

INVESTIGATION OF SELF-EFFICACY BELIEFS AND PERCEPTIONS OF ENGLISH LANGUAGE TEACHERS TOWARDS FACE-TO-FACE AND ONLINE EDUCATION¹

İNGİLİZCE ÖĞRETMENLERİNİN YÜZ YÜZE VE ÇEVİRİM İÇİ EĞİTİME YÖNELİK ÖZ YETERLİK İNANÇLARININ VE ALGILARININ İNCELENMESİ

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Abstract: This study aims to reveal the self-efficacy beliefs of English language teachers regarding face-to-face and online education. The study used an explanatory mixed-method research design, with quantitative analysis preceding qualitative analysis. The Teacher's Self-Efficacy Scale (TEBS-Self) (Dellinger et al., 2008) and the Michigan Nurse Educators' Sense of Competence for Online Teaching Scale (MNESEOTS) (Robinia, 2008) scales were used for the study. 220 English language teachers participated in completing the scales, and 10 participated in semi-structured interviews that the researchers devised and piloted. The study's results indicated that face-to-face teachers had greater self-efficacy views than those who taught online. Experienced teachers had higher levels of self-efficacy beliefs than inexperienced teachers, depending on the variables, including school type, gender, and experience. However, there was a significant difference in teachers' self-efficacy views based on teaching experience. The results of semi-structured interviews also highlighted the value of face-to-face contact and prompt feedback while acknowledging the flexibility and accessibility of online education.

Keywords: *self-efficacy beliefs, teacher perceptions, face-to-face education, online education, teacher training*

Özet: Çalışmanın amacı, Türkiye'de çalışan İngilizce öğretmenlerinin yüz yüze ve çevrim içi derslere yönelik öz-yeterlik algılarının belirlenmesidir. Çalışma, nicel analizden sonra nitel analizin geldiği karma yöntemli, açıklayıcı bir yaklaşım kullanmıştır. Çalışmada, Öğretmen Öz-Yeterlik Ölçeği (TEBS-Self) (Dellinger ve ark., 2008) ve Michigan Hemşire Eğitmcilerinin Çevrim İçi Öğretim İçin Yeterlilik Duygusu Ölçeği (MNESEOTS) (Robinia, 2008) kullanılmıştır. 220 İngilizce öğretmeni ölçekleri doldurmaya katılmış ve 10'u araştırmacılar tarafından tasarlanan ve pilot olarak uygulanan yarı yapılandırılmış görüşmelere katılmıştır. Nicel analiz sonuçlarına göre, yüz yüze ders veren öğretmenlerin öz yeterlik görüşleri, çevrim içi ders verenlere göre daha yüksek düzeydedir. Deneyimli öğretmenlerin, okul türü, cinsiyet ve deneyim gibi değişkenlere bağlı olarak öz-yeterlik inançları konusunda, deneyimsiz öğretmenlere göre daha başarılı oldukları keşfedilmiştir. Ancak öğretmenlerin öz-yeterlik görüşlerinde deneyime göre kayda değer bir farklılık bulunmuştur. Yarı yapılandırılmış görüşmelerin sonuçları aynı zamanda yüz yüze etkileşimin ve hızlı geri bildirim değerini vurgularken, çevrim içi öğrenmenin esnekliğini ve erişilebilirliğini de kabul etmiştir.

Anahtar Kelimeler: *öz-yeterlik inançları, öğretmen algıları, yüz yüze eğitim, çevrim içi eğitim, öğretmen yetiştirme*

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Introduction

A second language is essential today, and speaking English facilitates communication worldwide. It has been the standard language for various fields, including politics, business, and science. Thus, qualified English language teachers are needed (Moeller & Catalano, 2015). The qualifications of teachers are crucial to language learning. Since today's learners are digital natives and possess the information, skills, and competencies needed in the digital age, teachers are lifelong learners who can relate to them. English language teachers should possess language proficiency, assessment and evaluation skills, classroom management, instructional strategies, relationships with education stakeholders, and student achievement and involvement. These requirements and skills are enhanced when English language teachers have high self-efficacy beliefs and perceptions. A great deal of educational research has demonstrated that teachers' attitudes, beliefs, and perceptions affect their knowledge and teaching effectiveness (Bandura, 1999; Caner & Aydin, 2021; Lazarides et al., 2021; Pajares, 1992; Tschannen-Moran et al., 1998).

In recent years, many institutions have been compelled to switch from traditional face-to-face instruction to online instruction with the global impact of the COVID-19 epidemic on education systems. Therefore, to ensure that English language teachers are sufficiently equipped to conduct both face-to-face and online learning programs effectively, it is imperative to understand their self-efficacy and attitudes toward both forms of education (Caner & Aydin, 2021). However, research on teachers' self-efficacy in face-to-face and online learning environments is scarce. Nevertheless, the studies conducted by Gencer and Cakiroglu (2007), Navnyko (2015), and Yıldırım (2021) concentrate on either face-to-face or online education. Few research has examined both modes of educational media using the same sample. Since the term "online education" is still relatively new, there has been little research done in the literature on teachers' self-efficacy in this setting (Assuncao Flores & Gago, 2020; Işık & Bahat, 2020; König et al., 2020). This study is expected to close this gap in the literature and contribute to our understanding of the self-efficacy attitudes held by English language teachers in both types of instruction.

This study aims to determine the self-efficacy beliefs and perceptions of English language teachers about face-to-face and online teaching and the relationship between the teachers' self-efficacy beliefs and practices. Research has indicated a positive correlation between instructors' self-efficacy beliefs, their teaching practices, and student accomplishment (Rashidi & Moghadam,

2014). In addition, the demand for online education is developing significantly. To make sure that online education is interesting and engaging for students, it can be helpful to understand the self-efficacy views of English language teachers concerning this medium (Hodges et al., 2020). Nonetheless, there are significant differences between face-to-face and online teaching, so it is essential to examine each mode of instruction separately. The results of this study might assist schools, and other educational institutions improve effective training programs for English language teachers to change their beliefs of self-efficacy regarding online education.

Literature Review

Teacher Self-Efficacy

Self-efficacy is the belief that one can organize and execute the steps to achieve specific goals (Whyte et al., 1997). In broad terms, self-efficacy encompasses a variety of self-efficacy kinds, including teacher and professional self-efficacy. Professional self-efficacy is an individual's innate belief in their ability to accomplish a certain job (Schyns & Von Collani, 2002). Conversely, teacher self-efficacy refers to the instructor's belief that they can influence even the most challenging and unmotivated students to study (Guskey & Passaro, 1994). A teacher's perception of his/her ability to influence students' progress is measured by their teacher's self-efficacy. Teachers and researchers continue to be interested in teacher self-efficacy since effective student outcomes are the cornerstone of every educational system. These factors include gender, grade level, academic achievement, professional seniority, in-service training status, and the kind of faculty department from which they graduated. The factors that significantly affect teacher performance include self-assurance, proximity to students, self-management, and learner readiness, according to a mixed-method study in 25 countries during the COVID-19 pandemic (Koruyan et al., 2022). The study highlights educators' crucial role in augmenting student motivation, autonomy, collaboration, and engagement, especially in face-to-face learning environments, by incorporating interactive tasks and humanistic approaches. However, it also highlights the potential hindrances to learning development caused by students' reluctance, inadequate preparation, and contextual factors. This study also addresses the educational, technical, and psychological elements of online education.

English language teaching, like other academic subjects, had difficulties during the Covid-19 pandemic. On the other hand, the usage of online English language teaching before the pandemic,

and the comfort level that some English language teachers and students had with online instruction, worked to their benefit during this unsettling time (Bailey & Lee, 2020). With the development of technology, English language instruction has been greatly influenced, and online language learning has become feasible (Bailey & Lee, *ibid.*). Thus, the review research that looks at how English was taught online in a crisis setting during the first year of the COVID-19 outbreak may offer crucial insights into challenges with both pedagogy and techno-pedagogy (Erarslan, 2021). The significance of preserving pre-service teachers' high teacher self-efficacy between initial teacher education and beginning their teaching careers in schools was emphasized by Ma et al. (2021). Different support strategies were proposed by Wang et al. (2016) to encourage high teacher self-efficacy (Gordon et al., 2023).

In terms of different variables such as gender, teaching experience, school type, or departments from which teachers graduated, studies found fluxional results. Some studies found no direct relationship between gender and self-efficacy levels of teachers (Esen, 2012; Gülistan et al., 2017; Üstüner et al., 2009; Yenen, 2018), while others, for example, Zheng et al. (2019) found that Chinese teachers' self-efficacy views may be influenced by their gender. Subsequently, İnceçay and Dollar (cited in Ercan, 2023), demonstrated that English language teachers might be self-efficacious in various contexts and that their approach to teaching English might evolve. Lastly, interviews revealed that most EFL teachers in Türkiye were dissatisfied with their training, particularly with the brief teaching practicum time.

Face-to-Face Education

Long-term connections between teachers and students are forged during regular classroom encounters (Pennings et al., 2014). Teachers and students must be physically present using this educational mode and meet at predetermined times and places. In a traditional classroom setting, students engage in pedagogical exchanges with experienced teachers on a timetable within official educational institutions. Students and teachers need to be in the same space at the same time for face-to-face instruction to occur. There should be a set curriculum and one-on-one contact between teachers and students of the same age and skill level. With these requirements in mind, this educational medium may be helpful, particularly for hands-on training and highly effective teaching methods in developing skills and attitudes. Furthermore, networking chances and

academic performance are facilitated by trainers and students collaborating in the same space (Gillies, 2003).

Online Education

Web-based or internet-based distance learning is commonly referred to as online education. Both professors and students may work at their own speed from any location. Asynchronous and synchronous learning is included in online education. Synchronous learning involves real-time contact between professors and students via video, audio, and communication software. More extended-distance learners may more easily access education thanks to online learning, which offers various instructional strategies to enhance the learning process. Online learning is structured differently from traditional education, presenting unique opportunities and difficulties (Anderson, 2004). Academic institutions may now provide more access across longer distances and use the Internet to carry out traditional classroom training.

Previous research has indicated that the characteristics of teaching differ significantly between face-to-face and online classroom environments and examining teachers' self-efficacy beliefs toward both modes of education may be necessary. Thus, this study aims to seek answers to these questions:

1. What are the self-efficacy beliefs of English language teachers in Türkiye about face-to-face and online education in terms of gender, school type, and teaching experience?
2. Is there any relationship between English language teachers' self-efficacy beliefs about face-to-face and online education?
3. How do English language teachers perceive the advantages and disadvantages of face-to-face and online education, and how do their perceptions relate to their self-efficacy beliefs regarding each mode of education?

Methodology

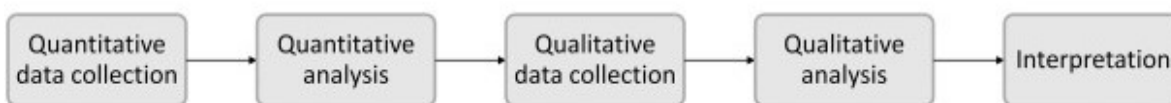
Research Design

In this study, explanatory mixed-method research integrated quantitative and qualitative techniques were used in a single study (Creswell et al., 2004; Creswell, 2009; Creswell & Plano Clark, 2011).

This approach was selected because the research necessitated a thorough comprehension of the phenomena, allowing scholars to get a deeper and more nuanced grasp of the phenomenon. Quantitative and qualitative approaches' unique benefits and drawbacks complement one another (Lewitt et al., 2018). The validity and reliability of the study's conclusions are increased when quantitative and qualitative methodologies are combined (Figure 1).

Figure 1.

Explanatory sequential mixed method research design (Creswell, 2009, p.193)



The current study first used online scales for Turkish EFL teachers in Türkiye to gather quantitative data. Semi-structured interviews were applied to collect qualitative data following the completion of the quantitative phase to get a more in-depth explanation of the results of the quantitative phases. Table 1 presents the general research design.

Table 1

Research Design by Research Questions

Quantitative Data	Qualitative Data
Research Questions 1 & 2	Research Question 3
TEBS-Self & MNESOETS scales	Semi-structured interviews

Publication Ethics

In terms of ethical concerns, Süleyman Demirel University's Institute of Educational Sciences granted approval by the Ethical Committee on June 14, 2022, under reference number 122/22. The study's goal, the methods used to gather the data, and the participants' ability to discontinue participation at any moment were explained. All subjects gave their informed permission before beginning the study.

Participants

220 Turkish EFL teachers in public and private schools participated in the quantitative phase of the research, one teacher participated in the pilot study and 10 EFL teachers, working in public (70%) and private (30%) and in the cities Afyon, Ankara, Çorum, Isparta, İstanbul, Kayseri and Konya, participated in the semi-structured interviews in the qualitative phase. The participants were selected using the *purposive sampling method* (Dörnyei, 2007). Email, Telegram, WhatsApp, and social networking sites (SNS) were used to transmit scales, and Zoom was used for interviews. The participants' demographic data is displayed below:

Table 2

Information about the Participants for the Scales

Demographic Information		N=220	
Gender	Frequency (f)	Valid Percent (%)	
Female	141	64,1	
Male	79	35,9	
Teaching Experience			
0-5 year (s)	58	26,4	
6-10 years	80	36,4	
11-20 years	68	30,9	
20 years and over	14	6,4	
Working in			
Public school	151	31,4	
Private school	69	68,6	
School Type			
Primary school	59	27,1	
Secondary school	97	44,5	
High school	67	28,4	
Graduated Department			
ELT	115	52,5	
English Language and Literature	59	26,9	
Other	46	20,6	

Data Collection and Analysis

In the quantitative phase of the investigation, two distinct scales were employed. *Teacher's Self-efficacy Scale (TEBS-Self)* (Dellinger et al., 2008) aims to gauge teachers' levels of self-efficacy regarding their face-to-face instruction. The Cronbach's Alpha is .913 which indicates excellent internal reliability.

The second scale, the *Michigan Nurse Educators' Sense of Competence for Online Teaching Scale (MNESEOTS)* (Robinia, 2008) aims to measure teachers' levels of self-efficacy regarding their online instruction. The scale consists of 32 items, and the Cronbach's Alpha is .964 which indicates excellent internal reliability.

The third instrument used in the study is a semi-structured interview. Firstly, the results from the online scale were carefully examined and categorized into relevant themes that represented the key elements of teacher self-efficacy in both types of learning environments. The questions for the semi-structured interview were developed based on these themes. The interview questions were written in combination with the themes and items of the online scales to guarantee coherence and consistency. Expert opinions were sought to verify the interview questions' reliability and clarity. The pilot study was carried out with one EFL teacher. The pilot study made it feasible to evaluate the interview questions thoroughly and identify any potential flaws or ambiguities that needed clarification. Some of the questions were rewritten and enhanced considering the pilot study's input to ensure their applicability and capacity to elicit insightful answers from the participants.

To ensure the validity and reliability of the scales, Cronbach's Alpha was computed. It was discovered to be .913 for TEBS-Self and .964 for MNESEOTS. The quantitative data were examined via the SPSS 25. To determine whether the data were regularly distributed, skewness and kurtosis values, numerical testing (Shapiro-Wilk and Kolmogorov Smirnov tests), and visualization (histograms and Q-Q plots) methods of analysis were employed. To verify the inter-coder reliability of the interviews, MAXQDA 22 was used. The categories in the data were sorted, defined, and recognized by two separate raters, proving the validity of the qualitative analysis. Inter-coder agreement was .91, indicating a high degree of reliability and that raters had reached a consensus on the coding and classification of the data.

Results

This study aims to provide insights into English language teachers' self-efficacy beliefs about the two modes of education and how these beliefs affect their instructional strategies. The results of this study contribute to a better understanding of the variables influencing the self-efficacy beliefs and perceptions of English language teachers about face-to-face and online learning environments, as well as how these beliefs could be reinforced to enhance instruction and learning in both settings.

Quantitative Research Findings

RQ1: What are the self-efficacy beliefs of English language teachers in Türkiye about face-to-face and online education in terms of overall mean, gender, school type, and teaching experience?

The first research question examined English language teachers' general self-efficacy beliefs about face-to-face and online teaching. The mean score of the teachers' face-to-face self-efficacy beliefs was determined in line with the first study question. A 4-point Likert scale is used in TEBS-Self. It is made up of 31 items. Table 4 below displays the mean scores of the TEBS-Self, which were used to determine teachers' face-to-face education self-efficacy beliefs. The overall mean score ($M= 3,4676$) indicates high self-efficacy beliefs of teachers about face-to-face instruction.

Table 4

Mean scores of TEBS-Self

Item	N	Mean
F2F-Self 1	220	3,27
F2F-Self 2	220	3,44
F2F-Self 3	220	3,36
F2F-Self 4	220	3,58
F2F-Self 5	220	3,50
F2F-Self 6	220	3,47
F2F-Self 7	220	3,38
F2F-Self 8	220	3,55
F2F-Self 9	220	3,42
F2F-Self 10	220	3,52
F2F-Self 11	220	3,45
F2F-Self 12	220	3,48
F2F-Self 13	220	3,38
F2F-Self 14	220	3,44
F2F-Self 15	220	3,52
F2F-Self 16	220	3,52
F2F-Self 17	220	3,50
F2F-Self 18	220	3,57
F2F-Self 19	220	3,45
F2F-Self 20	220	3,42
F2F-Self 21	220	3,43
F2F-Self 22	220	3,54

F2F-Self 23	220	3,49
F2F-Self 24	220	3,56
F2F-Self 25	220	3,43
F2F-Self 26	220	3,52
F2F-Self 27	220	3,35
F2F-Self 28	220	3,41
F2F-Self 29	220	3,52
F2F-Self 30	220	3,49
F2F-Self 31	220	3,55
Scale Mean	220	3,4676

On the other hand, Table 5 displays the mean scores of the MNESEOTS, which were used to determine teachers' self-efficacy beliefs about online teaching. The overall mean score ($M=5,5571$) indicates a modest level of self-efficacy beliefs of teachers regarding online teaching.

Table 5

Mean scores of the MNESEOTS

Item	N	Mean
Online Self 1	220	5.31
Online Self 2	220	5.02
Online Self 3	220	5.46
Online Self 4	220	5.41
Online Self 5	220	5.50
Online Self 6	220	5.63
Online Self 7	220	5.76
Online Self 8	220	5.60
Online Self 9	220	5.52
Online Self 10	220	5.58
Online Self 11	220	5.61
Online Self 12	220	5.50
Online Self 13	220	5.50
Online Self 14	220	5.41
Online Self 15	220	5.56
Online Self 16	220	5.56
Online Self 17	220	5.51
Online Self 18	220	5.52
Online Self 19	220	5.43
Online Self 20	220	5.65

Online Self 21	220	5.64
Online Self 22	220	5.42
Online Self 23	220	5.60
Online Self 24	220	5.69
Online Self 25	220	5.50
Online Self 26	220	5.68
Online Self 27	220	5.61
Online Self 28	220	5.40
Online Self 29	220	5.45
Online Self 30	220	6.00
Online Self 31	220	5.88
Online Self 32	220	5.90
Scale mean	220	5,5571

As is seen in Table 6, male and female averages on the "Online Self-efficacy Mean Score" measure are 111.66 and 109.85, respectively, which are close to one another. However, on the "F2F Mean Score" assessment, males score higher than women (M=108.21) with an average rank of 114.58 for males. This result implies that males consider themselves better than women in face-to-face education.

Table 6

Mann-Whitney U Test Ranking Average by Gender

	Gender	Ranks		
		N	Mean Rank	Sum of Ranks
Online Self-Mean Score	Man	79	111.66	8821.50
	Woman	141	109.85	15488.50
	Total	220		
F2F Mean Score	Man	79	114.58	9052.00
	Woman	141	108.21	15258.00
	Total	220		

Furthermore, as there is no statistically significant difference between men and women in this measurement, the p-value ($p= 0.475$) in the Mann-Whitney findings below is still larger than 0.05.

Furthermore, Table 7 below presents the Mann-Whitney by gender for online teaching ($p=0.839$) and face-to-face teaching ($p=0.475$). The findings indicate that there is no statistically significant distinction between the genders in this assessment.

Table 7

Mann-Whitney U Test by Gender

	Online Self-Mean Score	F2F Mean Score
Mann-Whitney U	5477.500	5247.000
Wilcoxon W	15488.500	15258.000
Z	-.203	-.714
Asymp. Sig. (2-tailed)	.839	.475

In terms of school type, the Mann-Whitney Test Ranking Average Test was used to investigate the effect of the school type. Table 8 shows that private school teachers' average rank ($M= 117.99$) is greater than that of public-school teachers.

Table 8

Mann-Whitney U Test Ranking Average by School Type

		Ranks		
	School Type	N	Mean Rank	Sum of Ranks
Online Self-Mean Score	Public school	151	111.20	16791.00
	Private school	69	108.97	7519.00
	Total	220		
F2F Mean Score	Public school	151	107.08	16168.50
	Private school	69	117.99	8141.50
	Total	220		

However, Table 9 shows that the p-value ($p= 0.236$) in the following Mann-Whitney suggests that there is no statistically significant difference in face-to-face teaching between public and private schools. Similarly, there is no statistically significant difference in this measure between public and private schools in online teaching ($p=0.810$).

Table 9

Mann-Whitney U Results by School Type

	Online Self-Mean Score	F2F Mean Score
Mann-Whitney U	5104.000	4692.500
Wilcoxon W	7519.000	16168.500
Z	-.241	-1.184
Asymp. Sig. (2-tailed)	.810	.236

For another factor, teaching experience, the teachers were separated into four groups by the years of experience they have: 0–5 years, 6–10 years, 11–20 years, and more. Table 10 presents the mean ranks of teaching experience.

Table 10

Kruskal-Wallis H Test Ranking Average by Teaching Experience

Ranks			
	Teaching experience	N	Mean Rank
F2F Mean Score	0-5 years	58	128.32
	6-10 years	80	108.80
	11-20 years	68	97.18
	20+ years	14	111.11
	Total	220	
Online Self-Mean Score	0-5 years	58	94.72
	6-10 years	80	105.74
	11-20 years	68	126.22
	20+ years	14	126.71
	Total	220	

As is seen in Table 11, the p-value for the "F2F Mean Score" measurement is 0.054, which is borderline; therefore, further information was gathered by examining the effect size (η^2 value), which was found to be .0345, suggesting a minimal influence. Based on these findings, the "F2F Mean Score" indicates a statistically negligible difference in the groups' levels of teaching experience. Furthermore, no significant differences were noted across the cohorts.

Table 11

Kruskal-Wallis H Test by Teaching Experience

	F2F Mean Score	Online Self Mean Score
Kruskal-Wallis H	7.629	9.070
Df	3	3
Asymp. Sig.	.054	.028

However, there is a statistically significant difference in the groups based on teaching experience for “Online Self Mean Score” ($p=0.028$). Furthermore, the "Online Self Mean Score" had an effect size (η^2) of about .0410, which suggests that there is a finite effect size. Consequently, the "Online Self Mean Score" test indicates a statistically significant difference in the groups' levels of teaching experience. Table 12 below provides a detailed comparison via Dunn’s Test.

Table 12

Dunn’s Test by Teaching Experience

Sample 1-Sample 2	Pairwise Comparisons of Teaching Experience				
	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
0-5 years-6-10 years	-11.013	10.976	-1.003	.316	1.000
0-5 years-11-20 years	-31.496	11.375	-2.769	.006	.034
0-5 years-20+ years	-31.990	18.951	-1.688	.091	.548
6-10 years-11-20 years	-20.483	10.497	-1.951	.051	.306
6-10 years-20+ years	-20.977	18.437	-1.138	.255	1.000
11-20 years-20+ years	-.494	18.678	-.026	.979	1.000

In the initial pairwise comparison between 0–5 years and 6–10 years, the p-value (0.316) is greater than 0.05, indicating no statistically significant difference between the two groups. After using the Bonferroni test correction, this result remained unchanged. The second pairwise comparison between 0–5 years and 11–20 years yielded a p-value of 0.006, less than 0.05, indicating a statistically significant difference between the two groups. Since the modified p-value (0.034) obtained following the Bonferroni test correction remained less than 0.05, this result remained unchanged. Given that the p-value in the third pairwise comparison (0–5 years and 20+ years) and other comparisons are greater than 0.05, there is no statistically significant difference between these groups. However, teachers in the (0–5) group exhibited lower levels of self-efficacy than in the (11–20) and (20+) groups. The results suggest that teaching experience might be a minor factor in teacher self-efficacy in online settings.

To conclude, the study found no statistically significant difference between the factors related to gender and school type. However, the study discovered a significant difference in online education between inexperienced and experienced teachers.

RQ2: Is there any relationship between English language teachers' self-efficacy beliefs about face-to-face and online education?

The second study question focused on the link between English language teachers' self-efficacy views in face-to-face and virtual learning. Between "F2F Self-efficacy" and "Online Self-efficacy," a very slight negative correlation is not statistically significant. The study's quantitative phase yielded data indicating, overall, that English language teachers' self-efficacy beliefs showed high levels of self-efficacy in face-to-face education and moderate levels in online education. As is seen in Table 3, The study found no significant relationship between the self-efficacy beliefs of English language teachers in terms of face-to-face and online education.

Table 13

Spearman's Rho Correlation between Participants' Face-to-face and Online Self-efficacy Scores

			F2F self-efficacy	Online self-efficacy
Spearman's Rho	F2F self-efficacy	Correlation Coefficient	1.000	-.030
		Sig. (2-tailed)	.	.660
		N	220	220
	Online self-efficacy	Correlation Coefficient	-.030	1.000
		Sig. (2-tailed)	.660	.
		N	220	220

Qualitative Research Findings

RQ3: How do English language teachers in Türkiye perceive the advantages and disadvantages of face-to-face and online education, and how do their perceptions relate to their self-efficacy beliefs regarding each mode of education?

To begin with face-to-face education, the participants' responses indicate that face-to-face education provides several advantages across different themes. These advantages include the ability to utilize interactive materials, build strong relationships with students, offer a supportive learning environment, and use various assessment methods to track students' progress effectively.

While some challenges, such as managing crowded classrooms or dealing with aggressive students, were mentioned as potential disadvantages, the consensus from the participants' answers is that the benefits of face-to-face education outweigh these drawbacks. Face-to-face education allows for more personalized interactions, immediate feedback, and a dynamic learning atmosphere, contributing to better student engagement and motivation. Table 14 below provides teachers' perceptions regarding face-to-face education.

Table 14

Teachers' Perceptions towards the Advantages and Disadvantages of Face-to-face Education

Themes	Codes	<i>f</i>
Disadvantages	Have problems in managing crowded classrooms	2
	Have difficulties in time management issues	1
	Handle aggressive students	1
	Handle activities disturbing class	1
Advantages	Plan and organization before class	1
	Use of technology	1
	Have good communication with students	1
	Express my expectations	1
	Ensure student focus	1
	Have a good relationship with students	1

On the other hand, regarding online education, the findings indicate that online education presents the benefit of ease and adaptability, while technical issues present difficulties for teachers and students alike. Although teachers with strong technological abilities can efficiently alleviate challenges, technical constraints like device problems and network problems can seriously impair the online learning environment. These technological issues must be resolved to guarantee an effective and smooth online learning environment. However, there were certain benefits to online learning, especially in terms of flexibility and the utilization of technology for resources and assessment. The convenience of online platforms for the delivery of content, assessment handling, and access to an extensive range of digital resources was recognized by the participants. Table 15 below provides teachers' perceptions regarding online education.

Table 15

Teachers' Perceptions towards the Advantages and Disadvantages of Online Education

Themes	Codes	<i>f</i>
Disadvantages	Face lack of organizations	1
	Face connectivity issues	1
	Have difficulty in control students	1
	Have difficulty in managing large group	1
	Cannot motivate the students	1
	Draw their attention	1
	Focus on the class	1
	Not turning on microphones	1
	Behave unethically	1
	Advantages	Use digital tools and technology
Mute the students		1

Last, regarding how teachers' perceptions might be related to their self-efficacy beliefs, the findings indicate that both modes presented difficulties. For example, large class sizes, time limits, and disruptive student behavior were mentioned as drawbacks to face-to-face education. On the other hand, there were problems with technology, less effective classroom management, and sustaining student interest and motivation in online education. However, the participants seemed to believe that the benefits of in-person education exceeded those of online education. It is possible to conclude from the qualitative data that the participants' stronger self-efficacy beliefs in face-to-face education may have originated from their more favorable perceptions of this type of instruction. Teachers tend to feel more in charge and confident in their ability to run their classes when they are in face-to-face teaching settings, where there are direct interactions and classroom dynamics. However, the drawbacks of online education, like poor classroom management and technological difficulties, affect teachers' perceptions and self-efficacy beliefs. Concerning the classroom management theme, one participant stated *"I mostly believe that I could manage classroom management during the online class. 'Mute them all' is a good option for students who cause trouble. Yet, it is really hard to achieve class management during an online class"* (P2), while another participant commented on face-to-face education *"In classroom management, my strengths: I build good relationships with the students and provide a conducive environment. Also, I persuade the students and motivate them to excel in their academics"* (P5). Similarly, about motivation in online education, one participant expressed difficulties *"It is hard to motivate the kids who only sit before the pc or mobile phones"* (P2), and another highlighted the use of positive

reinforcement “*I congratulate them and I send symbols like clapping or heart*” (P5). However, in face-to-face education, teachers felt more confident. For example, one participant said “*I do not make them feel uncomfortable. Feeling safe is the key to success. If they feel secure, they will enjoy themselves during classes. Joyful activities enable learners to have fun. Having fun brings academic success. It is all about letting them enjoy*” (P7). Overall, the findings imply that EFL teachers in Türkiye value face-to-face education more due to its advantages, and these favorable perceptions may influence teachers' self-efficacy beliefs more than those of online learning.

Discussion

This study examined the self-efficacy beliefs and perceptions of English language teachers in Türkiye concerning face-to-face and online teaching in terms of gender, school type and teaching experience. The study also investigated how English language teachers consider the benefits and drawbacks of face-to-face and online education and the connection between these views and their self-efficacy beliefs about each mode of instruction.

Concerning the first research question, regarding face-to-face education, English language teachers in Türkiye have demonstrated high self-efficacy beliefs. This result is consistent with other research carried out in Türkiye, which shows that teachers are passionate about face-to-face education despite the challenges including packed classrooms, a shortage of technology, an increase in workload, and no institutional support. This enthusiasm for face-to-face education emphasizes how teacher-student contact and communication are crucial (Balcı et al., 2019; Çankaya, 2018; Güngör & Yaylı, 2012, 2018; Meç et al., 2020; Merç, 2015; Özkara, 2019; Yıldırım, 2021).

On the other hand, English language teachers have demonstrated moderate levels of self-efficacy beliefs about online education. The study’s most significant finding is that, despite the absence of direct student connection, the teachers view online education as a competitive substitute for face-to-face education. Furthermore, the study found no significant difference in the self-efficacy views of male and female English language teachers in Türkiye for face-to-face and online education. These findings are consistent with other studies that examined the connection between gender and teacher self-efficacy (Gencer & Cakiroglu, 2007; Kavanoz et al., 2015; Navnyko, 2015; Tschannen-Moran & Hoy, 2002; Yıldırım, 2021). The study discovered no connection between teachers’ self-efficacy beliefs and school type. Regardless of the mode of education, public school teachers in Türkiye showed similar levels of self-efficacy beliefs to their private school

counterparts. This finding contradicts an earlier study (Skaalvik & Skaalvik, 2018), which discovered that the type of school might influence teachers' beliefs of their self-efficacy. One possible explanation for this paradox might be the resources and assistance that public schools offer. Last, the study found that EFL teachers' self-efficacy beliefs in online education were strongly impacted by their teaching experience levels. According to the study, novice teachers showed lower levels of self-efficacy beliefs than experienced teachers in terms of online education. Similarly, Klassen and Chiu (2010) discovered that teachers with more extraordinary experience of teaching had greater self-efficacy in controlling student conduct and upholding a supportive learning environment.

With respect to second research question, the results of the study's quantitative phase showed no meaningful relationship between these two teaching modalities. This finding contradicts previous research that found a favorable relationship between teachers' self-efficacy beliefs across various educational situations (e.g., Corry & Stella, 2018). The distinct cultural and educational background might explain the discrepancy in the findings.

Relating to the third research question, face-to-face education is considered more favorable by English language teachers in Türkiye because of its benefits for planning, motivation, and classroom climate. Compared to online education, these positive perceptions may have an impact on teachers' self-efficacy beliefs, which could lead to a greater degree of competence and confidence when it comes to providing face-to-face education. In a classroom, teachers were able to participate in real-time exchanges, non-verbal clues, and eye contact with students. At the same time, they were physically present in the classroom. These activities are crucial for successful communication and classroom management (Vekiri & Chronaki, 2008) and are desperately lacking in online education (Gao & Zhang, 2020). These variables may be attributed to teachers' favorable perceptions and increased self-efficacy beliefs, especially in face-to-face education.

Conclusion

The study provided insightful details on the self-efficacy beliefs and perceptions of EFL teachers in Türkiye toward face-to-face and online education. The results show that although teachers' self-efficacy beliefs were generally strong in face-to-face education, they were only moderate in online education. This difference implies that teachers' perceptions of their own abilities in these two

modalities of education fluctuate, depending on a variety of characteristics like face-to-face interaction, prompt feedback, and difficulties with classroom management.

The study's findings highlight the significance of understanding the unique benefits and drawbacks of both face-to-face and online education. Higher self-efficacy beliefs in face-to-face education are a result of teachers' favorable perceptions of face-to-face education, which are driven by direct student contact, motivation, instant feedback, and classroom management. On the other hand, teachers' self-efficacy may be lowered by the technical and engagement difficulties associated with online education, indicating the need for guidance and instruction.

There are important issues for professional development and teacher education. Teachers' self-efficacy can be increased by incorporating online teaching practices into teacher training programs and offering resources to handle difficulties in online education. Future studies should broaden the focus to include a variety of samples and investigate the variables affecting self-efficacy in various topic areas and educational environments.

Geniřletilmiř Trke zet

Politika, iřletme ve bilim dahil olmak zere eřitli alanlar iin standart dil olan İngilizce konuřmak dnya apında iletiřimi kolaylařtırır. Bu nedenle nitelikli İngilizce ğretmenlerine ihtiya duyulmaktadır. Dil ğreniminde ğretmenlerin nitelikleri nemlidir. Gnmzn ğrencileri dijital yerliler olduėundan ve dijital aėın ihtiya duyduėu bilgi, beceri ve yeterliliklere sahip olduklarından, ğretmenler de onlarla iliřki kurabilen ve yařam boyu ğrenen pozisyonundadır. İngilizce ğretmenlerinden dil yeterliliėi, lme ve deėerlendirme becerileri, sınıf ynetimi, ğretim stratejileri, eėitim paydařlarıyla iliřkiler ve ğrenci bařarısı ve katılımı beklenmektedir. İngilizce ğretmenlerinin z-yeterlik algıları yksek olduėunda bu gereksinimler ve beceriler artar. COVID-19 salgını kresel eėitim sistemlerini nemli lde etkilemiřtir. ğrenmenin srekliliėini saėlamak iin Trkiye’de ve dnyada birok eėitim kurumu geleneksel yz yze eėitimden evrim ii eėitime gemek durumunda kalmıřtır. Bu nedenle, İngilizce ğretmenlerinin yz yze ve uzaktan ğrenme programlarını etkili bir řekilde yrtmek iin yeterli donanımına sahip olmalarını saėlamak iin onların z yeterliliklerini ve her trl eėitime ynelik tutumlarını anlamak zorunludur. Eėitmenlerin yz yze ve evrimii ğrenme ortamlarındaki z yeterliliėine iliřkin arařtırmalar azdır. Arařtırmalar yz yze veya evrim ii eėitim zerinde yoėunlařmaktadır. Nadiren aynı rneėi kullanarak her iki eėitim medyasını da inceleyen arařtırmalar bulunmaktadır.

Bu çalışmanın literatürdeki bu boşluğu kapatması ve İngilizce öğretmenlerinin her iki öğretim türünde de sahip oldukları öz-yeterlik tutumlarının anlaşılmasına katkıda bulunması beklenmektedir.

Bu çalışma, İngilizce öğretmenlerinin yüz yüze ve çevrim içi öğrenmeye ilişkin öz-yeterlik inançlarını ve algılarını ve bu görüşlerle öğretmenlerin öz-yeterlik inançları arasındaki ilişkiyi tespit etmeyi amaçlamaktadır. Bir öğretmenin öğretmen öz-yeterlik inancına sahip olması, öğrencilerinin başarısını etkileyebileceğini düşündüğünü gösterir. Okulun hedeflerinden biri öğrenci başarısı olduğundan ders çalışmak çok önemlidir. Bununla birlikte, yüz yüze öğrenme ile sanal öğrenme arasında önemli farklılıklar vardır, dolayısıyla her birini bağımsız olarak incelemek önemlidir. "Çevrim içi eğitim" kavramı nispeten yeni olduğundan literatürde öğretmenlerin bu ortamda öz-yeterliklerine ilişkin çok az araştırma yapılmıştır. Bu açığı kapatmak ve öğretmen öz yeterliliğini artırmak için bu çalışma hem yüz yüze hem de çevrimiçi öğrenmenin ardındaki mantığı belirlemek amacıyla öğretmenlerin demografik özelliklerini incelemektedir.

Bir öğretmenin, öğrencilerin ilerlemesini etkileme becerisine ilişkin algısı, öğretmen öz-yeterliği ile ölçülür. Etkili öğrenci sonuçları her eğitim sisteminin temel taşı olduğundan, öğretmenler ve akademisyenler öğretmen öz-yeterliğiyle ilgilenmeye devam etmektedir. Bu faktörler arasında cinsiyet, sınıf düzeyi, akademik başarı, mesleki kıdem, hizmet içi eğitim durumu ve mezun olunan fakültenin türü yer almaktadır.

Bu çalışmanın amacı Türkiye’de görev yapan İngilizce öğretmenlerinin yüz yüze ve çevrim içi eğitime yönelik öz-yeterlik algılarını belirlemektir. Çalışmada, bir olguyu keşfetmek ve açıklamak için açıklayıcı karma yöntem araştırması kullanılmıştır. Bu yaklaşım, araştırma konusunun olgunun kapsamlı bir şekilde anlaşılmasını gerektirmesi ve araştırmacıların olguyu daha derin ve daha incelikli bir şekilde kavramasına olanak sağlaması nedeniyle seçilmiştir. Bu çalışma "Nasıl" ve "Neden" sorularına cevap vermeyi amaçladığından, açıklayıcı sıralı karma yöntem araştırma tasarımı kullanılmıştır. Araştırmanın nicel aşamasının katılımcılarını Türk kamu ve özel okullarında yabancı dil olarak İngilizce öğreten öğretmenler oluşturmuştur. Araştırmanın nicel aşamasına 220 Türk İngilizce öğretmeni katılmıştır. Biri projenin pilot görüşme çalışmasına, diğerleri ise nitel aşamasında olmak üzere 10 İngilizce öğretmeni yarı yapılandırılmış görüşmelere katılmıştır. Araştırmanın nicel bölümünde iki farklı ölçek kullanılmıştır. Dellinger ve diğerleri tarafından oluşturulan "Öğretmen Öz-Yeterlik Ölçeği (TEBS-Self)" (2008), bu araçlardan biridir.

Ölçeğin amacı öğretmenlerin yüz yüze öğretime ilişkin öz-yeterlik düzeylerini ölçmektir. Ölçeğin 0.913'lük Cronbach Alfa değeri mükemmel iç güvenilirliği gösterir. İkinci ölçek ise Robinia (2008) tarafından geliştirilmiş ve Michigan Hemşire Eğitimcilerinin Çevrimiçi Öğretim Yeterlilik Duygusu Ölçeği (MNESEOTS) olarak adlandırılmıştır. Ölçek her biri dokuz dereceli 32 maddeden oluşmaktadır. Sonuçta ortaya çıkan 0.964'lük Cronbach Alfa değeri mükemmel iç güvenilirliği gösterir.

Araştırmanın nitel bölümünde kullanılan araç yarı yapılandırılmış görüşmedir. Bütün bu ölçekler analiz edilmiş ve sonuçlar nitel ve nicel olarak iki aşamada sunulmuştur. Nicel sonuçlara göre;

- TEBS-Self genel ortalama puanı (M=3,4676) olup, yüz yüze eğitim için yüksek öz-yeterlik inancını gösterir. MNESEOTS genel ortalama puanı (M=5,5571) olup, çevrim içi öğrenmeye ilişkin öz-yeterlik inancının orta düzeyde olduğunu göstermektedir.
- Mann-Whitney U bulgularındaki p değeri ($p=0,475$), 0,05'ten büyük olduğu için kadın ve erkek katılımcılar arasında istatistiksel olarak anlamlı bir fark bulunmamıştır.
- Mann-Whitney U bulgularındaki p değeri (0,810)'ne göre, devlet okulları ile özel okullar arasında istatistiksel olarak anlamlı bir fark bulunmamıştır.
- İngilizce öğretmenlerinin çevrim içi eğitimdeki öz-yeterlik görüşleri, deneyim düzeylerinden güçlü bir şekilde etkilenmiştir. Araştırmaya göre yeni başlayan öğretmenler, çevrim içi eğitim konusunda deneyimli öğretmenlere göre daha düşük düzeyde öz-yeterlik görüşü sergilemişlerdir.

Katılımcıların çoğunlukla yüz yüze eğitime yönelik olumlu tutumları olduğu ancak çevrim içi öğrenmenin de uzaktan eğitim sürecince öğrencilerin gelişimine katkı sağladığını düşündüğü ortaya çıkmıştır. Katılımcılar yüz yüze eğitimde ders öncesi hazırlıklara, sınıf yönetimine yönelik tutumlara, öğrenciyi motive etme stratejilerine, dil gelişimi değerlendirme protokollerine ve sıcak bir sınıf atmosferini sürdürme çabalarına odaklandığı, çevrim içi eğitimde ise ders öncesi planlama, teknik problemler, ders esnasında kullandıkları uygulamalara odaklandıkları ortaya çıkmıştır. Yüz yüze eğitimi tercih eden öğretmenler, çevrim içi eğitimin de elzem durumlarda bir kurtarıcı olduğunu ve öğretmenlerin öz-yeterliklerinin bu eğitim şeklinde de artırılması gerektiğini vurgulamıştır.

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References

- Anderson, T. (2004). *Teaching in an online learning context. Theory and Practice of Online Learning*, 273. https://auspace.athabasca.ca/bitstream/handle/2149/758/teaching_in_an_online.pdf?sequence=1&isAllowed=y:
- Assunção Flores, M., & Gago, M. (2020). Teacher education in times of COVID-19 pandemic in Portugal: National, institutional and pedagogical responses. *Journal of Education for Teaching*, 46(4), 507-516. <https://doi.org/10.1080/02607476.2020.1799709>
- Bailey, D. R., & Lee, A. R. (2020). Learning from experience in the midst of COVID-19: Benefits, challenges, and strategies in online teaching. *Computer-Assisted Language Learning Electronic Journal*, 21(2), 178-198. https://www.academia.edu/download/55330532/Bandura1977_SelfEfficacy_for_Behavioral_Change.pdf
- Balcı, Ö., Şanal, F., & Üğüten, S. D. (2019). An Investigation of pre-service English language teachers' self-efficacy beliefs. *International Journal of Modern Education Studies*, 3(1), 41-53. <https://dergipark.org.tr/en/download/article-file/752823>
- Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology*, 2(1), 21-41. <https://doi.org/10.1111/1467-839X.00024>
- Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-efficacy: the exercise of control. *Journal of Cognitive Psychotherapy*, 13(2), 158-166. <https://doi.org/10.1891/0889-8391.13.2.158>

- Caner, M., & Aydin, S. (2021). Self-efficacy beliefs of pre-service teachers on technology integration. *Turkish Online Journal of Distance Education*, 22(3), 79-94. <https://doi.org/10.17718/tojde.961820>
- Corry, M., & Stella, J. (2018). Teacher self-efficacy in online education: A review of the literature. *Research in Learning Technology*, 26, 2047- <https://doi.org/10.25304/rlt.v26.2047>
- Creswell, J. W., Fetters, M. D., & Ivankova, N. V. (2004). Designing a mixed methods study in primary care. *The Annals of Family Medicine*, 2(1), 7-12. <https://doi.org/10.1370/afm.104>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.)*. Sage publications.
- Creswell, J. W., & Clark, V. P. (2011). *Mixed methods research*. Sage Publications. https://toc.library.ethz.ch/objects/pdf/z01_978-1-4129-7517-9_01.pdf
- Çankaya, P. (2018). The exploration of the self-efficacy beliefs of English language teachers and student teachers. *Journal of Language and Linguistic Studies*, 14(3), 12-23. <https://dergipark.org.tr/en/pub/jlls/issue/43365/528028>
- Dellinger, A. B., Bobbett, J. J., Olivier, D. F., & Ellett, C. D. (2008). Measuring teachers' self-efficacy beliefs: Development and use of the TEBS-Self. *Teaching and Teacher Education*, 24(3), 751-766. <https://doi.org/10.1016/j.tate.2007.02.010>
- Dörnyei, Z. (2007). *Research methods in applied linguistics (Oxford Applied Linguistics)*. Oxford University Press.
- Erarslan, A. (2021). English language teaching and learning during Covid-19: A global perspective on the first year. *Journal of Educational Technology and Online Learning*, 4(2), 349-367. <https://doi.org/10.31681/jetol.907757>
- Ercan, H. (2023) *Different majors, one profession: A comparison between ELT and non-ELT graduate English teachers' self-efficacy beliefs and their perceptions towards teacher training programs in Turkey*. (Publication No: 795969). [Master's Thesis, Kocaeli University]. Ulusal Tez Merkezi.
- Esen, G. (2012). *English language teachers' general and professional sense of self-efficacy: Mersin Profile*. (Publication No: 319627). [Master's Thesis, Mersin University]. Ulusal Tez Merkezi <https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp>
- Gao, L. X., & Zhang, L. J. (2020). Teacher learning in difficult times: Examining foreign language teachers' cognitions about online teaching to tide over COVID-19. *Frontiers in Psychology*, 11, 2396. <https://doi.org/10.3389/fpsyg.2020.549653>

- Gencer, A. S., & Cakiroglu, J. (2007). Turkish pre-service science teachers' efficacy beliefs regarding science teaching and their beliefs about classroom management. *Teaching and Teacher Education*, 23(5), 664-675. <https://doi.org/10.1016/j.tate.2005.09.013>
- Gillies, R. M. (2003). Structuring cooperative group work in classrooms. *International Journal of Educational Research*, 39(1-2), 35-49. [https://doi.org/10.1016/S0883-0355\(03\)00072-7](https://doi.org/10.1016/S0883-0355(03)00072-7)
- Gordon, D., Blundell, C., Mills, R., & Bourke, T. (2023). Teacher self-efficacy and reform: A systematic literature review. *The Australian Educational Researcher*, 50(3), 801-821. <https://doi.org/10.1007/s13384-022-00526-3>
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31(3), 627-643. <https://doi.org/10.3102/00028312031003627>
- Güngör, F., & Yaylı, D. (2012). Self-efficacy and anxiety perceptions of pre-service EFL teachers. In A. Akbarov & V. Cook (Eds.), *Approaches and methods in second and foreign language teaching* (pp. 227-236). IBU Publications. <https://www.academia.edu/download/39874205/Self-Efficacy-and-Anxiety-Perceptions-of-Pre-service-EFL-Teachers.pdf>
- Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. <http://hdl.handle.net/10919/104648>
- Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21(4), 343-356. <https://doi.org/10.1016/j.tate.2005.01.007>
- Işık, M., & Bahat, İ. (2021). COVID 19: Eğitimde yeni arayışlar. *Üniversite Araştırmaları Dergisi*, 4(1), 82-89. <https://doi.org/10.32329/uad.797635>
- Kavanoz, S., Yüksel, H. G., & Özcan, E. (2015). Pre-service teachers' self-efficacy perceptions on Web Pedagogical Content Knowledge. *Computers & Education*, 85, 94-101. <https://doi.org/10.1016/j.compedu.2015.02.005>
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756. <https://doi.org/10.1037/a0019237>
- Koruyan, K., Meri Yılan, S., & Karakaş, A. (2022). English teachers' beliefs and practices. A mixed-methods study of 25 countries in the covid-19 pandemic. *Asian Journal of Distance Education*, 17(1), 182-204. <http://asianjde.com/ojs/index.php/AsianJDE/article/view/629>

- König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education*, 43(4), 608-622. <https://doi.org/10.1080/02619768.2020.1809650>
- Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73(1), 26. <https://doi.org/10.1037/amp0000151>
- Lazarides, R., Fauth, B., Gaspard, H., & Göllner, R. (2021). Teacher self-efficacy and enthusiasm: Relations to changes in student-perceived teaching quality at the beginning of secondary education. *Learning and Instruction*, 73, 101435. <https://doi.org/10.1016/j.learninstruc.2020.101435>
- Ma, K., Cavanagh, M. S., & McMaugh, A. (2021). Preservice teachers' reflections on their teaching self-efficacy changes for the first professional experience placement. *Australian Journal of Teacher Education*, 46(10). 62-76. <https://ro.ecu.edu.au/ajte/vol46/iss10/4>
- Meç, A., Sağlam Ertem, İ., Şener, B. (2020). Online teaching experiences of ELT instructors. *Journal of Education, Technology and Online Learning*. 3(3), 340-362. <https://doi.org/10.31681/jetol.770418>
- Merç, A. (2015). Using technology in the classroom: A study with Turkish pre-service EFL teachers. *Turkish Online Journal of Educational Technology-TOJET*, 14(2), 229-240. <http://files.eric.ed.gov/fulltext/EJ1057362.pdf>
- Moeller, A. K., & Catalano, T. (2015). Foreign language teaching and learning. In *Elsevier eBooks* (pp. 327–332). <https://doi.org/10.1016/b978-0-08-097086-8.92082-8>
- Navnyko, K. S. (2015). *Russian novice English teachers' perceptions of themselves as English teachers*. (Publication No: 1587694). [Master's Thesis, Indiana University of Pennsylvania]. ProQuest Dissertations & Theses Global. <https://www.proquest.com/openview/8cfe3557d2711d0b4a51ca6e89595bb2/1?pq-origsite=gscholar&cbl=18750>
- Özkara, B. (2019). An investigation into the relationship between Turkish EFL teachers' self-efficacy and burnout level. *Journal of Family Counseling and Education*, 4(1), 12-24. <https://doi.org/10.32568/jfce.504499>

- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332. <https://doi.org/10.3102/00346543062003307>
- Pennings, H. J., van Tartwijk, J., Wubbels, T., Claessens, L. C., van der Want, A. C., & Brekelmans, M. (2014). Real-time teacher–student interactions: A dynamic systems approach. *Teaching and Teacher Education*, 37, 183-193. <https://doi.org/10.1016/j.tate.2013.07.016>
- Rashidi, N., & Moghadam, M. (2014). The effect of teachers' beliefs and sense of self-efficacy on Iranian EFL learners' satisfaction and academic achievement. *Tesl-Ej*, 18(2), 1-23. <http://files.eric.ed.gov/fulltext/EJ1045203.pdf>
- Robinia, K. A. (2008). *Online teaching self-efficacy of nurse faculty teaching in public, accredited nursing programs in the state of Michigan*. (Publication No: 3316933). [Master's Thesis, Western Michigan University]. <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1813&context=dissertations>
- Robinia, K. A., & Anderson, M. L. (2010). Online teaching efficacy of nurse faculty. *Journal of Professional Nursing*, 26(3), 168-175. <https://doi.org/10.1016/j.profnurs.2010.02.006>
- Schyns, B., & Von Collani, G. (2002). A new occupational self-efficacy scale and its relation to personality constructs and organizational variables. *European Journal of Work and Organizational Psychology*, 11(2), 219-241. <https://doi.org/10.1080/13594320244000148>
- Skaalvik, E. M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. *Social Psychology of Education*, 21(5), 1251-1275. <https://doi.org/10.1007/s11218-018-9464-8>
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248. <https://doi.org/10.3102/00346543068002202>
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2002, April). The influence of resources and support on teachers' efficacy beliefs. *Annual Meeting of the American Educational Research Association, New Orleans, LA*. <https://anitawoolfolkoy.com/pdfs/aera-2002-megan.pdf>
- Üstüner, M., Demirtaş, H., Cömert, M., Özer, N. (2009). Ortaöğretim öğretmenlerinin öz yeterlik algıları. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 9(17), 1-17. https://www.researchgate.net/profile/Niyazi-Oezer/publication/285376012_Ortaogretim_ogretmenlerinin_oz-

[yeterlik_abilgileri/links/567b08f308ae197583813200/Ortaogretim-ogretmenlerinin-oz-yeterlik-abilgileri.pdf](https://doi.org/10.1016/j.compedu.2008.01.003)

- Vekiri, I., & Chronaki, A. (2008). Gender issues in technology use: Perceived social support, computer self-efficacy and value beliefs, and computer use beyond school. *Computers & Education*, 51(3), 1392-1404. <https://doi.org/10.1016/j.compedu.2008.01.003>
- Wang, L. (2022). Exploring the relationship among teacher emotional intelligence, work engagement, teacher self-efficacy, and student academic achievement: A moderated mediation model. *Frontiers in Psychology*, 12, 810559. <https://doi.org/10.3389/fpsyg.2021.810559>
- Whyte, G., Saks, A. M., & Hook, S. (1997). When success breeds failure: The role of self-efficacy in escalating commitment to a losing course of action. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 18(5), 415-432. [https://doi.org/10.1002/\(SICI\)1099-1379\(199709\)18:5<415::AID-JOB813>3.0.CO;2-G](https://doi.org/10.1002/(SICI)1099-1379(199709)18:5<415::AID-JOB813>3.0.CO;2-G)
- Yenen, E. T., & Dursun, F. (2019). İngilizce öğretmenlerinin öğretim süreci öz yeterlikleri ve sınıf ortamına yansımaları. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 15(2), 607-627. <https://doi.org/10.17860/mersinefd.464253>
- Yıldırım, B. (2021). Integration of STEM into environmental education: Pre-service teachers' opinions. *Journal of STEM Teacher Institutes*, 1(1), 50-57 <http://jstei.com/index.php/jsti/article/view/5>