

Structural Equation Modeling of the Sources of EFL Teachers' Self-Efficacy

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Abstract

Self-efficacy, which is known as the teachers' self-perception of their competence and abilities in doing specific tasks, has attracted considerable attention in teacher education. It is seen as the teacher's belief in achieving specific outcomes for students in their teaching practices, but the main sources of EFL teachers' self-efficacy have not been systematically explored in a single study. Therefore, this study set out to present a systematic review of the studies on EFL teachers' self-efficacy. To this aim, a meta-analysis approach was employed to systematically review closely related papers from Elsevier, Google Scholar, and ERIC. The articles examined the sources of self-efficacy in a different context. Through precise screening, 13 papers were found to be eligible enough to be included in this study. Findings revealed that 'Mastery Experiences', 'Vicarious Experiences', 'Social Persuasion and Support', 'Emotional and Physiological States', 'Language Proficiency', 'Intelligence', 'Teaching skills and experience', 'pre-service training courses', and 'professional development activities' are the main sources of self-efficacy. The findings could be theoretically and practically significant to EFL teachers, teacher trainers, and researchers interested in teacher education.

Keywords: sources of self-efficacy, EFL teachers, meta-analysis, systematic review

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1. Introduction

As education is one of the most important professions in the world, the constant developments and problems in education over the past two decades have increased the burden on teachers and administrators. A school is essential for young people to pursue their interests and find meaning in life. Teachers are considered an essential part of a student's academic performance as they play a special role in setting standards and providing a suitable environment for their students' academic performance. Teachers with high self-efficacy used more innovative methods in the classroom, promoted student autonomy, and used classroom management approaches and appropriate instruction that reduced protective controls than teachers with shared self-efficacy. Teachers' self-efficacy is enhanced in an atmosphere that supports risk-taking, personal commitment, commitment, decision-making, and professional progress (O'Connor & Korr, 1996; Ashton et al., 1983). According to Tschannen-Moran et al. (1998), teachers develop self-efficacy by assessing their ability to meet criteria for performing specific classroom practices in specific situations. An individual's knowledge, skills, and character qualities can be viewed in the light of environmental variables that hinder or facilitate education. Put another way, contextual or environmental or contextual considerations such as classroom resources, student factors, leadership practices, and collegiality should be considered when evaluating effectiveness.

Self-efficacy is a central concept in social cognitive theory (Bandura, 1986, 1997), which indicates that people can influence their life and work situations even when external variables mediate their behavior (Schunk & Pajares, 2010). Self-efficacy can predict how much effort an individual will put in, how well they will persevere in the face of adversity, and how well they will control their thoughts, actions, and goals (Schunk & Meece, 2006). Bandura defined teacher efficacy as a perceived self-efficacy as belief in one's ability to organize and carry out the course of action necessary to achieve a specified outcome (1997). Teacher self-efficacy is task- and context-specific. That is, teachers feel effective or ineffective in different situations. A teacher's level of effectiveness depends on the subject they teach, the students they teach, and their tasks (Bandura, 1997; Schunk & Pajares, 2010; Tschannen-Moran et al., 1998). Others describe self-efficacy as the belief in one's ability to organize and carry out the course of action necessary to achieve a specified goal (Bandura, 1997).

Reciprocal causation is a crucial idea in social cognition theory, which states that three interrelated forces can influence future performance. Environmental influences, individual behavior, and internal personal factors such as cognitive, emotional, and biological processes. Beliefs in personal effectiveness, on the other hand, are shaped by the dynamic interplay between past and present performance, external influences, and internal personal traits. As a result, one might conclude that efficacy beliefs are situation-specific, influenced by different characteristics such as job complexity and the amount of time and resources that an individual has available (Alibakhshi, 2011; Alibakhshi et al., 2019; Alibakhshi et al., 2020; Alibakhshi et al., 2021; Bandura,

1997; Klassen & Chiu, 2011; Malmir & Mohammadi, 2018; Pajares, 1996). Self-situation-specific efficacy has been identified as a significant source of the current debate over its meaning and measurement (Tschannen-Moran & Woolfolk Hoy, 2001).

Self-efficacy, the individuals' self-perception of their competence and abilities in executing specific tasks (Bandura, 1977), attracted considerable attention in teacher education (Alibakhshi et al., 2021; Choi & Lee, 2016; Hoang & Wyatt, 2021; Salehizadeh et al., 2020). Teacher self-efficacy has been conceptualized as a teacher's judgment of competence in engaging students, managing the classroom, and performing assigned teaching tasks (Tschannen-Moran et al., 1998). Since teaching English as a foreign language (EFL) is task-specific and domain-specific (Bandura 1997; Tschannen-Moran & Woolfolk Hoy, 2001), we were inspired to explore the sources of EFL teachers' self-efficacy.

1.1. Definition of Self-efficacy

The term "self-efficacy" (SE) refers to a teacher's belief in one's abilities and worth. It is also a cognitive process that includes one's emotions. According to Bandura (2003), SE is an individual's confidence in their ability to influence certain life events. Several factors are influenced by self-confidence in one's ability to do things well and efficiently, such as 1) behavioral and behavioral control, 2) choice of environment and scenarios, and 3) tenacity to complete a particular task. (Bandura, 1997). According to Bandura (1982), SE is based on behavioral imitation, stress psychology, self-management, and self-actualization rather than negative behavior, lack of resignation, and tenacity to achieve something. SE is an essential part of getting the job you want.

Self-efficacy is described by Tschannen-Moran et al. (1998) to significant effect as a highly efficient natural cycle that seeks to improve performance. Self-efficacy (SE) is a cognitive process that helps people manage their behavior, increase their self-efficacy and competence, and increase their competence and efficiency (Shoulders & Krei, 2016). Self-efficacy is also essential for teachers to increase teacher-student engagement, which can lead to positive outcomes. Most research has been conducted in education to assess how self-efficacy beliefs are expressed.

The definition of teacher self-efficacy in this study was the belief in a teacher's ability to organize and carry out the course of action required to accomplish a specific educational task in a specific context" (Tschannen-Moran et al., 1998, p. 233) builds on Bandura's (1997) social cognition theory. Teacher self-efficacy refers to a teacher's belief in their ability to facilitate learning. This quality helps you plan, organize, and carry out tasks (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). Research has shown that instructor beliefs are directly related to student success (e.g., McLaughlin & Marsh, 1978) and motivation (e.g., McLaughlin & Marsh, 1978). (e.g., Midgley, Feldlaufer & Eccles, 1989). It also indicates teachers' appreciation for educational progress (e.g., Cousins & Walker, 2000), classroom management skills (Woolfolk et al., 1990), and teachers' concentration (Greenwood et al., 1990). Self-efficacy is a personality trait that makes instructors

more adaptable when dealing with classroom challenges. You are more receptive to new tactics and processes for dealing with complex and challenging situations. Teachers with this trait deal positively with unmotivated children and are more resilient to failure and loss. Teacher self-efficacy has a positive impact on teacher performance and improves teaching effectiveness. Self-efficacy teachers are dedicated to achieving the goals they set for themselves. Teacher self-efficacy is very important in the field of education.

1.2. Sources of Self-efficacy

According to Bandura (1977, 1997), the four main sources of self-efficacy are coping experiences, psychological and emotional states, vicarious experiences, and social beliefs. All sources are linked to each other. They interact with each other and can co-occur. Depending on educational experience, the origin of self-efficacy may positively or negatively affect her EFL teacher's self-efficacy. Coping experience is considered the most potent source of self-efficacy. These options are available for those who want to complete challenging and demanding tasks. As a result, children believe that perseverance can overcome difficulties. This idea can be applied to her education in general and her EFL education.

This is true, assuming that teachers who have had positive experiences with their students will continue to have positive experiences with their students in the future. They plan and develop effective tactics for the future based on their past teaching experience. The expectation of success increases self-efficacy and self-confidence. On the other hand, teachers who feel that their classrooms are less effective are more likely to feel that there is little they can do to help low-performing children who are less affected by their home and environment (Bandura, 1997).

The second source of self-efficacy is vicarious experience related to how people are affected when they see the successes and failures of others through social media. A colleague's successes or failures can influence their behaviors. For example, confidence in one's potential increases when people benefit equally from knowledge and persistence (Bandura, 1994; Pajares, 2002), and seeing the success of others can have a powerful effect on individuals (Bandura, 1982; Gist, 1987; Gist, Schwörer & Rosen, 1989 and 1982). But seeing your friends fail despite your hard work and dedication can harm your self-efficacy. For vicarious experiences to influence self-efficacy, peers and social models must be perceived as comparable to oneself. If your social style is perceived differently than you are, it is unlikely to affect your self-efficacy. Additionally, peers must demonstrate accomplishment of the task observers wish to accomplish (Bandura, 1994; Namaziandost et al., 2022; Swanson, 2012).

People are members of society and have certain connections with each other. Their existence depends on each other. Self-efficacy increases when someone supports others by saying they can complete a task. For example, parents want their children to be successful in life. This helps morally and economically. Try to motivate your child by reassuring him that he can pass an exam or get a job.

Similarly, professors can encourage students to raise their spirits to do well on tests. If others are confident in their ability to meet a task, they are confident in their ability to accomplish it. The verbal comfort or support that people receive is called verbal beliefs or social beliefs. This source of self-efficacy is beneficial in a person's life. The goal of social influence should be to improve people, not to compare them with others (Bandura, 1994; Swanson, 2012).

How people react to situations can affect their self-esteem. Tension and fear of failure can be viewed as symptoms of vulnerability that reduce confidence in one's ability to perform tasks effectively (Bandura, 1994). Successful teachers are not easily confused when difficult or undesirable situations arise in the classroom. On the other hand, teachers who lack a sense of accomplishment can quickly become swayed by difficult situations for which they are not psychologically prepared. The rigidity of teachers with low self-efficacy can be an obstacle in overcoming challenges related to classroom management and student behavior. Teacher SEs were analyzed in many ways, including teacher attitudes and language proficiency (Lee, 2009), teacher teaching methods (Thompson, 2016), teacher culture (Phan & Locke, 2016), and teacher language. SE is also affected by variables such as status (native/nonnative) (Mills & Allen, 2007), teacher development through participation in internships (Atay, 2007), action research (Cabaroğlu, 2014), peer coaching (Goker, 2006), vocational and educational Identity change teacher practices (Locke et al., 2013) and job satisfaction (Moe et al., 2010).

Liu et al. (2021) unpacked EFL teachers' SE in the Chinese context. They utilized a questionnaire adapted from Lin and Zheng as the major instrument and supplementary interviews to examine teacher self-efficacy in Livestream teaching in the Chinese context. The exploratory factor analysis yielded a two-factor structure of teacher SE comprising technological and instructional self-efficacy. The interview data also indicated a fluctuation in technological self-efficacy at the onset of Livestream teaching compared to 1 month into Livestream teaching.

In another study, Marashi and Azizi-nasab (2018) explored the relationship between Iranian EFL teachers' self-efficacy and language proficiency. They found that the teachers' SE is correlated with language proficiency. Similarly, in the Turkish context, Balci et al. (2019) investigated pre-Service English language teachers' self-efficacy beliefs. They revealed that pre-service EFL teachers had high-level teacher self-efficacy perceptions in general and for student engagement, classroom management, and instructional strategies subscales. Also, they reported that juniors had significantly higher scores than sophomores in both the total scale and student engagement subscale, indicating that pre-service training courses contributed to the student teachers' SE.

In another context, El-Abd and Chaaban (2019) employed a mixed-methods study to investigate classroom management self-efficacy (CMSE) beliefs of early childhood pre-service teachers in Lebanon. They analyzed vicarious experiences through observation of an in-service teacher for efficiency in supporting the development of pre-service teachers' CMSE beliefs. They reported several trends noted through the focus group interviews, including a shift from

emphasizing reactive behaviors to more proactive ones. All pre-service teachers voiced their desire for additional mastery experiences to aid in developing their CMSE beliefs.

The other factors influencing teachers' SE are teachers' professional knowledge (Chan, 2008; Fathi et al., 2020; Huang et al., 2007; Morris & Usher, 2011), pre-service training programs (Van der Scheer & Visscher, 2016; Tuchman & Isaacs, 2011), attending practicum courses (Atay, 2007) and language proficiency (Chacon, 2005). Some other studies' results show that some variables contribute to the teachers' SE. The variables include stress-free and supportive schools and institutes (Shaalvik & Shaalvik, 2007), institutes managed by experienced managers (Walker & Slear, 2011), and collaborations among colleagues (Guo et al., 2011).

1.3. Purpose of the Study

This study aimed at exploring the sources of EFL teachers' self-efficacy. Therefore, the study had two objectives: to explore sources of EFL teachers' self-efficacy through a qualitative systematic review and to validate the model through structural equation modeling. More specifically, the researchers addressed the following questions:

1. What are the most frequently reported sources of EFL teachers' self-efficacy as far as effect sizes are concerned?
2. What is the psychometrics of the scale of the sources of EFL teachers' self-efficacy?
3. Does the hypothesized model of the sources of self-efficacy for English language teachers in Iran show acceptable fit indices as explored through the EFL teachers' sources of the self-efficacy questionnaire?

2. Method

The researchers employed a mixed-methods research design. In line with the objectives, the best research design was an exploratory mixed research design (Qual-Quan). The qualitative phase aimed at exploring the sources of EFL teachers' SE. Meanwhile, the quantitative phase addressed the validation of the model through Structural Equation Modelling (SEM). Each phase is explained as follows:

2.1. Phase 1: Systematic Review

The purpose of the systematic review is to provide readers with a better understanding of the factors that influence teacher self-efficacy. Electronic journals were used to access the information for review. The literature was analyzed using journals published between 2013 and 2021. The following databases were created for these papers: Elsevier, Google Scholar, and ERIC (EBSCO). In this study, we used a qualitative meta-analysis of published papers on EFL teachers' SE. Qualitative meta-analysis is "an attempt to conduct a rigorous secondary analysis of primary

qualitative findings. Its purpose is to provide a more comprehensive description of a phenomenon and an assessment of the influence of the method of investigation on findings—is discussed” (Timulak, 2009, p. 591). For this type of meta-analysis, we used the Google search engine with the words “sources of EFL teachers’ SE, antecedents of EFL teachers’ SE, “and the result was 2000 articles. The word “EFL teachers’ self-efficacy” and sources of self-efficacy for searching were used. Of the total of studies on EFL teachers’ SE, only 13 were related to the sources and antecedents of SE. The researchers selected 40% as the representative of self-efficacy-based articles. As a result, the researchers used four steps to analyze this study. The identification step, screening phase, eligibility phase, and finally, the inclusion phase are all included.

Step 1: Identification Phase

Identifying relevant work was the first stage of the systematic review. There were two primary processes in this phase. The first stage entailed gathering relevant articles and selecting relevant articles based on inclusion and exclusion criteria. This type of study may demonstrate the limitations of publication bias. The examination of literature from sources other than journal databases, such as book chapters, white papers, and technical reports, was not part of this research method. As a result, the research examined peer-reviewed publications to compare diverse sources. Google Scholar and ERIC were the major databases used in this research. The publications included in this systematic review were published between 2013 and 2021. To avoid becoming out-of-date, today’s evaluations of the literature must be aware not only of the overall direction and successes of a field of research but also of the most current results. In this procedure, a variety of keywords were combined. Self-efficacy, sources of self-efficacy, EFL teachers, and EFL instructors’ self-efficacy are among them.

Step 2: Screening

Duplicates were detected and eliminated within a few hours after the relevant publications in ERIC, and Google Scholar were chosen. The papers were then re-evaluated to verify that the remaining articles complied with the researcher’s specifications.

Step 3: Eligibility Phase

In the third step, the articles were scrutinized for eligibility, and they had to meet the criteria specified in the inclusion part of Table 1. This is an essential step in guaranteeing the high quality and reliability of the data obtained for this study.

Table 1*Inclusion Criteria*

Inclusion criteria
EFL teachers' sources of self-efficacy
Research methodologies: quantitative, qualitative and mixed-method
Sample or respondents from various context
The positive relationship between a concept and teachers' self-efficacy
Journal articles published between 2013 and 2021

Step 4: Exclusion

The remaining articles were removed from our systematic literature review after the third round of verifying for eligibility. Table 2 lists the criteria for items that were eliminated. Like the eligibility process, the exclusion step was critical in ensuring that the researchers collected high-quality data.

Table 2*Exclusion Criteria*

Exclusion criteria
Not EFL Teachers
The studies did not evaluate self-efficacy
The concept was not the source of self-efficacy
Journal articles not published between 2013 and 2021

There was a total of 13 papers that discussed the origins of self-efficacy among EFL teachers. The majority of the publications examined used a mix of quantitative, qualitative, and mixed-method investigations. Respondents in all of the investigations mentioned different contexts and techniques.

Phase 2: Quantitative Research Method (SEM)

The purpose of this phase was to validate the model of SE sources. This phase consisted of several steps. First, the sources of SE were carefully worded and sent to the panel of experts consisting of three experts to assess their Content Validity Ratio (CVR) and Content Validity Index. 33 items were found to be relevant to the content. In the next step, the questionnaire was sent to 180 EFL teachers who were selected through convenience sampling. The teachers' ages ranged from 25 to 48. In the third step, Structural equation modeling (SEM) was used. SEM is a term used to describe models that explore causal relationships between latent or unobserved variables that have no value. SEM identifies the contribution of different statements to this assessment of a latent variable (Holtzman, 2011). In this process, confirmatory factor analysis is a technique to examine the impact of each statement on the measurement of that construct or key variable. It thus enables the selection of only relevant constructs for the model. Confirmatory factor analysis can reduce data dimensions and standardize the scale of different indicators. In other words, if a model has many latent variables, confirmatory factor analysis helps to reduce them so that only the relevant ones are visible (Fan, 2016).

3. Results

3.1. Qualitative Findings

This section presents the main findings of the study. After four steps of selecting suitable papers for evaluation, 13 articles were deemed relevant in this systematic review according to the nature of the research. Many different scholars have published studies on the origins of self-efficacy among EFL instructors, and Table 3 below summarizes the most important articles related to EFL teachers' SE.

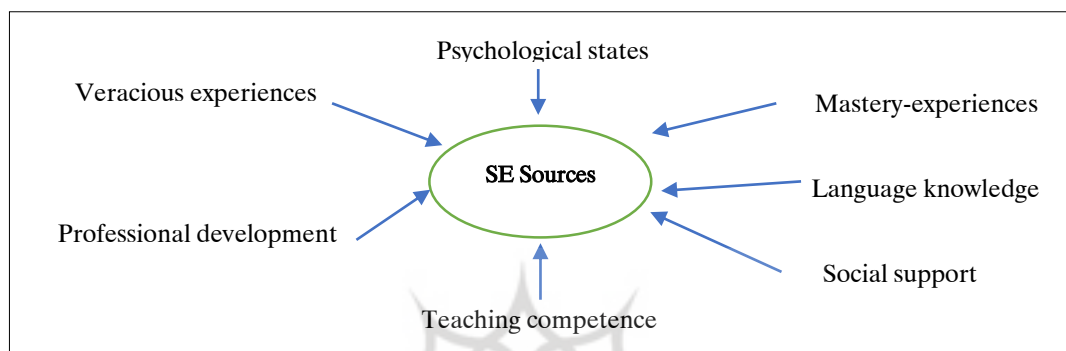
Table 3
Previous Studies on Self-Efficacy among EFL Instructors

Authors	Title	Findings
Abolfazli Khonbi and Gholami (2015)	Iranian EFL Student-Teachers' Multiple Intelligences and Their Self-Efficacy: Patterns and Relationships	Multiple intelligence.
Moafian and Ebrahimi (2015)	An empirical examination of the association between multiple intelligences and language learning self-efficacy among TEFL university students A B	intrapersonal and linguistic intelligence
Eslami Rasekh & Fatahi (2008)	Teachers' Sense of Self-Efficacy, English Proficiency, and Instructional Strategies: A Study of Nonnative EFL Teachers in Iran	Language proficiency
Alibakhshi et al. (2021)	Exploring the antecedents of English language teachers' teaching self-efficacy: a qualitative study	Motivation for teaching, teachers' pedagogical knowledge, experience, verbal intelligence, job satisfaction, support from school teachers and leaders, language knowledge, in-service and pre-service training courses
Almuhammadi, K. H., Assalahi, H. M., & Madini, A. A. (2020).		Professional development training courses
Balci, Ö., Şanal, F., & Üğüten, S. D. (2019)	An Investigation of Pre-Service English Language Teachers' Self-Efficacy Beliefs	Pre-service training
Barabadi, et al (2018)	Iranian EFL teachers' sources of self-efficacy in the context of the new English curriculum: A grounded theory approach.	Mastery Experiences, Teacher Competence, Social Persuasion, Vicarious Experiences
Phan, N.T.T & Locke (2015)	Sources of self-efficacy of Vietnamese EFL teachers: A qualitative study	Mastery experiences, social persuasion, Vicarious experiences, Physiological/affective states
Moradkhani & Haghi (2017)	Context-based sources of EFL teachers' self-efficacy: Iranian public schools versus private institutes	Positive feedback, Prior successful experience, Professional preparation, Emotional well-being,
Liu & Wang (2021)	Unpacking EFL Teacher Self-Efficacy in Livestream Teaching in the Chinese Context	instructional skills and technological skills
Martin et al. (2015)	Practicum experiences as sources of pre-service teachers' self-efficacy	professional experiences before practicum as mastery experiences, classes' characteristics, planning and teaching practice; lesson observation as vicarious experiences; and post-lesson conversations as verbal persuasion
Listiani, et al., (2018)	Investigating English Teachers' Self-Efficacy in Developing Classroom Management Style	Teaching experience, teachers' skills, students' conditions, and treatment
Marashi & Azizi Nasab (2018)	EFL Teachers' Language Proficiency, Classroom Management, and Self-Efficacy	Language proficiency

As seen in Table 3, the most frequently reported sources of EFL teachers were categorized into seven main themes: mastery experiences, voracious experiences, social support and persuasion, psychological and affective states, professional development activities, teaching competence and skills, and language knowledge (proficiency). The components of EFL teachers' SE are shown in Figure 1.

Figure1

Sources of EFL Teachers' Self-efficacy

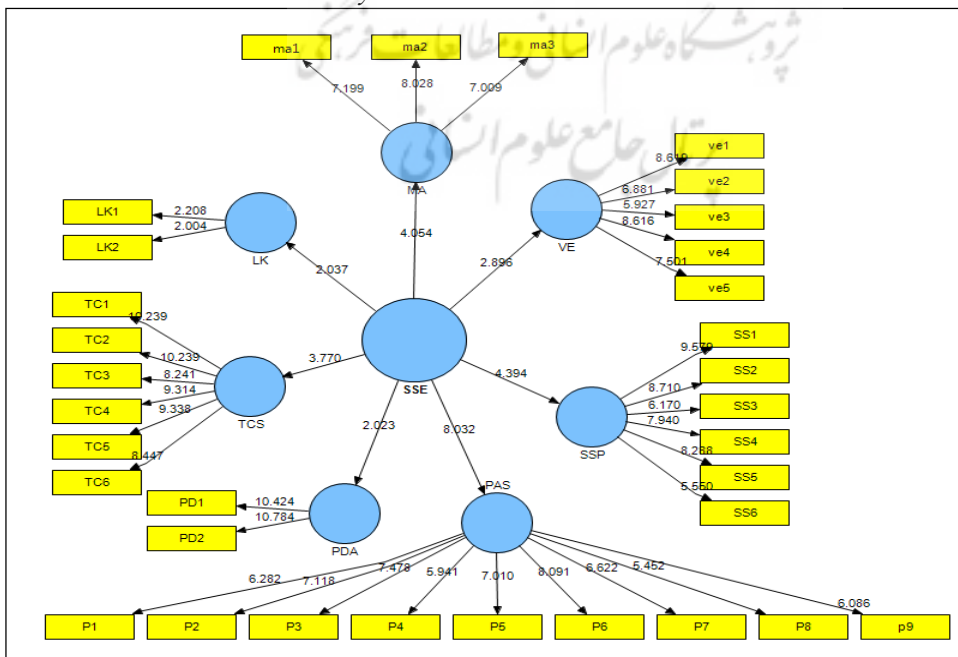


3.2. Quantitative Findings

In order to test the hypothesis of the research, we employed multivariate analysis and structural equation modeling using Smart-PLS software, due to the low sample size. The results of running the model for two conditions: non-standard coefficients (significant coefficients) and standard coefficients (influence coefficients) are shown in graphs 1 and 2, respectively.

Figure 1

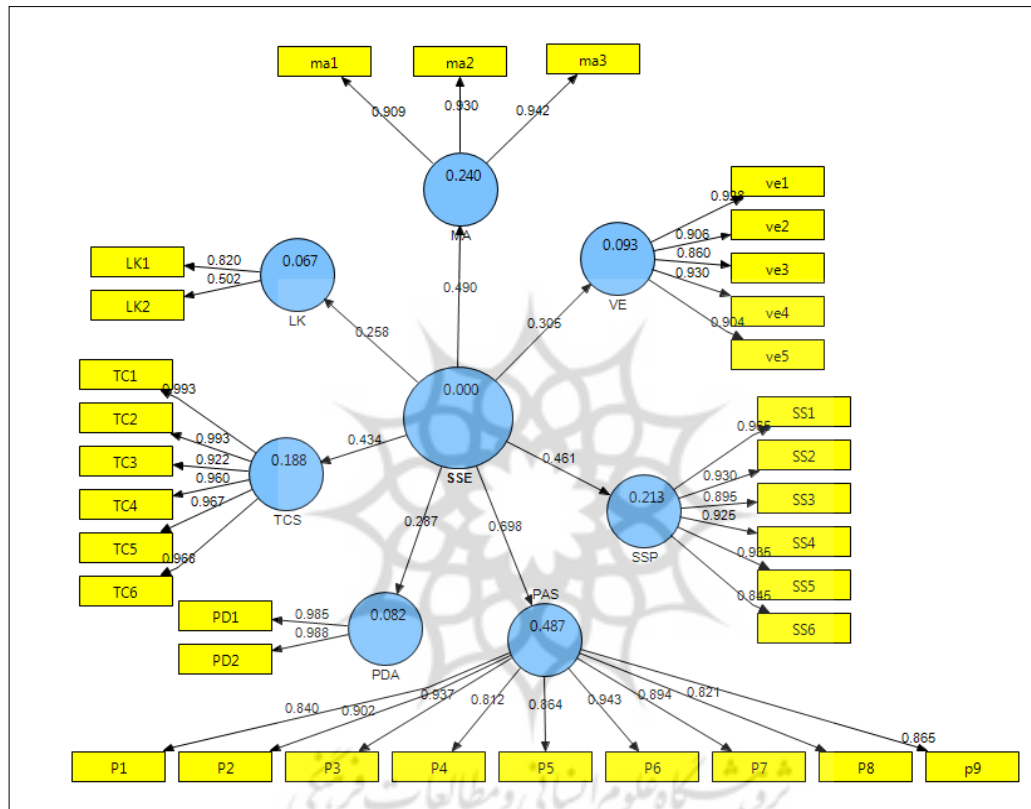
Measurement Model of Self-Efficacy Sources Based on Non-Standard Coefficients



As seen in Figure 1, all items and components at a confidential level of 99% and p-value of 0.01, are fit and appropriate for measuring the SE sources. In other words, all extracted sources and the items which constitute each component are fit for measuring the sources of self-efficacy. In Figure 2, the model for standardized coefficient conditions is presented.

Figure 2

Measurement Model of Self-Efficacy Sources Based on Standard Coefficients



Note ma=mastery experiences, v=voracious experiences, language knowledge, SS=social support, p=psychological states, PD=professional development, and TC=teaching competence).

As standardized coefficient shows, all items and components strongly measure the SE. In structural equation modeling through PLS software, the criteria of validity (convergent validity and divergent validity) and reliability (internal consistency) are used to check the fitness of measurement models. Each of them is discussed below:

3.3. Convergent Validity

To assess the convergent validity, the Fornell-Larcker criterion for convergent validity (the Average Variance Extracted (AVE) greater than 0.5 standardized factor loading of all items not less than 0.5, and composite reliability not less than 0.7. were used. Results are presented in Table 4.

Table 4*Loadings of the Items of the Five Components of Self-Efficacy Sources*

Latent variables	Mastery experiences (MA)	Vicarious experiences (VE)	Social support and persuasion (SS)	psychological and affective states (PAS)	Professional development activities (PD)	Teaching competence and skills (TC)	Language knowledge (LK)
Q1	0.909						
Q2	0.930						
Q3	0.942						
Q4		0.928					
Q5		0.906					
Q6		0.860					
Q7		0.930					
Q8		0.904					
Q9			0.955				
Q10			0.930				
Q11			0.895				
Q12			0.925				
Q13			0.935				
Q14			0.845				
Q15				0.840			
Q16				0.902			
Q17				0.937			
Q18				0.812			
Q19				0.864			
Q20				0.943			
Q21				0.894			
Q22				0.821			
Q23				0.865			
Q24					0.985		
Q25					0.988		
Q26						0.933	
Q27						0.993	
Q28						0.922	
Q29						0.960	
Q30						0.967	
Q31						0.966	
Q32							0.820
Q33							0.502

As seen in Table 4, the factor loadings of the items of self-efficacy resources components were higher than 0.5 Therefore, it indicates an acceptable correlation between observed variables (objects) and latent variables (components).

Table 5*AVE index for Self-efficacy Resource Components*

Components of SE sources	AVE
Mastery experiences (MA)	0.860
Vicarious experiences (VE)	0.821
Social support and persuasion (SSP)	0.840
psychological and affective states (PAS)	0.768
Professional development activities (PDA)	0.973
Teaching competence and skills (TCS)	0.936
Language knowledge (LK)	0.570

As shown in Table 2, the average variance extracted (AVE) for all constructs is higher than the acceptable value (0.5). Therefore, the convergent validity of the model is confirmed.

3.4. Discriminant Validity

We also evaluate the effectiveness of (c) the Forell-Larcker criterion for discriminant validity, which requires the AVE of both constructs greater than square correlation between the two constructs, (d) the Bagozzi et al. criterion which requires the correlation between two constructs significantly less than unity, and (e) the Kline criterion for discriminant validity, which requires the correlation between two constructs less than 0.85.

Table 6*Convergent Validity of the Components of SE Sources Based on Forell-Larcker*

Components	Mastery experiences (MA)	Vicarious experiences (VE)	Social support and persuasion (SSP)	psychological and affective states (PAS)	Professional development activities (PDA)	Teaching competence and skills (TCS)	Language knowledge (LK)
Mastery experiences	0.927						
Vicarious experiences	-0.021	0.906					
Social support and persuasion	-0.084	0.063	0.916				
psychological and affective states	0.630	-0.080	0.038	0.877			
Professional development activities	0.165	-0.048	0.103	0.132	0.986		
Teaching competence and skills	-0.083	0.097	-0.002	0.040	-0.008	0.967	
Language knowledge	0.089	0.087	0.142	0.141	0.074	-0.013	0.754

As seen in Table 6, there is little or no correlation between the constructs, as the value of AVE in cells located on the left and under the Main diagonal are smaller than that of the main diagonal. Therefore, the latent variables (components of self-efficacy resources) have more interactions with their items than other constructs, and the divergent validity of the model is at an acceptable level.

3.5. Reliability (Internal Consistency)

Cronbach's alpha is a classic indicator for reliability analysis and represents a strong tradition in structural equations that shows an estimate for reliability based on the internal correlation of items, and the appropriate and acceptable value for it is greater than 0.7. However, due to the sensitivity and underestimation of Cronbach's alpha coefficient to the number of items, composite reliability is also used. The superiority of composite reliability over Cronbach's alpha lies in the fact that the reliability of structures is not calculated in absolute terms, but according to the correlation of their structures with each other.

Table 7
Cronbach's Alpha and Composite Reliability of SE Sources

SE sources	Cronbach's Alpha	Composite Reliability
Mastery experiences (MA)	0.918	0.948
Vicarious experiences (VE)	0.945	0.959
Social support and persuasion (SSP)	0.961	0.970
psychological and affective states	0.962	0.967
Professional development activities (PDA)	0.973	0.986
Teaching competence and skills (TCS)	0.986	0.989
Language knowledge (LK)	0.680	0.720

As seen in Table 4, Cronbach's alpha coefficient as well as composite reliability for all research constructs (except Cronbach's alpha for LK) is higher than 0.7; therefore, the reliability of the constructs is confirmed. Therefore, according to the criteria of convergent validity, divergent validity, and reliability (internal consistency), it could be strongly argued that the developed model for Sources of self-efficacy (SSE) has the necessary fitness and similarity with the conceptual model.

4. Discussion

The growth of teacher efficacy can be influenced by various factors (Klassen et al., 2011). The qualitative meta-analysis of the studies on the sources and antecedents of EFL teachers' self-efficacy revealed that a range of factors could make a contribution to EFL teachers' SE which could fall into different themes. Although efficacy sources are considered significant in the development of teacher effectiveness, they have only been studied and connected to teacher efficacy from qualitative or mixed-methods perspectives. Quantitative evidence for teacher efficacy sources may give stronger theoretical and practical connections with teacher efficacy (Klassen et al., 2011), yet

there are few methods for evaluating teacher efficacy sources. According to the studies mentioned, all four sources had significant moderate correlations with teacher efficacy; however, contrary to previous suggestions that mastery experience was the most influential source for teacher efficacy (Bandura, 1997; Cheung, 2008), the results of multiple studies showed that the order of importance and effect of the resources may differ depending on the context. For example, according to the findings of Weng et al. (2017), social persuasion was a stronger predictor of teacher efficacy than the other three factors, and physiological arousal was the second strongest predictor. They also provide an explanation for this phenomenon, namely that physiological arousal was assessed in this study in a positive direction, as opposed to earlier studies that exclusively operationalized this concept negatively (Usher & Pajares, 2009).

Some studies also provide ways for teachers' self-efficacy to improve or expand regarding class management, school climate, and other factors. According to Listiani et al. (2019), the following factors can aid in the development of teacher self-efficacy:

Mastery and vicarious experiences were the most influential variables for the teachers' SE. EFL teachers' achievement during pre-service teaching and practicum programs and their successful experiences during teaching and fulfilling the requirements during teacher training programs were listed as the variables affecting the teachers' self-efficacy. Findings also revealed that the voracious experiences of teachers, such as observing teachers, colleagues, and mentors, observing teachers who managed difficult classroom situations successfully, shape the teachers' sense of self-efficacy.

Social persuasion/support and positive feedback from colleagues and institutes were also mentioned as the variables which lead to EFL teachers SE. The study showed that social persuasion was the predominant source of efficacy information for participating teachers. Findings also suggested that feedback from leaders, language learners, and colleagues positively influences teachers' SE.

Regarding the psychological sources (types of intelligence) of teachers SE, it can be argued that teachers need to explain topics to students. Those with high verbal, interpersonal, and linguistic intelligence are better at explaining and communicating with students. Explaining is known as a verbal process. Excellent and effective teachers are role models for appropriate and acceptable writing and speaking. They must also understand the school's verbal communication, especially with their students and colleagues. In addition, they must be able to help students improve their verbal skills. Therefore, teachers with such abilities certainly have a high SE.

Teaching experience, especially for experienced teachers, makes it easier to instruct pupils and manage the class. Most authoritative instructors were highly secure in their ability to teach in any classroom because once they are appreciated by the students or by the manner they teach, their confidence to teach in any classroom with a variety of student personalities grows. It has to do with self-efficacy; the more self-efficacy, the better the teacher manages the classroom. Teachers with

strong self-efficacy and a good classroom management style are not severe with their pupils, are introspective and adaptable in the classroom, and always look for a pleasant approach to education.

Other studies in the table revealed a positive relationship between multiple intelligence and teachers' self-efficacy (Moafian & Ebrahimi, 2015; Abolfazli Khonbi & Gholami, 2015). By looking into this field of study, it was discovered that there is a lack of research in the areas of Vicarious Experiences, Social Persuasion, and Emotional & Physiological States, particularly concerning EFL teachers. As a result, these topics might be an excellent site for EFL researchers to investigate. Furthermore, a qualitative investigation introduced three new sources of self-efficacy in a study by Alibakhshi et al. (2021). The sources are personal, educational, and institutional variables and are defined as personal characteristics such as verbal intelligence, language competence, and other characteristics are examples of personal variables. The institutional factors include support from the administration, colleagues, community support, and quality of work life. Pre-service and in-service training courses are educational antecedents (Alibakhshi et al., 2021). The results of this study open a new area of self-efficacy for researchers to investigate.

With regard to the quantitative findings, it can be strongly argued that the developed model has the goodness of fitness and the extracted sources have a strong correlation with the main variable (Sources of SE). Simply put, the items of each source measure that source/component appropriately and the components appropriately measure the main construct. Therefore, it could be strongly discussed that EFL teachers SE has seven antecedents.

5. Conclusions

This systematic review of the literature analyzed 16 articles on the sources of self-efficacy in EFL teachers. It supported that mastery experiences, psychological and emotional states, vicarious experiences, language knowledge, teaching experience, skills, and social persuasions are the main sources of self-efficacy in EFL teachers. It also introduced three new sources (personal, educational, and institutional variables), which revealed a new area in self-efficacy and opened up room for further research. Numerous researchers were reviewed in this paper, and these researchers have carried out studies using a variety of methodologies in order to highlight the importance of self-efficacy in EFL, especially teachers' self-efficacy from various contexts. The result of the meta-analysis confirmed that all sources had significant moderate correlations with teacher efficacy. However, in a different context, the order of the effect of the sources is different. Also, it was shown that there is a need for investigation into the psychological and emotional states, vicarious experiences, and social persuasions due to the paucity of research. It is hoped that the results of this study can help EFL researchers to find new areas of research.

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