Journal of Pedagogical Research Onlinefirst Article, 2024 https://doi.org/10.33902/JPR.202427265



# Research Article

# Enhancing teacher self-efficacy: The power of effective training programs

Khulood M. Almajnuni<sup>1</sup> and Tarik A. Alwerthan<sup>2</sup>

<sup>1</sup>Saudi Ministry of Education, General Directorate of Education in Taif, Kingdom of Saudi Arabia (ORCID: 0009-0001-0461-7978) <sup>2</sup>Taif University, College of Education, Department of Educational Leadership and Policies, Kingdom of Saudi Arabia (ORCID: 0000-0003-0501-3153)

This study aimed to identify the relationship between training program effectiveness and English language teachers' self-efficacy. The participants of this study consisted of 144 English language teachers at Makkah schools. The data were collected via the Effectiveness of Training Program Scale and the Teachers Self-Efficacy Scale. The findings of the study revealed a statistically significant relationship between training programs effectiveness and English language teachers' self-efficacy. Furthermore, English teachers perceived self-efficacy toward student engagement and instructional strategies was medium, whereas classroom management was not high. Relevant implications and future directions are discussed within the scope of the training program effectiveness and teacher's self-efficacy literature.

Keywords: Classroom management; Effectiveness of training programs; Instructional strategies; Student engagement; Teacher sense of self-efficacy

Article History: Submitted 19 February 2024; Revised 15 May 2024; Published online 1 July 2024

## 1. Introduction

Professional development [PD] is an essential component contributing to change in teachers' performance and abilities. One of the most common professional development tactics within the education sector is training programs. Specifically, effective training programs are known to positively impact teachers' self-efficacy, teaching skills, and instructional strategies. In addition, it improves teachers' knowledge, and enhances their ability to recognize students' needs and handle their differences (Hassan et al., 2020; Malik et al., 2015; Qadir et al., 2020). This is especially important as in-service teachers encounter contentious professional challenges (Catalano & Popiţan, 2020). As such, PD, and by extension training programs, is one of the fundamental processes that contribute significantly to developing the knowledge and experiences of English language teachers and raising their self-efficacy (Senser & Cokciskan, 2017). Increasing the self-efficacy of English language teachers via effective PD training programs is crucial as there are many challenges when teaching English as a second language, necessitating the need for teachers to improve their knowledge, skills, strategies, and competencies to be proficient instructors (Halabe, 2015; Putri et al., 2019; Yoestara, et al., 2020).

Several studies have demonstrated the importance of the cognitive and practical aspects of training programs and their positive impact on English language teachers' experiences, practices

Address of Corresponding Author

Khulood M. Almajnuni, EFL Teacher, Master of Educational Policies, Taif, Ministry of Education, Kingdom of Saudi Arabia.

khuloodalmajnuni@outlook.sa

**How to cite:** Almajnuni, K. M. & Alwerthan, T. A. (2024). Enhancing teacher self-efficacy: The power of effective training programs. *Journal of Pedagogical Research*. Advance online publication. https://doi.org/10.33902/JPR.202427265

and self-efficacy (Darling-Hammond et al., 2017; Giraldo, 2014; Priajana, 2017; Ravhuhali et al., 2015; Vien, 2017; Yeşilçınar & Çakır, 2018). Teacher self-efficacy is a significant factor that positively impacts teachers' performance. Specifically, self-efficacy is a psychological concept that affects a person's physical and psychological well-being. For example, an individual with low self-efficacy may feel more anxious and lack the ability to be academically competitive when compared to someone with high self-efficacy (Al Mawadieh et al., 2021). Self-efficacy is built from an individual's confidence in their ability to complete tasks, solve problems, and appreciate their abilities (Alghulayqah, 2021).

Teacher's self-efficacy appears clearly in classrooms (Hepburn et al., 2021; Klassen & Tze, 2014; Sokmen et al., 2022; Tschannen-Moran & Hoy, 2001). According to Tschannen-Moran and Hoy, (2001) teacher's self-efficacy can be observed through the degree of learners' involvement, the use of instructional strategies, and the capacity of classroom management. These improvements are crucial as English teachers need to use these factors to achieve the objectives of teaching English as a second language. According to Sokmen (2021), the interaction of students in the classroom is achieved through involving students in class decisions and activities. In addition, using effective instructional strategies in the classroom contributes to students' participation and interaction (Shin & Bolkan, 2021). Hepburn et al. (2021) also concluded that classroom management provides students many opportunities to develop their learning. However, to obtain high levels of self-efficacy, English teachers must feel confident in their ability to teach English effectively. Professional development training programs serves as a necessary component to fulfill this need.

Previous studies show the importance of PD and its role in raising teachers' competencies (Abu Mudaigm et al., 2018; Gore et al., 2017; Mussa 2018; Putri et al., 2019; Tzivinikou, 2015). For instance, Putri et al. (2019) concluded that PD programs are one of the most effective ways to improve teachers' competence. Training programs are important and powerful in developing teachers' skills, enhancing their performance, and increasing self-efficacy (Alqahtani & Albidewi 2022). As such, the main purpose of this paper is to determine the relationship between the effectiveness of training programs and English language teacher self-efficacy. The three research objectives of this current study are 1) To determine the level of training program effectiveness in the Kingdom of Saudi Arabia [KSA], 2) to determine the level of perceived self-efficacy by English language teachers, and 3) to examine the potential correlation between training program effectiveness and English language self-efficacy.

This study is important because it may assist decision-makers in the training centres at the Ministry of Education in developing a clear scientific and applied methodology that enhances the effectiveness of professional development programs for English teachers. Additionally, it can contribute to the understanding of the relationship between training program effectiveness and English teachers' self-efficacy. Moreover, by considering the cognitive and practical effectiveness of the provided training programs for EFL teachers, the current study can pave the way for identifying which training programs might be effective for teachers working in the field of foreign language education. The outlined objectives can be helpful for decision-makers in education districts to provide training programs for EFL teachers after investigating their needs both cognitively and practically. Additionally, it can inform school principals on the significance of reporting training needs to the relevant authorities and nominating teachers for training programs tailored to their specific needs. In the line with the objectives of the current study, the questions that this research aims to answer are:

- RQ 1) What is the relationship between the effectiveness of training program and English teachers' self-efficacy in the KSA?
- RQ 2) What is the level of training program effectiveness from the perspective of Saudi English Teachers?
  - RQ 3) What is the level of self-efficacy among Saudi English teachers?

#### 2. Literature Review

# 2.1. The Effectiveness of PD Programs

Students are expected to master increasingly complex competencies, which cannot be done successfully without providing teachers with proper PD opportunities to acquire necessary knowledge and skills. Effective PD can assist teachers in refining the pedagogies required to deliver complex and modern skills such as critical thinking, complex problem-solving, mastery of challenging content, communication and collaboration (Darling-Hammond et al., 2017). English teachers can develop their knowledge, skills, and experiences through effective cognitive and practical training programs. According to Hassan (2011), PD can be defined as continuous activities and programs that are planned and implemented to develop teachers' various capabilities, skills, and experiences to prepare them to perform their duties efficiently and effectively. It's important to note that effective training program as a form of PD leads to the establishment of quality lesson implementation in the classroom (Easton, 2008).

Studies have showed that effective PDP is crucial for teachers. For instance, a study conducted by Shakir et al. (2019), which collected responses from 200 teachers, found that teachers believe that training programs have a positive impact on their profession. They suggest that training programs should be monitored and followed to measure their effectiveness. Additionally, new knowledge and skills are supposed to be introduced during training programs to ensure professional development for teachers according to contemporary issues. Furthermore, in a quantitative study from the perspective of 247 English teachers, Ravandpour (2019) found that there is an association between continuous professional development programs for EFL teachers and teachers' self-efficacy.

Despite the significance of PD for teachers and the effective PD programs, there are some shortcomings in these programs. Abdulsalam's study (2019) found that the PD programs do not meet the training needs of teachers, and the content of these programs does not contribute to the development of teachers' knowledge and skills. In addition, the PD programs tend to be offered in a theoretical rather than practical manner, which may result in making them less helpful and hard to master cognitively and practically. Fortunately, teachers are also motivated and willing to engage in these programs as a means to increase their knowledge and skills. For example, a study conducted by Catalano and Popitan (2020) that collected responses from 102 teachers found that teachers have a strong desire to strengthen their knowledge and skills by enrolling in effective training programs. As a result, the current study aims to reduce the gap in the literature by distinguishing between the cognitive effectiveness and practical effectiveness of training programs in relation to self-efficacy dimensions from EFL teachers' perspectives.

# 2.1.1. Cognitive effectiveness of PDP

The cognitive effectiveness of PD programs is revealed through its ability to achieve impact on teachers by introducing new and modern knowledge, activities, and capacities. Effective PD programs increase teachers' knowledge, improves practices, and enhances student learning outcomes (Darling-Hammond et al., 2017). It provides teachers with teaching skills and instructional strategies (Ravhuhali et al., 2015). In addition, Qadir et al. (2020) concluded that it enriches teachers' knowledge and provides them with the necessary skills for teaching, dealing with students, and identifying students' educational needs. Also, PD has an effective role in providing information and enhancing teacher cooperation (Mahmoudi & Özkan, 2015). As Priajana, (2017) highlighted, PD supports sharing ideas and experiences with teachers, providing diverse and different points of view. Training programs can provide teachers with a lot of effective knowledge and experiences that enhance their experiences and enable them to improve their teaching practices. From a cognitive load theory point of view, teachers' PD programs are a primary requirement to introduce them to new knowledge in the field and provide them with a chance for revisiting prior learning which reduces potential gaps. This is crucial as an individuals' cognitive processing capacity is limited and cannot handle a large number of information elements

simultaneously (Sweller et al., 2019). Previous research has shown that participating in a training program that is perceived by teachers as having both cognitive and practical effectiveness can influence self-efficacy positively (Tzivinikou, 2015).

# 2.1.2. Practical effectiveness of PD programs

There is a crucial need to re-build teaching workforces by exposing teachers to training programs that encourages them to perform their tasks and duties while simultaneously reducing the gap between theoretical and practical aspects (Gore et al., 2017). Focusing on the practical effectiveness of training programs can provide an opportunity to tackle challenges related to implementing received knowledge on the classroom.

The effectiveness of a training program is demonstrated by introducing applicable strategies and methods pertaining to the classroom environment, effective teaching and students' challenges (Malik et al., 2015). It enriches teachers with different experiences and skills (Mohammadi & Moradi, 2017). Also, Mahmoudi and Ozkan (2015) stated that these programs refine teachers' practices by introducing modern educational strategies for teaching. In addition, it provides teachers with various and appropriate strategies to enhance their experiences and improve their skills (Joshi et al., 2018). These programs include technological applications such as digital libraries and electronic conferences (Vien, 2017). Therefore, the effectiveness of practical PD programs is represented in providing various teaching strategies, multiple workshops, electronic conferences, and integrating technology into education.

## 3.2. Sense of Self-efficacy

A sense of self-efficacy is one of the most important things that positively impact a person (Lu & Mustafa, 2021; Mireles-Rios et al., 2019; Tzivinikou, 2015). It appears most prominently in performance and behaviors that involve interaction with others. Lu and Mustafa (2021) confirmed that a teacher with a high sense of self-efficacy has confidence in their professional abilities. In contrast, a teacher with low self-efficacy tends to think about their weaknesses in performance. According to Tzivinikou's pre- and post-evaluation research (2015), professional development (i.e., training program for in-service teachers) has a positive impact on teachers' self-efficacy (planning and implementing interventions, process of students' assessment). In addition, Mireles-Rios et al. (2019) pointed out that teachers' self-efficacy and effectiveness are evaluated through different teaching fields, such as instructional strategies, classroom management, and student engagement.

## 3.2.1. Instructional strategy

Instructional strategies are the essential methods used in the classroom, through which students' learning is supported effectively, and teachers can use various classroom activities (Akdeniz, 2016; Lu & Mustafa, 2021; Tzivinikou, 2015; Woo et al., 2018). Specifically, according to Akdeniz (2016), instructional strategy refers to the methods that teachers use in the classroom to achieve educational goals; these methods typically consider the educational objectives and content of the curriculum. Many studies indicated the importance of instructional strategies and their impact on education (Mireles-Rios et al., 2019; Sarfo et al., 2015; Seechaliao, 2017; Thomas & Green, 2015). Seechaliao (2017) stated that educational strategy contributes to students' involvement in educational activities, discussion in class, asking questions, and using inductive and deductive thinking. Thomas and Green (2015) also added that educational strategies must be tailored to the needs of learners. Several studies have revealed that teacher self-efficacy is related to the use of instructional strategies. In fact, Woo, et al. (2018) found a positive relationship between teachers' self-efficacy and the use of instructional strategies. Sarfo et al. (2015) also discovered that teachers who have high self-efficacy are more effective in using instructional strategies.

## 3.2.2. Student engagement

Teachers' sense of self-efficacy toward education positively impacts students' scientific achievements and participation in classroom activities (Chang & Chien 2015; Mireles-Rios, et al.,

2019; Shaukat & Iqbal, 2012; Sökmen et al., 2022; Van Uden et al., 2014). Van Uden et al. (2014) pointed out that teachers with a high self-efficacy toward teaching enhance students' participation and make them much more active in class. As such, there is a relevant relationship between self-efficacy for teachers and students' engagement in class (Sökmen, 2021). Shaukat and Iqbal (2012) stated that teachers have a high self-efficacy in making students engage in classroom activities. In addition, Lu and Mustafa (2021) added that teachers' self-efficacy positively affected students' engagement in learning. Thus, classroom participation contributes significantly to the educational process's success (Chang & Chien 2015). Based on the above, we conclude that the self-efficacy of teachers and educational efforts within the classroom is based on encouraging the effective participation of students, which positively impacts their learning outcomes.

# 3.2.3. Classroom management

Managing the classroom is one of the most essential skills that teachers should have (Alshihri & Qotb 2020; Hepburn et al., 2021; Sieberer-Nagler, 2015; Sivri & Balcı 2015; Tzivinikou, 2015). Alsihry and Qotb (2020) indicated that controlling the classroom is the most important educational competency for teachers and for success in the educational process, through which the goal and objectives are achieved. Similarly, Sivri and Balci (2015) added that teachers must have the requisite knowledge and skills to complete the teaching process smoothly, deal with classroom activities, and guide the students to achieve educational goals. Many studies indicated the importance of classroom management (Alshihri & Qotb, 2020; Hepburn et al., 2021; Sivri & Balcı, 2015; Tzivinikou, 2015). For instance, Sieberer-Nagler (2015) stated that classroom management aims to provide students with many opportunities to learn, develop their learning, and implement what is required. Hepburn et al. (2021) also pointed out that effective classroom management is not just setting rules and regulations, it's also making the students understand educational practices. Therefore, through the activities in the classroom, students receive higher instances of educational skills and experiences. As a result, Sivri and Balci (2015) pointed out the positive relationship between teachers' sense of self-efficacy in classroom management and their expectations are related to the result of their practices in the classroom. As such, teachers' ability to manage the classroom contributes to students' learning and academic achievement. Through activities and actions in the classroom, students receive more educational skills and experiences that contribute to the success of education and learning.

## 4. Method

#### 4.1. Procedure

The sample of the current study was recruited from the General Department of Education in the Makkah region by approaching in-service English teachers at their schools. As all teachers in the Kingdom of Saudi Arabia routinely attend general and specialized training programs, this offered an effective method of convenience sampling and a representative range of English teachers within Saudi. The specialized training programs focus on teaching English as a foreign language for each targeted grade level: elementary school, middle school, and high school. The study and its' instrument were approved by the Taif University's [TU] institutional review board [TU-IRB]. The survey required finishing a 7–12-minute anonymous unidentified electronic survey.

## 4.2. Participants

This study was conducted online from March 2022 to April 2022 and participants were gathered from public schools from different levels of education (Elementary Schools, Middle Schools, High Schools) to ensure a diverse pool of participants. A total of 144 English language teachers at Makkah Al-Mukarramah city's schools in Makkah in the Kingdom of Saudi Arabia were randomly selected and recruited from the total population of English teachers which was around 1300. Of the sample collected, 100% of the sample was Saudi Arabian Nationals, 59.72% were female and 82.72% had ten or more years of experience. As indicated in Table 1 all participants were exposed

to different kinds of training program (general programs in the education field and specialized program in teaching English as a second language). Table 1 highlights sociodemographic characteristics of participants.

Table 1 *Characteristics of the participants* 

Characteristics of the participants	п	%
Gender		,,
Male	86	59.72
Female	58	40.28
Educational Background		
BA with EDU PREP	106	73.61
BA without EDU PREP	18	12.50
MA in English Language	7	4.86
MA in Education	11	7.64
PhD in Education	2	1.39
Years of Experience		
Under 5	7	4.86
Above 5 & under 10	15	10.42
Above 10 & under 15	45	31.25
Above 15 & under 20	39	27.08
Above 20	38	26.39
School Level		
Elementary school	46	31.94
Middle school	44	30.56
High school	54	37.50
General Training hours		
Under 50	44	30.56
Between 50-100	43	29.86
Above 100	57	39.58
Specialized Training hours		
Under 50	30	20.83
Between 50-100	50	34.72
Above 100	34	23.61

Note: EDU PREP= Educational Preparation

# 4.3. Data Collection Tools

To gather realistic perceptions from potential participants, we engaged in discussion with 6 inservice English teachers and 4 teaching supervisors in the Kingdom of Saudi Arabia regarding their perceptions of training program effectiveness and self-efficacy inside the classroom based on their experiences. Next, the targeted constructs were decided to measure training program effectiveness and teacher's self-efficacy. The training program for English language program scale contains two constructs: cognitive effectiveness and practical effectiveness and the self-efficacy scale contains three constructs: instructional strategies, student engagement and classroom management. After finalizing the instrument, the study was approved by TU-IRB. The same 6-point Likert response scale (Not at all, A little, Somewhat, Quite a bit, Very much, Extremely) was utilized for all of the items in the study. Responses were averaged for each scale so that higher scores indicated higher levels of the target construct.

The validity of the scales were conducted by sharing the scales with 10 experts in the field of education, psychology. In addition, 4 teachers who hold graduate degrees were asked to provide their opinions regarding to the scales. The authors rewrote the items of the scales according to the expert's feedback. Then, the questionnaire was implemented on 50 teachers. In order to show the relationship between item's score and the total score of the construct, the Pearson's correlation

coefficient was used, which showed that the internal consistency was acceptable for the scales' items.

# 4.3.1. Effectiveness of Training Programs Scale

Based on our discussions with the educators regarding the current and previous studies, we found that there is a need to develop a scale to assess the effectiveness of training programs. Twenty-six items were developed with thirteen items used to assess cognitive effectiveness and thirteen items were used to assess practical effectiveness. According to the Cronbach's alpha test, which was employed to measure the reliability each construct of training program effectiveness scale, responses demonstrated high internal consistency in the current sample. A sample question from the Cognitive Effectiveness Training Program [CETP] subscale includes "It enables teachers to exchange knowledge and successful experiences with English Teacher"s" (Cronbach's  $\alpha$  =.89). Similarly, a sample question from the Practical Effectiveness Training Program [PETP] subscale includes "Training programs is positively affected classroom practices while teaching" (Cronbach's  $\alpha$  =.86).

# 4.3.2. English Teacher self-efficacy Scale

Based on our discussions with the educators regarding the current study, an existing scale was highlighted by the experts (Tschannen-Moran & Hoy 2001). Twenty-four items from the Teachers' Sense of Teacher Efficacy Scale assessed the extent to which the efficacy in instructional strategies [EIS], efficacy in student engagement [ESE], and efficacy in classroom management [ECM] have been met. Every construct contains eight items. The scale was translated into Arabic by 4 university professors, and 2 teachers. The survey was then revised by the researchers to adapt the items to be appropriate to the Saudi environment. According to the Cronbach's alpha test which was employed to measure the reliability of each construct of the English teacher self-efficacy scale, responses demonstrated high internal consistency in the current sample; instructional strategies (e.g., "I can measure students' understanding of the explained lesson."; Cronbach's  $\alpha$  = .87 ), Student Engagement (e.g., "I find it easy to motivate students who show little interest in schoolwork."; Cronbach's  $\alpha$  = .87), and Classroom Management (e.g., "I find it difficult to control the naughty students who obstruct the achievement of the lesson objectives"; Cronbach's  $\alpha$  = .89).

## 5. Results

The data information was analyzed using descriptive statistics, such as frequencies, percentages, means, and standard deviation. In addition, correlation analysis were used to explore the potential association between the effectiveness of professional programs and teachers' sense of self-efficacy using the Pearson correlation coefficient.

Table 2
Descriptive statistics

Variable	No. Items	M	M%	SD	Weighted Mean	Efficiency
CETP	13	53.548	68.65%	11.456	4.119	Average
PETP	13	53.090	68.06%	13.255	4.084	Average
ESE	8	33.118	69.00%	5.329	4.140	Average
EIS	8	36.020	75.04%	5.765	4.503	Above Average
ECM	8	37.034	77.16%	6.765	4.629	Above Average

Note: 1-2.65=Low Average; 2.66-4.32= Average; 4.33-6=Above Average. Note: CETP = cognitive effectiveness of training program; PETP = practical effectiveness of training program; ESE=efficiency of Student Engagement; EIS= efficiency of instructional strategies; ECM= efficiency of classroom management.

## 5.1. Descriptive Statistics

The weighted mean of EFL teachers' perception toward cognitive effectiveness of training programs was 4.119 and practice effectiveness of training programs was found to be 4.084, both of

which are considered acceptable results (see Table 2). Teachers' perception toward their level of self- efficacy for efficiency of student engagement was found to be 4.140 which is also considered an acceptable result (see Table 2 for the weighted mean). Furthermore, the weighted mean of EFL teachers' self-efficacy for efficiency of classroom management is 4.629 and for efficiency of instructional strategies is 4.503 which are both above average.

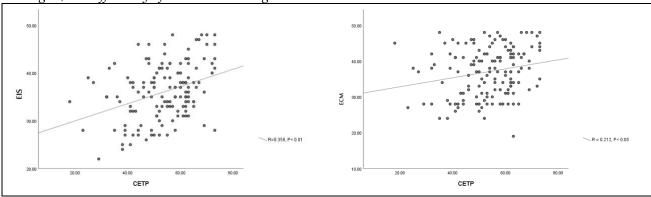
Table 3
Descriptive statistics and normal distribution test

Descriptive statistics			Shapiro-Wilk				
Variable	Min	Max	Mdn	M	SD	W	р
CETP	18.00	73.00	55	53.548	11.456	0.985	0.146
PETP	13.00	78.00	54.5	53.090	13.255	0.986	0.183
ESE	22.00	48.00	33	33.118	5.329	0.987	0.233
EIS	22.00	48.00	36	36.020	5.765	0.984	0.110
ECM	19.00	48.00	37.5	37.034	6.765	0.987	0.220

Note: CETP = cognitive effectiveness of training program; PETP = practical effectiveness of training program; ESE=Efficiency of student engagement; EIS= efficiency of instructional strategies; ECM= efficiency of classroom management

The Shapiro-Wilk test was utilized on the collected data to figure out whether the sample and collected data came from a normal distribution. The result of descriptive statistics which includes Shapiro-Wilk is presented in Table (2). Additionally, Table 3 shows that the data were normally distributed for the cognitive effectiveness of training program [CETP] (0.1464), practical effectiveness of training program [PETP] (0.1838), Efficiency of student engagement [ESE] (0.2335), efficiency of instructional strategies [EIS] (0.1105), and efficiency of classroom management [ECM] (0.220) which all exhibited a significance level higher than 0.05 (p> .05). Therefore, the Pearson Correlation Formula was used for all pairs.

Figure 1
Illustration the correlation between cognitive effectiveness of training programs, efficiency of instructional strategies, and efficiency of classroom management



*Note.* CETP = cognitive effectiveness of training programs; EIS= efficiency of instructional strategies; ECM=efficiency of classroom management.

The CETP was significantly correlated to EIS (r =.358, p <.01). The cognitive effectiveness of training programs was also moderately correlated to the efficiency of classroom management in a positive direction (r =.212, p =.012; see Table 4). Figure 1 also shows that all plots exhibit linear correlation between pairs CETP, EIS, and ECM.

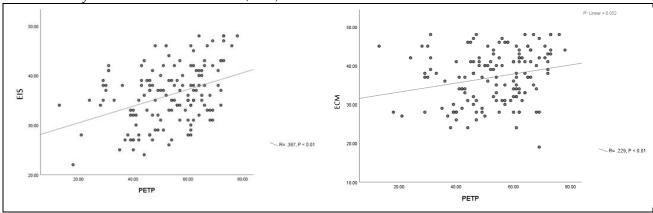
Table 4
Correlation analysis

Variables	R	df	р
CETP vs EIS	.358**	142	<.01
CETP vs ECM	.212*	142	.012
PETP vs EIS	.387**	142	<.01
PETP vs ECM	.229**	142	<.01
ESE vs EIS	.703**	142	<.01
ESE vs ECM	.575**	142	<.01

Note. \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

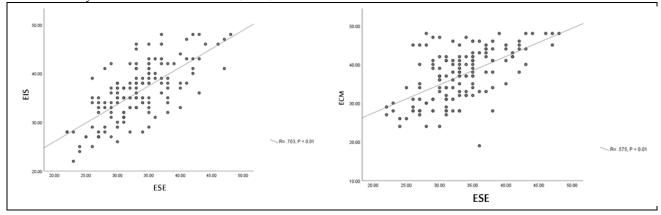
The PETP was significantly correlated to EIS (r =.387, p <.01). The practical effectiveness of training program was also moderately correlated to the efficiency in the ability to manage the classroom in a positive direction (r =.229, p <.01). Figure 2 shows that all plots exhibit a linear correlation between the pairs of PETP, EIS, and ECM.

Figure 2 *Illustration of correlation between PETP, EIS, and ECM* 



Furthermore, ESE was significantly correlated to EIS (r =.703, p <.01). The PETP was also highly correlated to the efficiency classroom management in a positive direction (r =.575, p <.01). Figure 3 also highlights that all plots exhibit linear correlation between the pairs of PETP, EIS, and ECM.

Figure 3 *Illustration of correlation between ESE, EIS, and ECM* 



Finally, it was found that there was no statistically significant difference in training effectiveness based on a qualification, F = 2.246, p = .065; Wilk's  $\Lambda = 0.936$ . There was also no statistically significant difference in training effectiveness based on a years of

experience, F=1.207, p =.302; Wilk's  $\Lambda$  = 0.982. Similarly, there was no statistically significant different in self-efficacy (see Table 5).

Table 5 *The results of the one way Manova analysis* 

	Trainin	g Effectiv	eness	English Teacher-efficacy		
Factors	Wilks' Lambda	F	P	Wilks' Lambda	F	p
ractors	Λ	Г		Λ	Г	
Qualification	0.936	2.246	0.065	0.975	.407	.916
Years of Experience	0.982	1.207	0.302	0.965	1.174	.325
School you teach at	0.960	1.38	0.241	0.923	1.337	.225
Number of G.T.Hrs.	0.936	2.223	0.067	0.928	1.230	.282
Number of S.T.Hrs.	0.986	0.463	0.763	0.965	.576	.797
Gender	0.994	0.396	0.674	0.941	2.044	.092

Note. Number of G.T.Hrs.= Number of general training hours, Number of S.T.Hrs.= Number of specialized training hours.

## 6. Discussion

The current study sought to investigate the level of training program effectiveness and English language teachers' self-efficacy in the KSA, and to determine the potential relationship between the effectiveness of professional development programs (Cognitive & Practical Effectiveness) and English language teachers' sense of self-efficacy (Classroom Management, Instructional Strategies, & Student Engagement) who work at Makkah Al-Mukarramah city's schools in the Kingdom of Saudi Arabia. The significance of this study is to assist training center decision-makers in increasing the level of efficacy produced from training programs. Providing an effective training program is essential for teacher success, which will impact their students directly and indirectly (Sukontapol et al., 2018).

The results indicate that the participants of the study have, to some extent, a general agreement on the effectiveness of provided training programs cognitively and practically which can be interpreted as a result of the Ministry of Education's efforts to achieve the objectives of Saudi Vision 2030 (Ministry of Education, 2016). One of the Saudi Ministry of Education's initiatives is to contribute towards achieving objectives of Vision 2030, which is an initiative of Professional Development for Teachers. The results are consistent with Mussa's (2018) study. However, there is still a need to make training programs more effective cognitively and practically (Abu Mudaigm, et al, 2018). Overall, the results of question 1 are inconsistent with the findings of Alghtani's (2022) study which highlighted the weakness of provided professional development programs to English language teachers. In addition, there is a need to improve the effectiveness level of provided training program by the Ministry of Education (Administration of Scholarship and Training, Educational Training Centers) especially as more English courses have been included in the curriculum of students in the elementary school and the shift that Saudi Arabia is witnessing at all levels (Alyami, 2014; Pavan, 2017). The results of question 2 indicate that generally speaking, EFL teachers experience an average to above average level of self-efficacy which can be interpreted as a result of allowing teachers to participate in online training and traditional training. In addition, motivating teachers by making them seek knowledge and obtain skills through seminar, workshop, program training, and action research as a requirement for annual professional development can be the reason for having high level of self-efficacy. In order for EFL Teachers to deliver language skills and knowledge to their students, they need to have high level of selfefficacy and the ability to master the skills of instruction strategies, student engagement and classroom management (Sarfo et al., 2015; Sukontapol et al., 2018). On the other hand, teachers' self-efficacy of instructional strategies was average, which indicates there is a need to improve training programs to EFL teachers.

The results of the correlation analysis confirmed a significant positive correlation between effectiveness of training program and EFL teachers' self-efficacy. In other words, the more effective training programs are, the higher teachers' sense of self-efficacy. The findings of this study support previous studies (Mussa, 2018; Yoo, 2016). For instance, Mussa (2018) highlighted the positive relationship between the effectiveness of the content of training courses for teachers and their level of performance. Moreover, the study conducted by Yoo (2016) which showed a positive relationship between professional development program [PDP] and teachers' self-efficacy.

# 7. Implications, Limitations and Future Studies

The results of current study can be used by the Ministry of Education and its departments to increase the efforts in building training programs. They can do so by taking into consideration the importance of studying training needs before starting to build training programs. In addition, the voice of the targeted audience of these programs has to be considered as they can highlight their challenges which can be addressed through providing effective training programs. Furthermore, as the study results showed, the relationship between effective training programs and self-efficacy shows that there is a need to schedule meaningful training programs for teachers according to their needs which can be obtained from school leadership and teacher supervisors.

The explanation of these study results is somewhat limited because of the following reasons. First, the sample was a convenience sample of English language teachers in one of the KSA's city. Forthcoming studies will need to explore how well the current study's results generalize to other cities. Second, this study was based on self-reports of teachers' perceptions towards the effectiveness of training programs both cognitively and practically to increase English language self-efficacy. Future research could use mixed methods (qualitative and qualitative methods) to provide insights regarding the topic's variables. In addition, future research could also gather data from multiple informant approaches (school's leaders, students, teacher supervisors) to reduce the potential of bias and include the opinions of others who directly and indirectly deal with teachers. Third, the current study adopted a cross-sectional study design which meant the collection of data was at a single time point. Future research can utilize a longitudinal study design which would allow researchers to examine the same individuals repeatedly over a period of time to determine the occurrence of any expected and unexpected changes.

**Acknowledgements:** The researchers would like to acknowledge deanship of Grdaute Studeis and Scientific Research, Taif University and General Department of Education in the Makkah region, Ministry of Education for supporting this work.

Author contributions: All authors were involved in the design and implementation of this study, reviewing relevant research, deciding on the content of the survey, creating IRB materials and obtaining IRB approval. Khulood M. Almajnuni coordinated (a) the translation process, (b) logistics with the General Department of Education in the Makkah region and (c) the data entry process. Khulood also personally collected all 144 survey responses who work as English language teachers. All authors were involved in the data cleaning and analysis process. Although Khulood took the lead on drafting the manuscript, Tarik was instrumental in shaping the manuscript into its current form. The authors are in agreement on the order of authorship.

**Declaration of interest:** The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

**Ethical declaration:** Authors declared that the study was approved by Taif University Research Ethics Committee on 08 March 2022 (Application No:43-512).

**Funding:** No funding was obtained for this study.

# References

- Abdul Salam, A. M. (2019). A proposed perspective for developing professional development programs at the professional academy for the teacher to meet licensing requirements in light of the experience of some countries. *Journal of Faculty of Education* 35(2), 1-72.
- Abu Mudaigm, K., Kayid S., & Jauarnh, T. (2018). The role of professional centers in developing teachers' performance from the perspective of the principals in the Beersheba Area. *Journal of Educational and Psychology Sciences*, 26(4), 432–462.
- Akdeniz, C. (2016). *Instructional process and concepts in theory and practice: improving the teaching process.* Springer Singapore.
- Al Mawadieh, R., Adheisa, M., Alomyan, H., & Al-Badri, A. (2021). The relationship between self-efficacy and quality of life among university students. *An-Najah University Journal for Research B (Humanities)*, 39(9), 1–23.
- Alghtani, O. (2022). Suggested proposal for sustainable alternative of the professional development of teachers in the light of the national vision 2030 of K.S.A. *Educational & Science Journal*, 1(20), 53-88.
- Alghulayqah, A. (2021). Professional performance development of educational supervisor and its relationship with perceived self-efficacy. *Journal of Education Studies*, 1(27), 275–326.
- Alqahtani, M., & Albidewi, I. (2022). Teachers' English language training programmes in Saudi Arabia for achieving sustainability in education. *Sustainability*, 14(22), 15323. https://doi.org/10.3390/su142215323
- Alshihri, K., & Qotb, I. (2020). A proposed concept to develop the competencies of classroom management for new teachers in private schools from educational supervisors and school leaders' perspectives in Makkah. *Journal of Educational and Psychological Sciences* 4(10), 86–118. https://doi.org/10.26389/AJSRP.K171019
- Alyami, R. (2014). Educational reform in the Kingdom of Saudi Arabia: Tatweer Schools as a unit of development. *Literacy Information and Computer Education Journal*, 5(2), 1515–1524. https://doi.org/10.20533/licej.2040.2589.2014.0202
- Catalano, H, & Popiṭan, A. (2020). The impact of training programs in professional development of teachers-ascertaning study. *European Proceedings of Social and Behavioural Sciences*, *6*, 84–89. https://doi.org/10.15405/epsbs.2020.06.9
- Chang, D., & Chien, W. (2015). Determining the relationship between academic self-efficacy and student engagement by meta-analysis. In P. Shaw (Ed.), 2015 International Conference on Education Reform and Modern Management (pp. 142-145). Atlantis Press. https://doi.org/10.2991/ermm-15.2015.37
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Easton, L. B. (2008). From professional development to professional learning. *Phi Delta Kappan*, 89(10), 755-761. https://doi.org/10.1177/003172170808901014
- Giraldo, F. (2014). The impact of a professional development program on English language teachers' classroom performance. *Profile Issues in Teachers Professional Development*, 16(1), 63-76.
- Gore, J., Lloyd, A., Smith, M., Bowe, J., Ellis, H., & Lubans, D. (2017). Effects of professional development on the quality of teaching: Results from a randomised controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education*, 68, 99-113. https://doi.org/10.1016/j.tate.2017.08.007
- Halabe, T. (2015). The problems faced by basic elementary stage teacher's in teaching English language in public schools at Nablus district [Unpublished master's thesis]. An-Najah National University, Palestinian.
- Hassan, F., Amin, M. K., Khan, T., Emon, M. M. H., & Amin, A. (2020). Roles of social influence in expediting online learning acceptance: A preliminary study on Bangladeshi learners. In C. Z. Lamagna (Ed.), *Proceedings of the International Conference on Computing Advancements* (pp. 1-6). ICCA.
- Hassan, M. (2011). Professional accreditation and its relationship to sustainable professional development for teachers in the era of knowledge flow. *Journal of Education, Assiut University*, 27(2), 1-85.
- Hepburn, L., Wendi B., & Alston-Knox, C. (2021). Classroom management practices commonly used by secondary school teachers: results from a Queensland survey. *The Australian Educational Researcher*, 48(3), 485–505. https://doi.org/10.1007/s13384-020-00402-y
- Joshi, K. D., Gnawali, L., & Dixon, M. (2018). Experience of professional development strategies: Context of Nepalese EFL teachers. *Pakistan Journal of Education PJE*, 35(2), 53-78. https://doi.org/10.30971/pje.v35i2.547
- Klassen, R. M., & Tze, V. M. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational research review*, 12, 59-76. https://doi.org/10.1016/j.edurev.2014.06.001

- Lu, Q., & Mustafa, Z. (2021). Toward the impact of EFL teachers' self-efficacy and collective efficacy on students' engagement. *Frontiers in psychology*, 12, 744586. https://doi.org/10.3389/fpsyg.2021.744586
- Mahmoudi, F., & Özkan, Y. (2015). Exploring experienced and novice teachers' perceptions about professional development activities. *Procedia-Social and Behavioral Sciences*, 199, 57-64. https://doi.org/10.1016/j.sbspro.2015.07.487
- Malik, S., Nasim, U., & Tabassum, F. (2015). Perceived effectiveness of professional development programs of teachers at higher education level. *Journal of Education and Practice*, 6(13), 169-181.
- Ministry of Education. (2016). Saudi Vision 2030. Author.
- Mireles-Rios, R., Becchio, J. A., & Roshandel, S. (2019). Teacher evaluations and contextualized self-efficacy: Classroom management, instructional strategies and student engagement. *Journal of School Administration Research and Development*, 4(1), 6-17. https://doi.org/10.32674/jsard.v4i1.1938
- Mohammadi, M., & Moradi, K. (2017). Exploring change in EFL teachers' perceptions of professional development. *Journal of Teacher Education for Sustainability*, 19(1), 22-42.
- Mussa, R. (2018). The effectiveness of the content of teachers' training courses and its relationship to their performance as perceived by school principals in Mafraq Governorate [Unpublished master's thesis]. Yarmouk University, Jordan.
- Pavan, A. (2017). Saudi Arabia approaching 2030: The shift from quantitative to qualitative ambitions in education, enhancing human development. *International Research in Higher Education*, 2(2), 8-14. https://doi.org/10.5430/irhe.v2n2p8
- Priajana, N. (2017). Continuing professional development activities for English teachers. *ELT echo: The journal of English language teaching in foreign language context*, 2(1), 37-48. https://doi.org/10.24235/eltecho.v2i1.1592
- Putri, Z., Yoestara, M., Aziz, Z. A., & Yusuf, Y. Q. (2019). The correlation between professional development training and English teachers' competence. *Journal of Physics: Conference Series*, 1232(1), 012037. IOP Publishing. https://doi.org/10.1088/1742-6596/1232/1/012037
- Qadir, S., Baloch, N., Shaheen, A., Gul, N., Rab, A., & Faiz, J. (2020). Teachers' perception of professional development at secondary school level: A qualitative study. *European Journal of Education Studies*, 7(6), 274-292. https://doi.org/10.5281/ZENODO.3695245
- Ravandpour, A. (2019). The relationship between EFL teachers' continuing professional development and their self-efficacy: A structural equation modelling approach. *Cogent Psychology*, 6(1), 1568068.
- Ravhuhali, F., Kutame, A. P., & Mutshaeni, H. N. (2015). Teachers' perceptions of the impact of continuing professional development on promoting quality teaching and learning. *International Journal of Educational Sciences*, 10(1), 1-7. https://doi.org/10.1080/09751122.2015.11890332
- Sarfo, F. K., Amankwah, F., Sam, F. K., & Konin, D. (2015). Teachers' self-efficacy beliefs: The relationship between gender and instructional strategies, classroom management and student engagement. *Ghana Journal of Development Studies*, 12(1-2), 19-32. https://doi.org/10.4314/gjds.v12i1-2.2
- Seechaliao, T. (2017). Instructional strategies to support creativity and innovation in education. *Journal of Education and Learning*, 6(4), 201-208. https://doi.org/10.5539/jel.v6n4p201
- Senser, S., & Cokciskan, A. (2017). English language teachers' perceptions on professional development: a case study of inservice teachers in Muğla. *International Association of Research in Foreign Language Education and Applied Linguistics ELT Research Journal* 6(2), 205–17.
- Shakir, M. A., Javed, M., & Akhtar, A. S. (2019). Teachers' perception about effects of teacher training workshop on professional skills of teachers teaching at federal government educational institutions. *International Journal for Cross-Disciplinary Subjects in Education*, 10(3), 4080-4087.
- Shaukat, S. & Iqbal, H. (2012). Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management. *Pakistan Journal of Social and Clinical Psychology*, 9(3), 82–85.
- Shin, M, & Bolkan, S. (2021). Intellectually stimulating students' intrinsic motivation: The mediating influence of student engagement, self-efficacy, and student academic support. *Communication Education*, 70(2), 146–64. https://doi.org/10.1080/03634523.2020.1828959
- Sieberer-Nagler, K. (2015). Effective classroom-management & positive teaching. *English Language Teaching*, 9(1), 163-172. https://doi.org/10.5539/elt.v9n1p163
- Sivri, H., & Balci, E. (2015). Pre-service teachers' classroom management self-efficacy beliefs. *International Online Journal of Educational Science*, 7(4), 37-50. https://doi.org/10.15345/iojes.2015.04.004
- Sökmen, Y. (2021). The role of self-efficacy in the relationship between the learning environment and student engagement. *Educational Studies*, 47(1), 19-37.

- Sökmen, Y., Azizan, N., Othman, A. K., Musa, M. H., Aziz, A. A., & Sakkanayok, K. (2022). Exploring online environment: the case for social cognitive theory. *International Journal of Academic Research in Business and Social Sciences*, 12(9), 1352-1371. https://doi.org/10.6007/IJARBSS/v12-i9/14761
- Sukontapol, C., Kemsen, S., Chansirikarn, S., Nakawiro, D., Kuha, O., & Taemeeyapradit, U. (2018). The effectiveness of a cognitive training program in people with mild cognitive impairment: A study in urban community. *Asian Journal of Psychiatry*, 35, 18-23. https://doi.org/10.1016/j.ajp.2018.04.028
- Sweller, J., van Merriënboer, J. J., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review*, 31, 261-292. https://doi.org/10.1007/s10648-019-09465-5
- Thomas, I. A., & Green, R. L. (2015, January). Using instructional strategies to enhance student achievement. *National Forum of Teacher Education Journal*, 25(3), 1-18.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805. https://doi.org/10.1016/S0742-051X(01)00036-1
- Tzivinikou, S. (2015). The impact of an in-service training program on the self-efficacy of special and general education teachers. *Problems of Education in the 21st Century*, 64(1), 95–107.
- Van Uden, J. M., Ritzen, H., & Pieters, J. M. (2014). Engaging students: The role of teacher beliefs and interpersonal teacher behavior in fostering student engagement in vocational education. *Teaching and Teacher Education*, 37, 21-32. https://doi.org/10.1016/j.tate.2013.08.005
- Vien, T. (2017). In search of effective professional development of EFL teachers in Vietnam. *VNU journal of foreign studies*, 33(3), 157-166. https://doi.org/10.25073/2525-2445/vnufs.4163
- Woo, P. S., Ashari, Z. M., Ismail, Z. B., & Jumaat, N. F. (2018). Relationship between teachers' self-efficacy and instructional strategies applied among secondary school teachers in implementing STEM education. In M. J. W. Lee (Ed.), 2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering, (pp. 454-461). IEEE.
- Yeşilçınar, S., & Çakır, A. (2018). Continuing professional development process: English language teachers' views on the role of teacher research. *Journal of Language and Linguistic Studies*, 14(2), 61-75.
- Yoestara, M., Putri, Z., & Ismail, N. M. (2020). School appreciation and teachers' competence: Are they correlated?. *International Journal of Language Studies*, 14(3), 47-66.
- Yoo, J. H. (2016). The effect of professional development on teacher efficacy and teachers' self-analysis of their efficacy change. *Journal of Teacher Education for Sustainability*, 18(1), 84-94. https://doi.org/10.1515/jtes-2016-0007