

# Turkish EFL Teachers' Self-efficacy Levels in the Implementation of Self-Regulated Learning

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#### **Abstract**

Despite the availability of resources and efforts, English as a foreign language (EFL) learners and EFL teachers face challenges in achieving proficiency in the target language in Turkey. Self-regulation, a cognitive and motivational trait, is crucial in foreign language learning. Self-regulated learning (SRL) focuses on learners taking responsibility for their entire learning process, enabling them to engage in metacognitive processes. It has gained significant attention in recent years due to the rise of autonomous learning practices and the importance of management skills in EFL education. Teachers can enhance their awareness and oversight of their students' progress towards their objectives through the use of metacognitive skills. However, there is a lack of focus on teachers' self-efficacy levels in adopting SRL in language education. This research aimed to investigate if Turkish EFL teachers actively encourage SRL in their instruction, focusing on their roles in implementing SRL theory. The causal-comparative model was utilized in the course of this study. A sample of 211 EFL instructors from high schools in an eastern city in Turkey, was investigated. An instrument titled "Teacher Self-Efficacy for Implementing Self-Regulated Learning" was utilized to gather the data. Descriptive statistics, independent sample t-test, and one-way ANOVA analysis were used to analyze the research data. Findings suggested that the average level of self-efficacy among Turkish EFL teachers in utilizing SRL strategies to engage students is moderate. The results of the study are of great implications for the role of educators in promoting students' autonomy and lifelong learning.

Keywords: Self-efficacy, Self-Regulated, EFL.

### **INTRODUCTION**

Despite the availability of numerous resources and the extensive efforts made to utilize them by instructors, English as a foreign language (EFL from this point forward) learners continue to encounter challenges in problems in achieving proficiency in the target language in Turkey. Similarly, EFL teachers encounter a multitude of challenges when it comes to instructing students in the foreign language. The inadequate proficiency in foreign language abilities among students has been a subject of ongoing discourse among educators, despite their prolonged exposure to English instruction at various educational stages. Significant amounts of time and effort are dedicated to the learning process; however, learners often struggle to progress beyond foundational knowledge or encounter challenges in advancing their level of competency unless they possess intrinsic motivation. The discourse surrounding the acquisition of a second or foreign language often centers on the effectiveness of instructional approaches, neglecting to adequately address the contextual elements, including individual, social, and societal aspects, that impact the learning process for Turkish students. The examination of contextual elements can be approached via the lenses of language, the learner, and the learning process.

Self-regulation is a cognitive and motivational trait that holds significant importance in the realm of foreign language learning. Self-regulation encompasses the cognitive, affective, and behavioral processes that individuals employ in a deliberate and systematic manner to influence their acquisition of knowledge and abilities. (Zimmerman, 2000). Self-regulated learning (SRL

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hereafter), which centers on learners assuming responsibility for their entire learning process, has been the subject of investigation by numerous researchers over the course of time. The significance of learner autonomy in SRL renders it a highly significant subject in the field of educational research. The current scholarly literature on SRL presents empirical evidence that supports the idea that individuals who possess the ability to effectively regulate and oversee both the learning process and their own motivation demonstrate improved capabilities in navigating the diverse challenges prevalent in today's society. (Lee, 1998; Brown, 2000; Harmer, 2001). According to Zimmerman (2000), SRL strategies encompass internally generated cognitive processes, emotional states, and behaviors that are purposefully employed to influence one's acquisition of knowledge and skills. The primary focus of SRL lies in facilitating learners' ability to engage in metacognitive processes, wherein they monitor, control, and regulate their own cognitive activity (Randi & Corno, 2000). In accordance with this notion, educators can enhance their awareness and oversight of their students' progress towards their objectives through the utilization of metacognitive skills. Therefore, teachers have the ability to augment the linguistic proficiency and understanding of their students. Hence, acquiring knowledge on the self-efficacy levels exhibited by Turkish EFL teachers in relation to their implementation of SRL practices within the EFL domain becomes imperative.

The body of scholarly work pertaining to SRL has experienced a steady growth in recent years. mostly driven by the increasing prevalence of autonomous learning practices, the significance of management skills, and the advancement of those abilities within the context of EFL education (Nejabati, 2015; Mahmoodi, Kalantari, Ghaslani, 2014; Öztürk & Çakıroğlu, 2014; Torres, 2013; Abbasnasab, Mohd Saad & Boroomand, 2012). While there is a substantial body of material on the self-regulation skills of learners, even, research has been conducted on the self-efficacy of students in relation to their ability to engage in self-regulated learning (Wang & Bai, 2017), there is a noticeable lack of emphasis on the self-efficacy levels of teachers in adopting self-regulation in language education. Prior research has also demonstrated a notable positive correlation between self-efficacy beliefs, self-regulated learning behaviors, and English language academic achievement (Wang, Schwab, Fenn & Chang, 2013). This research examines the concepts of selfefficacy and self-regulation as forms of metacognitive knowledge, as described by Flavell (1979) as Wang and Bai (2017) did. It aligns with Dörnyei's (2005) suggestion to prioritize psychological views in the study of language learning. Therefore, the primary objective of the current investigation is to determine if Turkish EFL teachers actively encourage SRL within the context of their instruction and it is hoped to contribute to the field with considerable results. The present study aims to examine the concept of SRL in a broader framework, followed by a specific focus on teachers' roles in implementing SRL theory into practice. The study then will provide the findings related to the self-efficacy levels of Turkish EFL teachers in implementing SRL in EFL and afterwards engage in a comprehensive discussion of these findings.

#### SRL Theory

The concept of self-regulation has been identified as a contributing factor to the variations observed in students' learning processes, particularly in relation to time management and productivity. Zimmerman's concept of self-regulation encompasses distinct levels of self-regulation (Zimmerman, 2002). Zimmerman's (1998) SRL model outlines a framework consisting of three distinct phases: the forethought phase, which encompasses processes that occur prior to engaging in learning activities; the performance phase, which encompasses processes that occur during active practice; and the self-reflection phase, which encompasses processes that occur at the conclusion of the learning event. During the initial phase, known as the forethought stage, learners engage in the analysis of the job at hand and establish their objectives. Based on this foundation, they organize the tactics required to attain these objectives. The motivation of learners has a significant impact on all processes. Furthermore, this encompasses their current level of motivation about the specific work, as well as their remaining motivational factors such as their perceived self-efficacy or goal orientations. Students that possess self-regulatory skills demonstrate an understanding of their accountability for their own learning. They recognize that

they bear the major responsibility for their educational progress. The monitoring phase necessitates learners to actively engage in the monitoring of their own learning processes in accordance with their predetermined objectives. According to Pintrich (2000), self-regulation is characterized as a productive and efficient cognitive process in which learners establish their learning objectives and actively manage their motivation, behaviors, and cognition. This process is influenced and shaped by both internal goals and external environmental factors. Pintrich's approach primarily focuses on the elements of motivation and goal orientation within the self-regulation process.

According to Brown (2000), Slavin's definition of learning is characterized as "a transformation in an individual resulting from exposure to various experiences" (p. 7). The notion of experience underscores the significance of learners' active engagement in the learning process, as opposed to their passive reception of knowledge. In addition to the experiential aspect, learner autonomy encompasses the essential elements of learners' skills, capacities, background knowledge, and desires, all of which contribute to their active engagement in the learning process. In the field of education, various learning strategies have been adopted and studied extensively. Notably, research has shown that approaches that emphasize student autonomy tend to be more effective (Harmer, 2001; Lee, 1998). When learners have the opportunity to assume responsibility for their own learning, the knowledge they receive is more likely to be retained over the long term and integrated into their daily life. The integration of these factors resulted in the development of SRL, which evolved as a comprehensive framework for understanding the learning process. SRL encompasses both cognitive and affective aspects and is closely linked to the concept of learnercentered pedagogy (Paris & Paris, 2001). SRL, a concept that originated in the field of educational psychology around the mid-1980s, refers to the cognitive and motivational processes by which learners organize their own learning at each step (Zimmerman, 2002). Motivation is a fundamental element within the framework of SRL. In addition to facilitating learners' cognitive adaptation to the learning process, it is imperative to adequately prepare students from a motivational standpoint. This is due to the fact that the attainment of good learning outcomes is contingent upon students' intrinsic motivation to engage in studying (Nota, Soresi, & Zimmerman, 2004). According to Schunk (2005) and Mega, Ronconi, and De Beni (2014), individuals who possess self-regulated learning abilities, which are associated with high levels of motivation, tend to effectively engage in the learning process, leading to improved academic performance.

As to Zimmerman's (1990) findings, individuals who exhibit self-regulated learning possess the capacity to establish precise objectives for themselves, subsequently overseeing and ultimately assessing their own cognitive processes. During the process of SRL, learners progressively develop the ability to become autonomous learners. In the beginning, educators, assuming the role of facilitators, assist learners in identifying their areas of strength and weakness through the provision of feedback. According to Pintrich (1995), learners undergo a transformation wherein they develop into self-regulated learners who possess a keen understanding of their own strengths and shortcomings, and possess the capacity to effectively govern their own behavior. As individuals progress in their learning journey, they assume complete accountability for their educational pursuits, encompassing the regulation of their motivation and the development of metacognitive skills. Lombaerts, De Backer, Engels, Van Braak, and Athanasou (2009) stated that self-regulated learners possess the following abilities: - Identifying their learning objectives - Identifying the necessary resources to achieve those objectives.

Pintrich (2004) asserts that self-regulation models share four key assumptions, notwithstanding some variations in general. First and foremost, it is important to note that all models discussed in this study adhere to a cognitive and constructivist perspective on learning. Learners are mandated to construct their own learning processes as engaged participants in the educational endeavor. The second premise posits that every student possesses the capacity to effectively monitor, control, and regulate their own cognitive processes, motivational factors, behavioral patterns, and learning environment. Furthermore, it is posited by models that learners must engage in the regulation of their cognition, motivation, and behavior in order to effectively monitor the learning

process and attain desired objectives. In all models, there exists a connection between the personal-contextual features of learners and their academic performance or achievements, which is mediated by self-regulated learning. In essence, the success of the learning process is influenced not only by the personal-contextual qualities of the learners, but also by their self-regulation, which plays a mediating role. Then, according to Pajares (2008), self-regulation may serve as a mediator in the relationship between self-efficacy and academic achievement. It is because self-regulation refers to an individual's ability to effectively manage their emotions and behaviors in order to achieve desired objectives (Farrington et al., 2012).

In order to effectively approach a learning activity, it is essential to establish a comprehensive plan. This plan should encompass several aspects such as determining the optimal working tempo, strategizing the learning approach, consistently monitoring progress, and making necessary adjustments until the desired outcomes are achieved. According to Lombaerts, De Backer, Engels, Van Braak, and Athanasou (2009, p.90), self-regulated learners possess the following abilities: - Identifying their learning objectives - Identifying the necessary resources to achieve those objectives. In order to effectively approach a learning activity, it is essential to establish a comprehensive plan. This plan should encompass several aspects such as determining the optimal working tempo, strategizing the learning approach, consistently monitoring progress, and making necessary adjustments until the desired outcomes are achieved.

SRL, a topic that has been extensively investigated by numerous scholars, has garnered significant attention within the realm of education due to its notable impact on learners' motivation and academic achievements (Boekaerts, 1999; Cleary & Zimmerman, 2002; Perry & Vandekamp, 2010; Schunk, 1996; Zimmerman & Schunk, 2001). In the contemporary era characterized by advanced technology, it is imperative for learners to possess self-regulation competences and skills in order to effectively navigate the challenges presented by the evolving educational paradigm. Since, he notion of SRL in the context of language learning has expanded due to advancements in technological tools (Lai & Gu, 2011; Lai, 2013). Technology provides students with a wide range of resources to engage in independent language learning activities. Given the contemporary circumstances of the 21st century, it is pertinent to examine the concept of selfregulated learning within the realm of foreign language acquisition. This is because the process of learning a foreign language necessitates individuals to actively regulate and manage their own learning endeavors. Consistently, research has demonstrated that proficient language learners possess a profound comprehension of the inner workings of language and are aware of how to accelerate their language learning endeavors by employing effective strategies (Haukas 2018; Zhang & Goh 2006). Learners' metacognition is the common term for this type of methodical thought demonstrated by second/foreign language learners. Therefore, it is imperative that language learners in all contexts strive to transform into "metacognitively strong" learners (Zhang, 2001). Metacognition plays a pivotal role in comprehending learners inside educational settings and beyond. Self-regulated learning is a concept that is closely associated with this notion. Self-regulated learning is a fundamental characteristic observed in proficient language learners as well (Zhang & Zhang, 2019).

### Teachers' Role in Implementing SRL Theory into Practice

The concept of learner-centered learning has been widely acknowledged as a beneficial technique within the field of SRL psychology. In the context of SRL, it is advocated that learners engage actively in all facets of their learning process in order to exhibit enhanced academic outcomes. Therefore, scholars propose a range of strategies to augment student engagement in the educational endeavor (Paris & Paris, 2001; Cleary & Zimmerman, 2004; Pintrich, 1995). In the words of Paris and Paris (2001), the development of learners' grasp of SRL occurs through three distinct mechanisms: indirect acquisition through experience, direct acquisition through interaction, and elicitation through practice (p. 98). The initial approach entails learners cultivating their self-regulatory abilities through the acquisition of knowledge from genuine and recurrent encounters. Learners acquire SRL knowledge and abilities through the process of observing individuals in their immediate social environment, including teachers, peers, and family

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members. In the second approach, educators provide explicit and unambiguous instructions in order to minimize potential sources of diversion. The teacher emphasizes the significance and relevance of SRL in order to enhance students' consciousness. During this instructional procedure, the educator establishes the desired skill by presenting a series of activities that include both illustrative instances and counterexamples. Additionally, learners are afforded the opportunity to engage in practice exercises with the provision of constructive feedback. The elicitation approach has the potential to enhance learners' SRL skills through their engagement in practice, which involves the integration of SRL with the task's inherent characteristics. In a collaborative learning environment, learners are required to actively engage in several aspects of SRL, including evaluating their own progress, modifying or implementing strategies, and effectively managing their time and resources. Pintrich (1995) provides five ideas for enhancing SRL, which are applicable to both learners and educators:

- -It is imperative for students to cultivate a heightened level of consciousness regarding their behavior, motivation, and cognition.
- -It is vital for students to possess optimistic motivational thoughts.
- -Faculty members have the potential to serve as exemplars of self-regulated learning.
- -It is imperative for students to engage in the utilization of self-regulatory learning mechanisms.
- -Classroom assignments possess the potential and should be seen as avenues for fostering student self-regulation.

Pintrich (1995) highlights the significance of feedback as a means for learners to gain insight into their strengths and limitations, enabling them to adapt their learning strategies accordingly. As defined by Corno (1989), in the field of SRL psychology, the job of the teacher is characterized as that of a facilitator who motivates students to maintain their focus on learning tasks in the presence of many distractions. Teachers play a vital role in facilitating the development of selfregulation skills by adapting classroom environments and designing learning experiences (Randi, 2004; Moos & Ringdal, 2012). In the opinion of Perry and Vandekamp (2010), it is imperative for educators to cultivate educational settings that empower children to assume control and exercise autonomy in their learning experiences, as opposed to adhering to traditional teacher-centric approaches. According to Lombaerts et al. (2007), students are provided with opportunities to participate in meaningful learning tasks under the guidance of instructors' scaffolding and the implementation of self-reflection practices. Teachers establish educational settings that are designed to minimize external disturbances that hinder students' concentration. The act of motivation serves to enhance learners' attentiveness to their assignments and ultimately fosters a deeper level of comprehension. Furthermore, educators facilitate the development of students' metacognitive skills by placing emphasis on the importance of establishing short-term, achievable, and specific goals in order to effectively control their learning process. Another responsibility of teachers in facilitating SRL inside the classroom is to empower students to make informed decisions pertaining to their own learning processes. Additionally, teachers should create opportunities for students to engage in regular self-assessment of both the outcomes and processes of their learning. Educators also employ non-intimidating evaluation methods, prioritizing the attainment of objectives while motivating students to focus on their own advancement (Lombaerts, Engels, & Vanderfaeillie, 2007). Educators establish educational settings that are deliberately shielded from external disturbances that impede students' concentration. The act of motivation serves to enhance learners' attentiveness to their assignments and ultimately fosters a deeper level of comprehension. Furthermore, educators provide assistance to students in effectively overseeing their educational journey by placing emphasis on the importance of establishing concise, achievable, and specific goals. In the words of Lombaerts et al. (2007), the organization of the learning environment has a favorable impact on learners, leading to improved management of the learning process, increased task performance confidence, and heightened motivation to learn.

Since a systematic and contingent interaction between the instructor and the students is required to properly equip learners with SRL techniques (Cohen, 2003; Nunan, 1997; Oxford, 2001; Pintrich, 2000), language teachers are seen as playing a significant role in promoting SRL strategies. However, research shows that teachers hardly ever use SRL training in conventional classroom settings, whereas tutors of one or two students frequently do (Weaver & Cohen, 1994). Based on Zhang and Goh (2006), language learners will be able to understand their own thought and learning processes and, as a result, supervise the selection and implementation of learning techniques, decide how to proceed with a learning assignment, and continuously assess their own performance. At this point, the study's goal is to conduct an initial study to determine how effective EFL teachers are at adopting SRL methods. Therefore, using a quantitative approach, the study investigated the degrees of Turkish in-service EFL teachers' self-efficacy in implementing SRL. In accordance with the objective of the study, the research questions were established in the following manner:

- 1- What are the self-efficacy levels of Turkish EFL teachers in regards to the implementation of SRL strategies, creating cooperative learning environments, and creating enriched learning environments in EFL instruction?
- 2- Is there a notable difference in the levels of self-efficacy exhibited by EFL teachers when it comes to their ability to apply SRL, with regards to factors such as gender, teaching experience, and undergraduate field of study?

The findings have the potential to inform future research endeavors by providing an overview of the current status of SRL integration in foreign language teaching and identifying the self-efficacy levels of teachers for its implementation.

#### **METHOD**

#### Research Model

The study model of causal comparison investigates the causal relationships between events, specifically focusing on the causes and effects of a pre-existing or observed event in its natural conditions, without any external intervention. (Fraenkel et al., 2011; Sözbilir, 2014). Therefore, the present study employed a causal-comparative model to investigate potential differences in the levels of self-efficacy among Turkish EFL teachers, with respect to independent variables including gender, teaching experience, and undergraduate field of study.

#### **Participants**

Table 1. The Demographic Characteristics of the Participants

Gender	Female:135	Male:76		
Teaching Experience	1-5 years: 40	6-10 years:94	11-15 years:44	16 above:33
Undergraduate Area	English Language	English Language	Others:31	
of Study	Teaching:97	and Literature:83		
Total	211			

Based on the data presented in Table 1, the sample for this study comprised 211 EFL instructors employed at high schools located in Elazığ, a city situated in the eastern region of Turkey. A total of 211 participants were considered to be an adequate sample size. It has been noted that ensuring the sample size is at least five times more than the number of items fulfills the fundamental assumptions (Çokluk et. al., 2010). The main aim of the present study is to ascertain if Turkish EFL instructors actively promote SRL in their instructional practices in high school level. Therefore, the study group was comprised of EFL teachers working within high schools. The process of participant selection employed purposeful sampling.

The scale received responses from 254 EFL instructors working in Elazığ in total. The analysis was refined by eliminating a cumulative sum of 43 data points through the application of control measures. Hence, a final count of 211 participants was retained. 76 participants were classified as male, while 135 were classified as female. Regarding the participants' teaching experience, it was found that 40 individuals had accumulated 1 to 5 years of teaching experience, while 94 participants reported having

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6 to 10 years of experience. Additionally, 44 teachers indicated having 11 to 15 years of experience, while 33 participants reported having 16 or more years of experience in the field of EFL instruction. When queried about their undergraduate field of study, 97 of the respondents indicated that they obtained their degrees from the department of English Language Teaching (ELT). Additionally, 83 of the participants pursued their studies in the department of English Language & Literature (ELL), while 31% of the respondents graduated from other departments with a focus on English language.

## **Data Collection Tools**

Personal information form and a "Teacher Self-Efficacy for Implementing Self-Regulated Learning" scale developed by De Smul, Heirweg, Van Keer, Devos and Vandevelde (2018), and adapted to Turkish by Saylan-Kırmızıgül, Kızkapan and Tanık-Önal (2022) was used to collect the data of the study. The personal information form encompasses inquiries regarding the gender, teaching experience, and undergraduate field of Turkish EFL instructors. Teacher self-efficacy for implementing self-regulated learning scale adapted to Turkish by Saylan-Kırmızıgül, Kızkapan and Tanık-Önal (2022) consists of 3 factors (self-efficacy for introducing self-regulated learning strategies, self-efficacy for creating cooperative learning environments, and self-efficacy for creating enriched learning environments) and 21 items that explain 51,8 % of the variance. Cronbach Alpha internal consistency coefficients are calculated as .810 for self-efficacy for introducing self-regulated learning strategies, .867 for self-efficacy for creating cooperative learning environments, .813 for self-efficacy for creating enriched learning environments, and .917 for the entire scale in adaptation results. Therefore, it can be asserted that the utilization of the five-point Likert type scale constitutes a valid and reliable means of assessing teacher self-efficacy in relation to the implementation of self-regulated learning.

In the current study, Cronbach Alpha internal consistency coefficients are calculated as .883 for self-efficacy for introducing self-regulated learning strategies, .943 for self-efficacy for creating cooperative learning environments, .885 for self-efficacy for creating enriched learning environments, and .936 for the entire scale in adaptation results. The five-point Likert type scale is a valid and reliable measurement tool that measures Turkish EFL Teachers self-efficacy for implementing self-regulated learning.

#### Data Analysis

The utilization of parametric tests in quantitative research is advantageous in terms of the dependability and applicability of the research findings (Can, 2014). Therefore, the employment of parametric tests was employed in this study to enhance the reliability and applicability of the research in order to utilize parametric tests, some criteria must be followed. Firstly, the data should be on a range scale or above. Additionally, the data should have a normal distribution, and it is important to verify that the assumptions of equal group variances are satisfied (Can, 2014). To establish these assumptions, an examination of the data was conducted, and descriptive statistics were utilized to assess the skewness and kurtosis values of the items, ensuring they fell within the range of "\(\frac{1}{7}\)" (Cokluk, Sekercioglu, & Buyukozturk, 2016). Additionally, the z scores were evaluated to determine if they fell within the range of "\(\pi 3.29\)" (Field, 2013). The analysis of the data largely focused on the examination of loss and extreme values. Subsequently, the skewness and kurtosis values of the elements were computed. Furthermore, an attempt was made to visually investigate the distribution of the data using histograms and P-P graphs. A total of 43 points of data were removed from the analysis by the implementation of control measures, such as controlling for the control item, extremes, and other descriptors. As a result of the descriptive analysis, analyzes were made with the remaining 211 data. During the examination of the research data, various statistical techniques were employed, including descriptive statistics such as the arithmetic mean and standard deviation, as well as the independent sample t-test and one-way ANOVA analysis. The significance criterion for the inferential analysis was established as p < .05. According to Miller (1969), the Bonferroni test is a commonly employed method for doing multiple comparisons, as indicated by t statistics. Notably, this test does not necessitate the assumption of equal sample sizes. The effect sizes  $(\eta 2)$  obtained due to the calculations were interpreted by being compared with certain criterion values. These values are (Green & Salkind,

2005, p. 157) " $\eta$ 2< 0.01" indicates that there is small effect size, " $\eta$ 2< 0.06" indicates that there is medium effect size, and " $\eta$ 2< 0.14" indicates that there is large effect size.

#### FINDINGS AND RESULTS

The results of the analysis are presented in this section in accordance with the sequential order of the sub-problems.

### Self-Efficacy Levels of Turkish EFL Teachers in the Implementation of Self-Regulated Learning

In order to assess the self-efficacy levels of Turkish EFL teachers in the application of self-regulated learning, mean values and standard deviation were computed. The findings of the analysis are presented in Table 2.

Table 2. Descriptive Analysis of the Self-efficacy Levels of Turkish EFL Teachers in the Implementation of SRL

Factors	N	Mean	Sd
introducing self-regulated learning strategies	211	2,73	,99
creating cooperative learning environments	211	2,57	,79
creating enriched learning environments	211	2,80	1,02

As seen in Table 2, the mean of self-efficacy for introducing self-regulated learning strategies that EFL teachers in "can do moderately", is M=2.73 standard deviation Sd=.99. While the mean of self-efficacy for creating cooperative learning environments that EFL teachers in "can do limitedly" is M=2.57, the standard deviation is Sd=.79. The mean of self-efficacy for creating enriched learning environments that EFL teachers in "can do moderately", is M=2.80 standard deviation Sd=1.02.

# Differentiation of Self-Efficacy Levels of Turkish EFL Teachers in the Implementation of Self-Regulated Learning Regarding Gender

The findings of an independent samples t-test are presented in Table 3, which aims to investigate potential differences in the self-efficacy levels of Turkish EFL teachers with respect to their gender in relation to the implementation of self-regulated learning.

Table 3. t-test Results Revealing Gender Differences in Self-efficacy Levels among Turkish EFL Teachers' Implementation of SRL

Factors	Gender	N	M	Sd	t	p	Effect size (η²)
introducing self-regulated	Male	76	2,05	,646	-9,521	,000*	,02
learning strategies	Female	135	3,11	,954			
	Male	76	2,09	,683	-7,386	,000*	,02
creating cooperative learning environments	Female	135	2,84	,724			
creating enriched learning	Male	76	2,04	,822	-9,772	,000*	,02
environments	Female	135	3,23	,859			

A significant difference was found in favor of female EFL teachers in the factor of introducing self-regulated learning strategies [t (209) = -9,521, p <.05] in terms of gender variable. While the mean of female EFL teachers' self-efficacy for introducing self-regulated learning strategies is M = 3.11, the mean of male EFL teachers is M =2.05. The results indicate that female EFL teachers exhibit higher levels of self-efficacy in implementing self-regulated learning practices compared to their male counterparts. The effect size of the observed difference was computed and found to be  $\eta 2$  = 0.02. Consequently, the magnitude of the change in effect size is minimal.

As Table 3 shows, self-efficacy for creating cooperative learning environments levels of EFL teachers differ significantly [t (209) = -7,386, p <.05] in terms of gender variable. The arithmetic means of female EFL teachers (M=2.84) are higher than those of males EFL teachers concerning self-efficacy for creating cooperative learning environments levels. The effect size of the difference was calculated as  $\eta 2 = 0.02$ . Therefore, the effect size of the difference is again minimal.

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The other finding from the same table shows that there is statistically significant difference [t (209) = -9,772, p <.05] between self-efficacy for creating enriched learning environments levels of EFL teachers and their genders (female: M = 3.23; male: M = 2.04). The effect size of the observed difference was computed as  $\eta 2 = 0.02$ . Hence, the observed difference exhibits a limited effect size.

# Differentiation of Self-Efficacy Levels of Turkish EFL Teachers in the Implementation of Self-Regulated Learning Regarding Their Teaching Experience

The findings of the one-way ANOVA test, presented in Table 4, aim to ascertain potential variations in instructors' engagement in professional development activities based on their levels of teaching experience.

Table 4. ANOVA Test Results on the Differentiation of Self-Efficacy Levels of Turkish EFL Teachers in the Implementation of SRL Regarding Teaching Experience

		Sum of		Mean		
Factors		Squares	df	Square	F	р
introducing self-	Between Groups	6,729	3	2,243	2,314	,077
regulated learning	Within Groups	200,622	207	,969		
strategies	Total	207,351	210			
creating cooperative	Between Groups	1,994	3	,665	1,051	,371
learning environments	Within Groups	130,906	207	,632		
	Total	132,900	210			
creating enriched	Between Groups	8,107	3	2,702	2,662	,050
	Within Groups	210,136	207	1,015		
learning environments	Total	218,243	210			

According to the findings presented in Table 4, there is no significant difference in the levels of self-efficacy among EFL teachers with regards to their teaching experiences, specifically in the areas of introducing self-regulated learning strategies, creating cooperative learning environments, and creating enriched learning environments. But the arithmetic means of "1-5 years teaching experiences" EFL teachers in self-efficacy for introducing self-regulated learning strategies levels (M=3.02), self-efficacy for creating cooperative learning environments levels (M=2.71) and self-efficacy for creating enriched learning environments levels (M=2.96) are higher than the others.

# Differentiation of Self-Efficacy Levels of Turkish EFL Teachers in the Implementation of Self-Regulated Learning in Terms of undergraduate field

The findings of a one-way ANOVA test are presented in Table 4, which aims to examine the self-efficacy levels of Turkish EFL instructors in the implementation of self-regulated learning, specifically in relation to their undergraduate field.

Table 5. ANOVA Test Results on the Differentiation of Self-Efficacy Levels of Turkish EFL Teachers in the Implementation of SRL Regarding Undergraduate Field of Study

Factors		Sum of Squares	df	Mean Square	F	р	Differencea	Effect size $(\eta 2)$
1. 1. 1.	Between Groups	82,426	2	41,213	68,620	,000	1>2, 1>3,	,39
introducing self- regulated learning	Within Groups Total	124,924	208	,601			2>3	
strategies		207,351	210					
creating	<b>Between Groups</b>	58,434	2	29,217	81,610	,000	1>2, 1>3	,44
cooperative	Within Groups	74,466	208	,358				
learning environments	Total	132,900	210					
creating enriched	d Between Groups	79,973	2	39,986	60,151	,000	1>2, 1>3	,36
learning	Within Groups	138,270	208	,665				
environments	Total	218,243	210					

Levene f1 = 9.626; p= .000 Levene f2 = 12.265; p= .000 Levene f3 = 20.805; p= .000

According to the one-way ANOVA test result, it was determined that in self-efficacy for introducing self-regulated learning strategies levels significantly [F= 68.620, p <.05] differed in terms of the undergraduate fields of EFL teachers. To identify the specific groups in which differences exist, the results of the Dunnett C test indicate that there is a significant difference in the levels of self-efficacy for introducing self-regulated learning strategies among the department of ELT (M = 3.39) groups compared to the department of ELL (M = 2.28) groups and other departments (M = 1.85) groups. There was a significant difference in the levels of self-efficacy for introducing self-regulated learning strategies between the ELL group (M = 2.28) and the other groups (M = 1.85). The calculated effect size of the difference, denoted as  $\eta 2 = 0.39$ , is considered to be large.

According to the findings shown in Table 4, there was a significant difference in the degrees of self-efficacy for developing cooperative learning settings among EFL teachers in different undergraduate disciplines (F= 81.610, p <.05). The findings of the Dunnett C test indicate that there is a significant difference in the levels of self-efficacy for developing cooperative learning settings between the groups from the department of ELT (M = 3.14), the department of ELL (M= 2.15), and the other groups (M = 1.92). The calculated effect size of the difference, indicated as  $\eta 2 = 0.44$ , is regarded to be large.

The other finding from the same table shows self-efficacy for creating enriched learning environments levels significantly [F= 60.151, p < .05] differed in terms of the undergraduate fields of EFL teachers. The Dunnett C test results, self-efficacy for creating enriched learning environments levels of the ELT (M = 3.47) groups differed significantly from ELL (M = 2.27) groups and others (M= 2.15) groups. The computed effect size for the difference, shown as  $\eta 2 = 0.36$ , indicates a substantial magnitude.

#### CONCLUSION and DISCUSSION

The main aim of the present study was to assess the extent to which Turkish EFL teachers promote SRL in their instructional practices. The findings indicate that, on average, Turkish EFL teachers possess a moderate level of self-efficacy in fostering student engagement with SRL strategies. The first category of the scale pertained to the amount of self-efficacy exhibited by EFL teachers while presenting SRL strategies to their students. The data clearly demonstrated that a moderate proportion of respondents reported incorporating SRL strategies into their instructional practices for students. The development and sustainability of self-regulated learning are influenced by various interconnected factors, as proposed by Bandura (1993), Boekaerts (1999), Pintrich (2000), and Zimmerman (2008). Among these factors, motivation plays a crucial role (Kurman, 2001; Ommundsen, Haugen, & Lund, 2005; Wang & Holcombe, 2010). Hence, the active encouragement of teachers in pushing their students to utilize self-regulated learning (SRL) practices assumes a significant role within educational environments.

Previous studies demonstrated a reciprocal relationship between self-efficacy and the utilization of self-regulation mechanisms, resulting in mutually beneficial outcomes (Pajares,2008). Therefore, it can be claimed that there is a positive correlation between higher levels of self-efficacy beliefs and the utilization of self-regulation strategies. Additionally, earlier research conducted by Bouffard-Bouchard, Parent, and Larivee (1991), Schunk (1984), and Zimmerman and Martinez-Pons (1990) demonstrated that the use of self-regulation strategies can result in increased self-efficacy beliefs and academic achievement. It can be inferred that the moderate levels of self-efficacy beliefs among Turkish EFL teachers in using SRL methodologies in their courses may have an impact on students' academic performance in EFL classes. It is because the delivery of social support by both teachers and peers has a significant role in facilitating the development of self-regulation skills among students. The results of a study conducted with fifth grade students indicated that there was a higher occurrence of task engagement and utilization of SRL strategies among students who consistently got assistance from both their instructor and peers (Patrick, Ryan, & Kaplan, 2007).

The second dimension of the scale was concerned with the level of self-efficacy demonstrated by Turkish EFL teachers while establishing cooperative learning settings for their students. The

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statistics conclusively indicated that a moderate level of participants reported implementing cooperative learning settings in their instructional approaches for students. SRL emphasizes the active engagement of learners in their own learning process. The arrangement of the learning environment and instructional settings in alignment with students' prior experiences and personal interests fosters active engagement among learners and empowers them to assume ownership of the learning journey (Randi, 2004; Moos & Ringdal, 2012). The existing body of evidence indicates that within a self-regulated learning environment, when teachers assume the role of facilitators, students require peer support in order to effectively navigate and address the various challenges that may arise during the learning process. The necessity of student cooperation is a fundamental element within the process of self-regulation, as highlighted by Paris and Paris (2001).

The third dimension of the scale pertained to the degree of self-efficacy exhibited by Turkish EFL teachers in the process of creating enhanced learning environments for their students. The statistical data provided clear evidence that an average proportion of participants included enriched learning environments into their instructional strategies for students. Despite the time constraints, teachers are frequently expected to complete numerous responsibilities. The establishment of enhanced learning environments is crucial in facilitating the utilization of self-regulated learning (SRL) strategies by students. It is crucial to have in mind that the utilization of self-regulated learning (SRL) methodologies can facilitate students in acquiring new knowledge and adequately equipping themselves for the corresponding tasks (Paris & Winograd, 1990).

The next finding of the present study pertains to the potential variations in the degrees of self-efficacy among Turkish EFL teachers, specifically in connection to their gender, in the context of self-regulated learning implementation. A notable disparity was observed, indicating a preference for female EFL teachers in the aspect of using self-regulated learning methodologies. This finding aligns with the findings of previous studies conducted by, Soliman and Alenazi (2007), Yan (2018), Özdemir and Önal (2021), and Güneş (2023), which support the notion that female teachers exhibit higher levels of positivity and willingness to incorporate SRL strategies in their instructional practices. Based on the findings of the study conducted by Elmas, Demirdöğen and Geban (2011), it has been observed that female instructors tend to experience a greater sense of ease when sharing their knowledge with others, whereas male teachers are more inclined to assume teacher-centered positions throughout the duration of their teaching profession. The researchers argue that the preference of male instructors for teacher-centered teaching styles may be influenced by their aspiration to embody an authoritative role that aligns with their societal role within the community.

One further discovery from the present study indicates that there exists no statistically significant variation in the degrees of self-efficacy in implementing SRL strategies among EFL instructors in relation to their teaching experiences. To promote SRL, educators are required to relinquish conventional teacher-centered instructional approaches and acquire proficiency in pedagogy tailored to the requirements of the emerging educational paradigm (Lau, 2013). The findings of Huberman (1993), Martin et al. (2006), Soliman & Alenazi (2007), Bolton (2018); Zembat & Yılmaz (2018) differ with the present study, as they observed that teachers, through their accumulated experience, acquire expertise in their respective areas and employ various instructional approaches that foster learner autonomy and have a favorable impact on the development of self-regulation skills in learners. In contrast, the findings of Ghaith & Yaghi (1997), Wilcox-Herzog (2002), Saraç and Tarhan (2020) differ with the current conclusion, suggesting that novice instructors are more effective in fostering learners' self-regulated learning (SRL) abilities compared to experienced teachers. This discrepancy may be attributed to the novice teachers' greater familiarity with contemporary learner-centeredness principles.

The final discovery of the research pertains to the impact of the undergraduate field on the self-efficacy levels of EFL instructors in their use of SRL methodologies. The field of study had been pursued by teachers plays a crucial role in shaping teachers' implementation of SRL strategies. A notable disparity exists in the degrees of self-efficacy pertaining to the use of SRL practices within

the department of English Language Teaching (ELT). This finding corroborates the hypotheses that were considered prior to embarking on the current inquiry. Teachers received training in educational institutions are likely to place a high emphasis on their students' ability to make their own decisions, which is one of the most important implications that can be drawn from this finding.

The existing corpus of research in the field of EFL lacks comprehensive studies that investigate the levels of self-efficacy among teachers in utilizing SRL strategies in their instructional practices, as far as the researchers are aware. The current study offered significant insights into the teachers' role in fostering students' autonomy and lifelong learning. The increasing fascination and widespread appeal of autonomous and lifelong learners have underscored the growing importance of students' capacity to actively participate in SRL. By instructing students in the development of self-regulatory learning skills, educators may enhance their effectiveness in fostering academic attainment, motivation, and the cultivation of lifelong learning. In order to adequately equip students with the skills essential for SRL, it may be necessary to implement significant modifications at the school level. These changes would enable teachers to effectively devote the required time and resources for student preparation. The organization of classroom curricula and assessment systems should prioritize and appreciate independent inquiry and strategic problem-solving (Patrick et al., 2007). The present study primarily examined the selfefficacy levels of teachers in implementing SRL strategies in the context of EFL. However, it is important to note that this study only addresses one aspect of the broader topic. Therefore, future research should aim to investigate a more comprehensive context that incorporates teachers' attitudes and competences as practitioners in the field of EFL.

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