and the teachers' self-efficacy scale. A moderately positive relationship was found between teacher self-efficacy scale and teacher autonomy scale (r=.407), general teaching autonomy (r=.554) and curriculum autonomy scores (r=.559) (p<0.05).

A moderately positive relationship was found between teacher autonomy scale and teacher self-efficacy scale (r=.582), student engagement (r=.592), instructional strategies efficacy (r=.534), and classroom management efficacy scores (r=.565) (p<0.05). It means that the more teachers have autonomy, the more their self-efficacy increases. There is a positive meaningful relationship between teacher self-efficacy and teacher autonomy.

The relationship levels between teacher self-efficacy scale, its sub-dimension scores and EBA proficiency and were examined and are shown in Table 3. A moderately positive relationship was found between the EBA proficiency scale and teacher self-efficacy scale (r=.631), student engagement (r=.519), instructional strategies (r=.578) and classroom management (r=.629) (p<0.05). The teacher self-efficacy contributes to the proficiency of EBA usage.

The relationship levels between the Teacher Autonomy Scale, its sub-sales scores and the EBA-proficiency scale were examined and are shown in Table 3. A moderately positive relationship was found between EBA proficiency scale and teacher autonomy scale (r=.521), general teaching autonomy (r=.567) and curriculum autonomy scores (r=.521) (p<0.05).

Regression analysis results regarding the predicting the usage of EBA by teacher autonomy and teacher self-efficacy

In this study, the factors affecting the teacher proficiency scores related to EBA and the effect ratios of the factors are examined. In the model, teacher self-efficacy and teacher autonomy were determined as independent variables. Regression analysis is made for one dependent variable and the other changing variables (Sykes, 1993). The effect of these independent variables on the dependent variable of EBA proficiency was examined by multiple regression analysis. It was seen that the relationship between dependent variables and independent variables was linear. It was also observed that there was no multicollinearity problem, that is, there was no high level of correlation between the independent variables (VIF values <10). In the multiple regression analysis of this model, the model was found to be statistically significant (F $(2,405)$=154.9 $p<0.01$). The independent variables explain 43% of the changes in teachers' EBA proficiency.

Table 4. Multiple regression analysis for the factors affecting teacher efficacy related to EBA Scale

Variable	B	Std. error$_B$	β (Beta)	T	p	Tolerance	VIF
EBA	.940	.164		5.714	.000		
TSES	.543	.050	.495	10.775	.000	0.662	1.511
TAS	.287	.057	.232	5.056	.000	0.662	1.511
R=0.658	R^2=0.43		F (2.405)=154.9, *p=0.000*				

Multiple regression analysis was carried out for the variables affecting teachers' EBA proficiency scale, and it is given in Table 4. According to the standardized regression coefficient (β), the order of importance of the independent variables on teachers' EBA proficiency; teacher self-efficacy and teacher autonomy. When the t-test results of all independent variables were analyzed, it was seen that all variables had a significant effect on teachers' EBA proficiency scale. This model shows that as teacher self-efficacy and teacher autonomy increase, EBA proficiency of the teachers will increase. In other words, when all values in the model are kept constant, when teacher self-efficacy increases by one point, it is seen that there will be a 0.495-fold increase in teacher proficiency related to EBA. In addition, it has been observed that when teacher autonomy increases by one point, there will be a 0.232-fold increase in teacher proficiency related to EBA.

Discussion

In the current study, there is a significant relation between teacher self-efficacy and teacher autonomy. In the literature, there are studies which corroborates autonomy and self-efficacy. In a study, Skaalvik and Skaalvik (2009) found that the teacher autonomy and teacher self-efficacy is related to each other. In another study, Federici (2013) carried out an analysis with 1818 principals from Norwegian Population. The study states that there is a positive relation between self-efficacy and job autonomy. According to Social Cognitive Theory proposed by Bandura (1997) self-efficacy has an effect on the individuals', that is to say, on how they perceive the outside chances. Teachers with lower self-efficacy focus on more obstacles they face. On the other hand, efficacious teachers are more motivated to gain more autonomy by focusing on possibilities and taking necessary steps rather than limitations. Sökmen and Kılıç (2019) conducted a study with 716 primary school teachers with the aim of finding out the relation among the teacher self-efficacy,

autonomy, burn out, engagement and job satisfaction. The teachers with high self-efficacy have feelings about themselves related to that they can succeed anything easily in their jobs. The teachers take their own responsibilities for the outcomes as an autonomous individual. At the end of the analysis the findings show that teacher self-efficacy predicts the teacher autonomy positively (Boz, 2014; Mickel, 2015) To sum up and respond to first research question, the findings are in the same line with the literature.

Another result of the present study found out a statistically significant correlation between teacher self-efficacy and EBA proficiency scale. In the literature review, it is stated that there is no study on the relation between these variables. However, there indeed are some studies that can explain the results of the current study. Even though the earlier studies did not focus on EBA itself, the studies intended to explain the relation between the teacher self-efficacy and technology and digital dimensions. Guskey (1988) states that teachers who have high self-efficacy beliefs are open to use new teaching methods. It means that using new technological materials for teaching purposes is related to the teacher self-efficacy beliefs. In the same line with Tschannen Moran and Hoy (2001) corroborates the current studies' findings. The study claims that the teacher's effort for teaching is related to the teacher self-efficacy levels. Another study emphasizes that self-efficacy is a source for overcoming the negative situations in distance learning during the COVID-19 pandemic. It can be concluded that the high level of teacher self-efficacy contributes to the distance teaching procedures of the teachers in COVID 19 period. (Rabaglietti et al, 2021) Another study reveals that the teachers with high self-efficacy during the distance learning period received trainings about technology usage or they used actively these technological tools (Yasemin et al, 2021). It is in the same line with the beliefs of the teachers shaped by the old experiences. In the current study, the proficiency of EBA usage also affect the self-efficacy levels of the teachers in new era of the education. The research by Arpacı (2017) aims to investigate the role of the self-efficacy and the usage of distance education tool, called LMS. Although the tools are different from each other, the findings of the study supports the current findings that the teacher self-efficacy influences the perception of the usage easiness of the technology. In other words, the perception of teachers about themselves affect how the teacher's attitudes change towards the distance education tools. People who trust their capacity and competence see the difficult tasks as something to be achieved not as impediments to escape and they can heal themselves quickly after any failure (Bandura, 1997) Another research studies the role of self-efficacy while using technological programs (Blonder et al., 2013) The participants of the study attended sessions on video-editing and using YouTube in their classrooms. At the end of the study the teachers with high self-efficacy continue to use editing for their teaching even though all of the teachers have taken the same course. Zimmerman (2000) says that efficacy beliefs are strongly related to the future behaviors of the people and those beliefs are predictable for the behaviors of the individuals. The correlation is found in another study indictaing that self-efficacy beliefs of the teachers can be predictors of their technology usage and the other instructional things for teaching (Sangkawetai et al.,2020). In light of the findings of the current study teacher autonomy is significantly correlated with the EBA proficiency and usage of the teacher. Distance learning gains importance in each passing day. The relation between learner autonomy and the usage of distance learning or e learning tools have been studied and questioned for so many times. Nevertheless, the role teacher autonomy in distance learning is uninvestigated compared to the other dimensions of distance learning. In the literature review, it is seen that there are not many studies related to that question. Still, there are some studies which support the current findings of the study. Gupta and Pathania (2021) study the effect of Google Classroom on teacher education. The study states that thanks to the platform the students could access the learning materials easily. Thus, the students could have

the chance to improve their capacity of autonomy and follow the lesson materials at their own pace thanks to Google Classroom supported by the teachers' sharings which are handouts, assignments and asks. In the current study, the usage of EBA which is distance education tool and the teacher autonomy correlated positively. It means that teachers who carry the characteristics of autonomous teachers reflect it to their teaching choices such as using EBA discussions or sharing posts and enhance their students' learning activities by enabling the autonomy of the students. In the literature, self-autonomy can be defined as the capacity to operate the teaching with the help of inner competence of teachers. (Benson, 2011; Martinez, 2008) For that statement, it is the proof that autonomous teachers' responsibility is to give the learners freedom to improve their own learnings. Another study is conducted with the pre-service teachers with the aim of investigating the teacher autonomy and ICT competency. The results of the study show that the teacher autonomy and the ICT competency is related to each other positively (Wu and Wu, 2018). With regard to the correlation and regression analyses of data, it could be deduced that there exists a statically significant relationship between teacher self-efficacy and teacher self-autonomy in predicting the usage of EBA and its proficiency. There is a significant correlation among teacher self-efficacy, teacher autonomy and EBA usage and proficiency. In addition to that, the regression analysis shows teacher self-efficacy contributes significantly to EBA proficiency and also act as predictors of it.

Conclusion

The current study is different form the relevant studies because it tries to investigate the relation among teacher self-efficacy, teacher autonomy and EBA proficiency. In addition to that, the study is conducted in the distance learning era which is also caused by the COVID-19 process. In this regard, significant implications can be inferred from the current study. It is clear that teacher self-efficacy and teacher autonomy contribute to the EBA proficiency of the teachers. On that account, the teachers have to be careful about improving their autonomy and efficacy levels. Teachers should be aware of the importance of the technological tools and platforms for their jobs too. On the other way around, if teachers have difficulty with usage of online platforms, the teachers have to keep in mind it could be related to their self-efficacy and autonomy levels. Teacher education system has to emphasize the importance of teacher autonomy and teacher self-efficacy while teaching the design of curriculum. In the literature, lots studies show that it is important to have training for technology usage. The education system should aim to give teachers the required technological information. Thanks to these technological competences of the teachers supported by the education system of universities, teachers will improve their self-images in their belief system, and they will be more autonomous in taking their own decisions. This results in being more proficient in using technology for teaching purposes. In the current study, from the minor perspective, it is proved that the demographic variables do have effect on teacher self-efficacy and the teacher autonomy levels of the teachers. These variables are the contributors of the proficiency of EBA usage. Thus, teachers need to be careful about the demographical findings. The changing education system needs to be analyzed with its all subcomponents. The present study tried to investigate the usage of online education tool EBA because of the pandemic.

Recommendations

The present study carried out to find out the relation among the teacher self-efficacy, teacher autonomy and the usage of EBA. In the literature, there is no study which focuses on this perspective of the technology usage. Thusly, the present study foresees how important technology will become for future teachings. For the quality of distance learning, the policy

makers have to keep in mind that the teachers' usage of technological tools are correlated with their autonomy and efficacy levels. Teachers can get enough pedagogical knowledge for online teaching in the teacher training programs, which is actually one of the most important obstacles that lowers teacher self-efficacy levels. The program development studies can be studied for future research. Furthermore, assessment strategies can be developed for online teachings. In addition to that, another obstacle was not to have access to the internet and low literacy levels of the users who are teachers and the students. These technological problems can be solved, and assuring the efficacy and autonomy levels of teachers and students can be possible. (Moser et al.,2021) School administrators' self-efficacy and autonomy level correlations can be studied in relation to crisis management as well. At a micro level, school administrators can have an emergency plan so that they can apply this during any situation. Also, they have to attend trainings for crisis management or leadership in technological platforms because it is important for both teachers and students to see their path. They can be made aware of teacher efficacy and teacher autonomy related to the usage of the technological tools and it means that efficacy and autonomy is related to the quality of education and to even student achievement. School administrators can support teachers thanks to their feedback. This topic could be advanced by studying on different variables. As it is stated in the limitations, the study was conducted with only EFL teachers in Gaziantep. For this reason, prospective studies can concentrate on private school teachers and can be carried out in the other districts of the country. In this study, quantitative research method is used. For further research interviews or longitudinal approaches could be used. The study focused on the relationship among the teacher self-efficacy and the teacher autonomy and the proficiency of EBA. In the future, other variables related to teachers could be combined to get a better understanding for the success of distance learning. Although the study shares some important results, it has some limitations to be shared. Because the participants were selected through convenience sampling. The number of the participants (n=408) could be one of the limitations of the study. Nevertheless, the data is distributed normally. The current study is conducted in only Gaziantep district, Türkiye. As the study is about EBA, which is a program implemented in state schools, the participants were selected from state schools. No participants from private schools or universities were recruited in the study.

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