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EFL Teachers' Resilience Prediction Based on Academic Self-Efficacy, Problem Solving Skills, and Metacognitive Skills

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Abstract: Teachers' resilience is their perception that they are able to adapt to the difficult teaching situations, deal with obstacles, and maintain their dedication to the profession. It has been conceived as one of the most important predictors of practice teaching in ELT research, which can be influenced by various factors. This study aimed, firstly, to examine the relationship between EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills, and secondly, to explore the prediction of EFL teachers' resilience by these three variables. The study was conducted on a sample of 100 EFL teachers (50 males and 50 females) teaching English at three private language institutes of Tehran, Iran. The whole population of the study included 140 among which 100 were selected through Krejcie and Morgan's (1970) values and by convenience sampling. Four questionnaires namely "Resilience Scale (RS)", "Academic Self-Efficacy Scale (ASES)", "Problem Solving Skills Scale (PSSS)", and "Metacognitive Skills Scale (MSS)", were administered to EFL teachers simultaneously. The data collected were analyzed through Pearson product-moment correlation, regression, and one-way analysis of covariance (one-way ANCOVA). The results showed a positive and strong significant relationship between male and female EFL teachers' resilience and their problem solving skills [r = .94; p = .00] and metacognitive skills [r = .93; p = .00], as well as a positive and slight significant correlation between EFL teachers' resilience and their academic self-efficacy [r = .29; p = .00]. However, no significant difference was found between male and female EFL teachers' resilience affected by academic self-efficacy, problem solving skills, and metacognitive skills [p = 1.00]. Consequently, all the three variables of the study could significantly predict EFL teachers' resilience [F (3.96) = 569.49; p = .00]. The findings imply that EFL teachers' resilience should be further researched in an EFL context, particularly through experimental studies in which the development of resilience can be investigated by an intervention that can be a teacher education program.

Keywords: Academic self-efficacy, EFL teachers, Metacognitive skills, Problem solving skills, Teachers' resilience

Introduction

According to Beltman (2021), there are four conceptualizations of resilience. The first conceptualization is person focused that defines resilience as an individual characteristic that emerges in a traumatic moment. The second conceptualization is process focused displaying resilience as a result of the interaction of the individual and the context. The third conceptualization is context focused. Context-focused conceptualization argues that given context is of paramount importance, in addition to individual skills and strategies. In this regard, resilience is the ability to adapt to tense situations and maintain one's performance in difficult sociocultural situations (Johnson et al., 2014). The fourth conceptualization is system-focused that considers resilience as a process in which many systems inside and outside a person interact dynamically.

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Teacher resilience, or the ability to withstand the natural stresses and setbacks, is of paramount importance in all areas of education as it can produce many positive results. More specifically, resilience refers to job satisfaction, responsiveness, effectiveness, self-efficacy, interpersonal relationships, agency, abilities, autonomy, optimism, positive interpersonal feelings, empathy, and emotions (Tait, 2008; Taylor, 2013; Xie & Derakhshan, 2021). Therefore, it is possible to develop this ability in teachers through a rich teacher education program, as teachers are front-line soldiers in the fight against adversity and their emotional state and readiness can significantly change educational outcomes around the world (Derakhshan et al., 2020; Wang & Derakhshan, 2021).

During the teaching years, a teacher might have experienced challenging issues relevant or irrelevant to education (Darling-Hammond & Sykes, 2003) that demand his/her awareness of taking the best measures to fulfill the target requirements (Roeser et al., 2012). In fact, teaching is accompanied by stress (Montgomery & Rupp, 2005) and burnout (McCormick & Barnett, 2011), which negatively affect the teacher's professional and personal life. When the teacher faces difficulties with parents, co-workers, learners' low motivation in learning, work demands, and internal or external pressures, the teacher's health, work performance, and work attendance are negatively influenced (Montgomery & Rupp, 2005). In this condition, the instructor is unable to offer a well-managed and encouraging class for the students (Jennings & Greenberg, 2009). Similarly, burnout in teachers might be a fundamental challenge affecting both the teacher and students' performance (McCarthy et al., 2010). The teacher's burnout stems from the feeling that the teacher thinks his/her profession is emotionally exhausting, which causes frustration (Hultell et al., 2013). Consequently, high levels of stress, anxiety and burnout intensify instructors' inability to fulfill the training as well as learning demands, which impact their resilience (Goddard & Foster, 2001; Tait, 2008). Smith et al. (2007) defined resilience as a critical life-capacity that promotes emotional and social well-being and allows individuals to deal with life. Resilience in teaching has been considered important by researchers for three reasons: first, the teacher has the role of a model for students, and therefore, he/she has a high level of resilience that promotes resilience in students (Henderson & Milstein, 2003); second, the teaching process is difficult and complex, as a result, it requires efficient management of classroom (Hargreaves & Fink, 2012); and third, resilience is the sustained return capacity and the rapid and effective promotion of strengths in dealing with stress and can strongly influence teachers' teaching motivation (Hargreaves & Fink, 2012). As a result, the teacher is encouraged to consistently take over the existing challenges and difficulties taking place during his/her professional experience (Howard & Johnson, 2004).

The learners' attainment is one of the crucial issues of education systems. What determines the learners' academic achievement is the point that it has always been a favorite in education and education psychology (Callahan, 2005). As claimed by Abedi and Gándara (2006), some environmental, individual, cognitive and non-cognitive elements can influence beginners' academic overall performance. The variable of academic achievement performance is a multidimensional variable and impresses numerous factors that the most important of which is the teacher. The teacher and the way he/she interacts and communicates with students should be included for students'

academic achievement (Lee, 2005). If the teacher can behave in such a way as to draw the attention of all students to class activities and respect their views, he/she can influence students' behavioral performance and their academic achievements in a positive way (Darling-Hammond, 2000). Considering the teacher's key role in student academic achievement, discussion of the teacher's characteristics is highly significant. In fact, the teacher's resilience can influence the learners' achievement since his/her commitment to professions can provide a supportive learning environment for the learners to be more engaged in the classroom (Hirschkorn, 2009). There are some factors that might be in alignment with teachers' resilience, including their academic self-efficacy, problem solving skills, and metacognitive skills, which are the focus of the present study and are explained below.

Bandera (1986) defined academic self-efficacy as human beings' judgment of their skills to organize and execute activities required to obtain distinct sorts of performance. The idea has actually been defined in various ways since it was first presented. Although the meanings might vary, the individuals' perceptions of their own capabilities are common among them. Additionally, more discussion was provided for this principle, and Bandura (1997) mentioned it as a regulating system that influenced actions in four ways: with (a) implementation of cognitive procedures, (b) adoption of goals, (c) production of raised goal dedication, and also (d) expectance that goals will be accomplished regardless of setbacks. Academic self-efficacy, as specified by Bandura (1977), primarily assumes that psychological treatments construct and enhance assumptions of personal efficacy. This concept suggests that mental procedures can alter one's sense of personal efficiency (Bandura, 1982). If people think they cannot produce successful outcome by their habits, they do not have adequate inspiration to act or to overcome difficulties. Bandura (2001) stated that any other factor that can act as a guide and motivator, lies in the central belief that one has the power to create an effect through one's actions. Apart from self-efficacy, teachers' problem-solving skills play a significant role in their resilience, which is justified in the following paragraph.

Problem solving is a treatment consisting of great deals of emotional processes used for relocating from the present condition to the specific objective (Mayer, 1985). In like manner, Chaudhry and Rasool (2012) asserted that to gain objectives, it is necessary for each person to benefit from problem solving skills. Problem solving is a fundamental skill that is in alignment with changing standards, brand-new demands and changes in learning theories, making teachers to modify instructional curricula by concentrating on learning settings that help students use higher order thinking abilities (Kirkley & Foshay, 2003). Teachers' academic success is mainly dependent on their problem solving skills (Agran et al., 2002). It is believed that learners' abilities will enhance if they are associated with the problem solving and do well in discovering the solution. As a matter of fact, students' problem solving skills are improved through the analysis, synthesis and reviewing (Ültay, 2017). Therefore, nowadays the major role of the scientific research is multidimensional including transferring knowledge and skills, promoting knowledge and skills as well as making use of the brand-new knowledge to choose and fix the trouble (Irwanto et al., 2018; Shieh & Chang, 2014).

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To make certain the learning to be carried out on the preferred level, it is essential to set up metacognitive skills that results in the individuals' control in their learning behaviors. A person with sophisticated metacognitive skills accentuates the learning device, distinguishes between worthless and important information, evaluates the quality of learning, recognizes which methods should be utilized for tracking the information, saving it in short- and long-term memories, and recalling it when it is needed (Altindağ, 2008). The literature introduces different interpretations of metacognition. For instance, metacognition was depicted by Jacobs and Paris (1987) as a set of data around the cognitive processes that can be shared among people. Kapa's (2001) definition considers metacognitive skills as "mental operations, which direct the cognitive functions of a person and support a learning conceptualization" (p. 318). Hacker (1998) believed that metacognition is information about a person's knowledge, processes, cognitive and emotional state and deliberate monitoring and regulation of knowledge, processes, cognitive and emotional state. Therefore, teachers' metacognition can be assumed to be their knowledge about cognitive processes involved in their practice teaching and how they are able to regulate these processes.

Research on teachers' resilience has been mainly devoted to its relationship with some other factors, such as job satisfaction, burnout, organizational commitment, and stress (Lacaba et al., 2020; Polat & İskender, 2018). In addition, some intervention studies were also conducted on teachers' resilience affected by teacher education programs, such as mindfulness-based training (Galante et al., 2018; Sharp & Rhinehart, 2018). Galante et al. (2018) performed a mindfulness-based intervention to reinforce resilience in college students through a practical randomized regulated test. They intended to take into consideration the pedagogical elements of mindfulness-based training and to discover whether it may be helpful for the teachers' resilience in controlling their stress and anxiety. They concluded that the intervention was rather effective in aiding the teachers to promote their mental awareness in the class, which could favorably impact their technique training in decreasing their level of tension. In like manner, Sharp and Rhinehart (2018) checked out whether mindfulness-based training as Cultivating Awareness and Resilience in Education (CARE) program could affect the resilience. The individual educators' interviews were analyzed, revealing that the CARE program can be useful for the teachers' resilience and improving their specialist dimension. They suggested that for teachers to be resilient, it may be crucial to take such therapies to virtually include with the specific condition they may encounter in the classroom and be thoroughly prepared to take the most appropriate measure.

In a descriptive study, Polat and İskender (2018) explored the connection of educators' resilience with work satisfaction, fatigue, business dedication and perception of organizational environment. Concerning the research objectives, the relationship between experience, gender, age, and the level of institutes with their resilience was examined. The outcomes, which were obtained from teachers' responses to different questionnaires, exposed a considerable unfavorable connection between teachers' resilience degrees and burnout; and substantial favorable connections between educators' resilience degrees and organizational commitment, work satisfaction as well as assumption of business

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climate. To experience high-quality teaching, teachers are required to develop their resilience. In this regard, Lacaba et al.'s (2020) investigation described the consequences of educators' resilience on their commitment and performance. Findings revealed teachers' awareness of the existing challenges in their teaching practice; however, they had to develop their resilience to promote their quality teaching and demonstrate their organizational commitment.

Apart from teachers' resilience, the relationship between teachers' academic self-efficacy, problem solving skills, and metacognitive skills has rarely been investigated. Kozikoglu (2019) made inquiries about the relationship between teachers' critical thinking potentials and their academic self-efficacy, problem solving skills, and metacognitive skills. In addition, the researcher examined whether the teachers' critical thinking could be significantly predicted by the three variables mentioned above. The correlational research design was employed with the participation of 229 instructors. Based on the correlation and regression analyses, a positive and strong significant correlation was found between the variables of the study. Moreover, teachers' metacognitive skills and academic self-efficacy could significantly predict their critical thinking. However, teachers' problem solving ability did not contribute to their critical thinking. Kozikoglu (2019) stated that to monitor the effect of metacognitive skills, problem solving skills, and academic self-efficacy on critical thinking, longitudinal studies are needed to be conducted.

Karademir (2019) examined whether the problem-solving skills and curiosity degrees were correlated in pre-service instructors. The study was done with the participation of 823 pre-service teachers at a college in Turkey. A positive and medium significant relationship was observed between teachers' problem-solving skills and their curiosity levels. The researcher also urged the need for more qualitative and longitudinal studies to uncover the main factors that can explicitly or implicitly influence teachers' resilience. It was suggested that compulsory or elective subjects and activities could be included in the curriculum to help the problem solving process and improve problem solving skills. KARAOĞLAN-YILMAZ et al. (2019) carried out an investigation to look into the relationship between teachers' metacognitive thinking abilities, critical thinking criteria, and academic self-efficacy. The correlational research design was employed and structural equation modelling was used for data analysis. It was revealed that critical thinking requirements and metacognitive thinking skills were positively and significantly correlated. There appeared to be a positive reduced level of correlation between critical thinking criteria and academic self-efficacy. In addition, metacognitive thinking abilities and academic self-efficacy were in moderate correlation. Researchers recommend further studies to investigate whether there is a difference in metacognitive thinking skills between students with high critical thinking skills and students with low critical thinking skills.

In the context of Iran, Razmjoo and Ayoobiyan (2019) and Fathi and Saeedian (2020) have recognized the role of teachers' resilience in paving the way for teachers to cope with difficult situations that demand cautious measures taken by teachers. The researchers concurred that resilience could, to a very large extent, predict teachers' self-efficacy, leading to their success in classroom management and pedagogy. It has also been found that for teachers to be resilient, they need to take an active part in

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teacher education programs through which they can be armed with various techniques they can implement in challenging conditions in the classroom.

As teachers' resilience emphasizes the teacher's success in doing his/her best performance in the classroom, resulting in the learners' success, it can be argued that the three variables of the study, i.e. teachers' academic self-efficacy, problem solving skills, and metacognitive skills possess the same objective that can be high-quality teaching and learning inspired by the teacher's expertise in implementing the skills mentioned above. In addition, resilience is associated with teachers and learners' beliefs in their ability to influence their environment, leading to improved teacher and student performance. Resilient teachers and students have a high level of autonomy and self-efficacy. They are confident and believe that things will work. As a result, studying teachers' resilience is of great importance. Although there might have been some studies that have examined the relationship between teachers' resilience and self-efficacy (e.g., Fathi & Saeedian, 2020; Razmjoo & Ayoobiyan, 2019), the relationship between teachers' resilience and the three variables of academic self-efficacy, problem solving skills, and metacognitive skills might have not been investigated in previous studies, thus, paving the way for the current study to address the following research questions:

RQ1: Is there any significant relationship between EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills?

RQ2: Do EFL teachers' academic self-efficacy, problem solving skills, and metacognitive skills significantly predict their resilience?

RQ3: Are there any significant differences between male and female EFL teachers' resilience affected by their academic self-efficacy, problem solving skills, and metacognitive skills?

Material and Methods

To quantitatively address the research questions, a non-experimental, comparative and correlational design was adopted in this study. In doing so, the relationship between male and female EFL teachers and their academic self-efficacy, problem solving skills, and metacognitive skills was explored through the administration of four questionnaires. Detailed information on participants, instruments, data collection procedures and data analysis is provided in the following sections.

Participants

One hundred EFL teachers from three private language institutes in Tehran were selected as potential candidates to fill out the questionnaires. They were 50 male and 50 female EFL teachers whose experience in teaching ranged from 5 to 20 years at language institutes and universities. It is worth mentioning that convenience sampling was applied to benefit from the participation of EFL teachers who were available at the time of conducting the study. The entire population of the study included 140 among which 100 were selected through Krejcie and Morgan's (1970) values. They were 85 MA graduates and 15 PhD candidates of TEFL. EFL teachers' native language was Persian and their ages ranged from 25 to 45.

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Instruments

Four instruments were used to collect data in this study. They all followed the Likert format ranging from SA (strongly agree), A (agree), N (Neutral), D (disagree), to SD (strongly disagree). For each scale below, the amounts of SA = 5, A = 4, N = 3, D = 2, and SD = 1 were considered to score the teachers' responses. The information about them is presented below:

Resilience Scale: EFL teachers' resilience was examined through Resilience Scale (RS), which was developed by Connor and Davidson (2003). This scale contains 25 items with the highest score of 125 and the lowest value of 25. The internal consistency of the scale was found to be 0.89. This value demonstrates that the inventory is a valid and reliable measurement tool.

Academic Self-Efficacy Scale: Academic Self-Efficacy Scale (ASES) was developed by Jerusalem and Schwarzer (1981) to take teachers' perceptions of their academic and professional efficacy into account. The scale is one-dimensional having 7 items in the sense that 35 is the most and 7 is the least score. Cronbach's Alpha was calculated as 0.79 to ensure the reliability of the scale.

Problem Solving Skills Scale: Problem Solving Skills Scale (PSSS) was adopted from Heppner and Petersen's (1982) study, including 32 items with the score range of 32 and 160. The main sub-dimensions of this scale are: (1) problem-solving confidence (items 1-11); (2) approach avoidance style (items 12-27); and (3) individual's ability in planning and monitoring his/her own learning (items 28-32). The estimated reliability reported by Heppner and Petersen (1982) was 0.88.

Metacognitive Skills Scale: Metacognitive Skills Scale (MSS) was administered to EFL teachers in order to investigate their (1) metacognitive knowledge and learning strategies (items 1-8); (2) individual's knowledge about his/her own learning (items 9-21); and (3) individual's ability in planning and monitoring his/her own learning (items 22-30). The highest score is 150 while the lowest one is 30. It was adopted from ALTINDAĞ and SENEMOĞLU (2013), and its reliability coefficient was calculated as 0.95.

Data Collection Procedures

The present study investigated the relationship between male and female EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills. The target population of the study was the entire number of EFL teachers from three private language institutes located in Tehran province. Initially, formal permissions were taken from the heads of the language institutes. Then, convenience sampling was employed to select 100 EFL teachers (50 males and 50 females) who voluntarily decided to take part in the study. Their informed consent forms were obtained, and the objectives of the study were explained to them. Due to Covid-19 Pandemic, the data collection processes were conducted through an online platform of Skyroom. The four questionnaires including "Teachers' Resilience Scale", "Academic Self-Efficacy Scale", "Problem Solving Skills Scale", and "Metacognitive Skills Scale" were all uploaded in the online platform. EFL teachers had time flexibility in filling out the scales, and the four questionnaires had to be filled out within two weeks from uploading. For each scale, extra description was provided to decrease possible ambiguities.

During two weeks, 100 EFL teachers sent their completed scales, and their cooperation in the study were appreciated.

Data Analysis

This study utilized a quantitative methodology to analyze EFL teachers' responses to the four scales. To investigate the relationship between the EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills, Pearson product-moment correlation was run. To examine if teachers' academic self-efficacy, problem solving skills, and metacognitive skills significantly predicted their resilience, regression analysis was used. Finally, the possibility of significant differences between male and female EFL teachers' resilience affected by their academic self-efficacy, problem solving skills, and metacognitive skills were explored by running one-way ANCOVA, which was run to remove the covariate of gender.

Results

Based on the objectives of the study, the following research hypotheses had to be tested:

$H_0$1: There is no significant relationship between EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills.

$H_0$2: EFL teachers' academic self-efficacy, problem solving skills, and metacognitive skills do not significantly predict their resilience.

$H_0$3: There are no significant differences between male and female EFL teachers' resilience influenced by their academic self-efficacy, problem solving skills, and metacognitive skills.

Initially, normality distribution was checked as in Table 1 below.

Table 1. Normality Distribution of Data

Variables	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Resilience Scale	.13	100	.07
Academic Self-Efficacy Scale	.08	100	.06
Problem Solving Skills Scale	.08	100	.08
Metacognitive Skills Scale	.11	100	.06

Table 1 shows that all *p* values for the four scales were more than .05, which verified the normality assumption, and indicated that parametric tests could be used for data analysis. Table 2 presents descriptive statistics for the EFL teachers' responses to the four scales.

Table 2. Descriptive Statistics for the Four Scales

Variables	N	Range	Min.	Max.	Mean	Std. Error	SD	Variance
Resilience Scale	100	1.60	2.48	4.08	3.29	.044	.44	.19
Academic Self-Efficacy Scale	100	2.43	2.00	4.43	3.01	.052	.52	.27
Problem Solving Skills Scale	100	1.60	2.43	4.03	3.17	.039	.39	.15
Metacognitive Skills Scale	100	1.57	2.43	4.00	3.25	.044	.44	.19

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As Table 2 indicates, EFL teachers' responses to RS had the highest mean scores [M = 3.29; SD = .44], while the mean score for ASES was the least value [M = 3.01; SD = .52]. The teachers' range of responses spanned from 1.57 to 2.43. The least score was devoted to ASES as 2.00, while the most score was allocated to the same scale measured as 4.43. The means ranged from 3 to 3.3, which revealed that there were similarities in the EFL teachers' responses to the four scales. Pearson product-moment correlation is illustrated in Table 3.

Table 3. Pearson Product-Moment Correlation for the Four Scales

Variables		Resilience Scale	Academic Self-Efficacy Scale	Problem Solving Skills Scale	Metacognitive Skills Scale
Resilience Scale	R	1	.29	.94	.93
	p		.00	.00	.00
	N	100	100	100	100
Academic Self-Efficacy Scale	R	.29	1	.46	.41
	p	.00		.00	.00
	N	100	100	100	100
Problem Solving Skills Scale	R	.94	.46	1	.92
	p	.00	.00		.00
	N	100	100	100	100
Metacognitive Skills Scale	R	.93	.41	.92	1
	p	.00	.00	.00	
	N	100	100	100	100

Table 3 demonstrates that there was a positive and strong significant relationship between EFL teachers' resilience and their metacognitive skills [r = .93; *p* = .00] and problem solving skills [r = .94; *p* = .00]. Similarly, a positive and slight significant relationship was found between EFL teachers' resilience and their academic self-efficacy [r = .29; *p* = .00]. Therefore, the first null hypothesis of the study was rejected since there was a significant relationship between EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills. To answer the second research question, Table 4 shows regression analysis for investigating the predication of resilience by the other three variables.

Table 4. Regression Analysis for the Four Scales

Model Summary [b]								
R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.97a	.94	.94	.10	.94	569.49	3	96	.00
a. Predictors: (Constant), Academic Self-Efficacy Scale, Problem Solving Skills Scale, Metacognitive Skills Scale								
b. Dependent Variable: Resilience Scale								

Based on the information illustrated in Table 4, the variables of EFL teachers' academic self-efficacy, problem solving skills, and metacognitive skills significantly predicted their resilience [F (3.96) = 569.49; *p* = .00]. Since the reliability of the scales in the current study was found to be 0.7, it can also be pointed out that the three variables can explain 94% of variance in teachers' resilience. In other words, three variables of EFL teachers' academic self-efficacy, problem solving skills, and metacognitive skills were the significant predicators of teachers' resilience at the specified $p < .05$

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level [p = .00], which rejected the second hypothesis of the study. Table 5 provides descriptive statistics for male and female teachers' responses to the four scales.

Table 5. Descriptive Statistics for Male and Female Responses to the Four Scales

Variables	Gender	N	Mean	Std. Deviation	Std. Error Mean
Resilience Scale	MALE	50	3.33	.42	.05
	FEMALE	50	3.24	.46	.06
Academic Self-Efficacy Scale	MALE	50	3.10	.55	.07
	FEMALE	50	2.92	.48	.06
Problem Solving Skills Scale	MALE	50	3.21	.37	.05
	FEMALE	50	3.12	.42	.05
Metacognitive Skills Scale	MALE	50	3.31	.42	.05
	FEMALE	50	3.20	.45	.06

As illustrated in Table 5, it appears that both gender groups performed similarly in answering the four scales with the mean range of 2.9 to 3.33. Investigation of significant differences between male and female teachers' resilience affected by their academic self-efficacy, problem solving skills, and metacognitive skills is provided in Table 6.

Table 6. One-Way ANCOVA for Gender Differences

Source	SS	DF	MS	F	*P*	Eta
Corrected Model	19.438a	66	0.295	1349.877	0.000	1.000
Intercept	18.060	1	18.060	82776.457	0.000	1.000
Gender	0.000	1	0.000	0.000	1.000	0.000
Metacognitive Skills Scale	0.092	5	0.018	84.055	0.000	0.927
Problem Solving Skills Scale	0.066	4	0.017	75.808	0.000	0.902
Academic Self-Efficacy Scale	0.001	1	0.001	3.667	0.044	0.100
Error	0.007	33				
Total	1103.435	100				
Corrected Total	19.445	99				
a. R Squared = 1.000 (Adjusted R Squared = .999)						
b. Computed using alpha = .05						

The one-way ANCOVA results of gender differences showed that gender was not a significant factor regarding the relationship between teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills [p = 1.00]. In other words, there were not any significant differences between male and female EFL teachers' resilience influenced by their academic self-efficacy, problem solving skills, and metacognitive skills, which confirmed the third hypothesis of the study.

Discussion

The present quantitative research was an investigation of the relationship between male and female EFL teachers' resilience and their academic self-efficacy, problem solving skills, and metacognitive skills. The findings of the study revealed a significant correlation between the study variables, and demonstrated that EFL teachers' academic self-efficacy, problem solving skills, and metacognitive skills could significantly predict their resilience. Finally, no significant difference was found between

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male and female teachers' resilience affected by their academic self-efficacy, problem solving skills, and metacognitive skills. In the following paragraphs, the importance of teachers' resilience, and its relationship with academic self-efficacy, problem solving skills and metacognitive skills are discussed. According to the results of the study, the role of resilience was recognized by EFL teachers, which requires more elaboration to pave the way for EFL teachers to be resilient in encountering challenging conditions inside and outside the learning environment. Teacher resilience has been found to be effective both in theory and practice, helping them to perform successfully in meeting the teaching needs. In general, researchers believe that by supporting students, teachers can provide an environment for students' engagement, helping them to have an active effort to solve problems and increase their collaboration in the problem solving learning environment (Tait, 2008). Therefore, the value of the teachers' resilience in high quality teaching as well as learning is indisputable because it holds lots of advantages for learners and teachers alike (Lacaba et al., 2020). Although it is probably difficult for instructors to control the problems concerned of their exercise teaching, it is crucial to discover which components affect their resilience negatively, in order that they could take on a greater favorable evaluation in the course of both themselves and their learners. Such an improved resilience may lie in the instructors' development, which may be fulfilled through an efficient instructor training program.

EFL teachers' academic self-efficacy was concluded to be significantly correlated with their resilience. Teachers' self-efficacy triggers learners' motivation to be engaged in the classroom and enhances peer collaboration (Paglis & Green, 2002). In this sense, teachers' self-efficacy can assist learners to improve their questioning strategies to create a problem solving learning environment in which learners maneuver on their learning potentials and assess their peers' achievements as well (Kozikoglu, 2019). Thus, teachers' self-efficacy targets quality teaching and learning achievements as parallel as teachers' resilience, which helps learners self-manage their learning behaviors. In sum, teachers' self-efficacy demonstrates their commitment to their profession regarding the application of all needed facilities to reach the desirable goal in teaching, the results of which can be beneficial for learners to experience an efficient learning environment caused by their self-efficacious teachers (Bandura, 1997).

Similar to teachers' academic self-efficacy, their problem-solving potentials were strongly and significantly correlated with their resilience. Teachers' problem solving skills were found to create learners' autonomy since they can analyze, synthetize, and evaluate the problem they were exposed to as a learning activity (Chaudhry & Rasool, 2012; Karademir, 2019). Teachers' resilience also makes learners be resilient problem solvers in the classroom in the sense that they can autonomously orchestrate classroom interaction and participate in a problem-solving task through teachers' monitoring. Teachers' resilience and their problem solving skills possess the common objective that is helping learners to be responsible for their learning outcomes and try to independently solve their problems (Kozikoglu, 2019; Lacaba et al., 2020). When learners' problem-solving skills increase, it results in their success in enhancing learning opportunities and interactive learning, which are the main goals addressed by teachers' resilience.

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To put it briefly, EFL teachers' resilience and their metacognitive skills were strongly and significantly correlated. Since teachers' resilience enables them to have their efficient performance in the classroom by encouraging learners to promote interaction in a stress-free learning environment, similarly their metacognitive skills such as planning and questioning strategies provide an atmosphere for teachers to monitor the learning procedures and help learners to be more engaged in classroom activities (Altindağ, 2008; Kozikoglu, 2019). Summarily, like the way that teachers' metacognitive skills are enhanced in the classroom by focusing on the learners' increasing ability to take an active part in the classroom through conscious questioning and improving their learning behaviors (Hacker, 1998; Kapa, 2001), teachers' resilience acts in the same way as well, by attempting to create an intimate atmosphere for learners to feel that they own the learning environment, which might lead to their ultimate success.

The findings of the study contributed to practical implications concerning the development of EFL teachers' resilience through teacher education programs. Teacher educators can also recognize the practical role of teachers' academic self-efficacy, problem solving skills, and metacognitive skills in bringing about teachers' resilience. EFL teachers who might encounter internal and external challenging conditions in their practice teaching are encouraged to develop their resilience by taking part in teacher education programs. Similarly, EFL teachers can benefit from developing their academic self-efficacy, problem solving skills, and metacognitive skills through efficient techniques that can be learned through teacher development program. When development occurs, learners are the beneficiaries of an interactive learning environment created by a resilient, metacognitive, problem solver, and self-efficacious teacher.

The current study was limited to a correlational research design to address the research questions of the study. Besides, quantitative methodology was adopted in administering the four scales. In addition, learners' achievement was not focused in this study. Finally, small sample of EFL teachers from three language institutes took part in the study. Concerning the limitations mentioned above, it is recommended to conduct an experimental study to comparatively investigate the effect of an intervention (e.g., a teacher education program such as clinical supervision) on EFL teachers' reliance, academic self-efficacy, problem solving skills, and metacognitive skills. Moreover, qualitative semi-structured interviews with teachers can be conducted regarding their awareness of their reliance, academic self-efficacy, problem solving skills, and metacognitive skills. A further study on learners' achievements affected by teachers' reliance, academic self-efficacy, problem solving skills, and metacognitive skills can be carried out. Moreover, further research can be done with larger number of participants to increase the generalizability of research findings.

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