

The Role of Self-Efficacy Instruction in EFL Teachers' Professional Development: A Mixed-Methods Study

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Received: November 27, 2022

Accepted: March 03, 2023

Abstract

The aim of the present mixed-methods study is to examine the role of self-efficacy (SE) instruction in English as a Foreign Language (EFL) teachers' professional development (PD). To do so, 30 EFL teachers and 150 of their students in different high schools in Zanjan, Iran were selected as the participants of the study. The convenience (availability) sampling procedure was used to select the participants. The students were asked to fill out the teachers' PD survey, and the questionnaire of SE was filled out by the teachers as the pre-survey. Then, the teachers received in-service training for SE with a specified syllabus. At the end of the training period, which lasted 5 sessions in a 1.5-month course, the students completed the teachers' PD survey, and the teachers filled out the SE questionnaire again as the post-survey. This study applied an explanatory sequential mixed-methods design for the collection of both quantitative and qualitative data. As according to the explanatory sequential design, quantitative data needs to be further explained and supported by qualitative data, semi-structured individual interviews were also held with 30 EFL teachers concerning their ideas toward the effects of SE instruction on their PD. To analyze the results of the quantitative phase, a paired-samples t-test was employed. Then, the qualitative data was analyzed through content analysis technique. Afterward, as the design of the study was a mixed-methods one, the qualitative and quantitative results were integrated. The findings of the study revealed that the EFL teachers' SE significantly affected their PD based on the results of the questionnaires and in-depth interviews. Moreover, the mixed-methods meta-inferences indicated that SE treatments had a significant effect on the Iranian EFL teachers' PD and their SE beliefs regarding both qualitative and quantitative results of the study. The findings hold a number of theoretical and practical implications for teacher education in general and teacher PD in particular in the Iranian EFL context.

Keywords: EFL Teachers, Professional Development, Teacher's Self-Efficacy, Mixed-methods Research

INTRODUCTION

In every educational system, teachers play a significant role as the most important agents in attaining the educational aims. They have an integral function in forming and modeling styles, conventions and, on the top of that, the learners' personality (Safari, Davaribina, &

Khoshnevis, 2020). Brown (2001) regards language instructors as the agents of change and notes "they can be agents for change in a world in desperate need of change: change from competition to cooperation, from powerlessness to empowerment, from conflict to resolution, from prejudice to understanding" (p. 445). Most countries, such as Iran, Turkey, and Iraq, are currently coping with the lack of qualified

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instructors, and the teacher burnout phenomenon could happen in the early stages of the teaching profession (Carlo et al., 2013). Moreover, the quality of English as a foreign language (EFL) teacher relies on different individual and social features and constructs, such as teachers' self-efficacy (TSE), and if these features are not treated and improved correctly, it could have negative impacts on the instructional system and its results (Safari, Davaribina, & Khoshnevis, 2020).

One of the reasons and causes of teachers' underdevelopment and burnout is the low level of self-efficacy (SE). SE, as an important notion in social cognitive theory (Bandura, 1986, 1997), is "the conviction that one can successfully execute the behavior required to produce a given attainment" (Bandura, 1977, p. 3). Based on Bandura (2006), SE is a notion that emerges from socio-cognitive theory concentrating on the supposition that an individual could affect his/her agency. SE is not associated with skill, and it is related to the perception in the capability to perform tasks in various professions. Abilities could simply be influenced by uncertainty, leading to individuals that are too vulnerable to low rate of self-esteem in contexts that they adopt an infirm perception of themselves (Bandura, 1977). Researchers believe that individuals with more SE could concentrate more on broader job chances and possess more job anticipations; and also, higher individual aims and better cognitive performance. SE could also develop mental health and capability to perform tasks and activities and help them to be more resilient against job anxiety (MirSami & Ebrahimi Ghavam, 2007).

Teachers' self-efficacy (TSE) is defined as teachers' belief in evaluating their capability to make positive effects on learner instructional results (Klassen et al., 2011; Tschannen-Moran & Woolfolk Hoy, 2001). Teacher self-efficacy has been the focus of extensive study for the past 30 years, and numerous studies have been done on this topic (e.g., Bray-Clark & Bates, 2003; Chesnut & Burley, 2015; Gale et al., 2021; Klassen & Chiu, 2011; Klassen et al., 2011; Klassen & Tze, 2014; Yada et al., 2018; Vaezi & Fallah, 2011; Zee & Koomen, 2016). Given its effects on instructional strategies,

teaching effectiveness, and student academic performance, teachers' self-efficacy has in fact steadily assumed a more significant role in school psychology research. The teaching profession is significantly impacted by teachers' self-efficacy because effective teachers seem to have a strong sense of efficacy. This refers to teachers' confidence in their ability to effectively manage the duties, demands, and problems connected with their professional activity. There is no doubt that teachers' self-efficacy is very effective and has a big impact on how their pedagogical development evolves in a lot of different ways (Barni et al., 2019; Alibakhshi et al., 2020). It was maintained that TSE influences not only learners' results, such as educational development and incentive but also instructors' constructs, like their anxiety, turnover, and views to engaging children with different instructional needs (Klassen et al., 2011; Mojavezi & Tamiz, 2012; Tschannen-Moran et al., 1998; Yada et al., 2018). Moreover, the studies recommend TSE has significant implications for general school efficiency (Bray-Clark & Bates, 2003). In addition, teachers' self-efficacy could reduce EFL teachers' stress (Vaezi & Fallah, 2011), and predict their burnout (Yazdi, Motalebzadeh, & Ashraf, 2014). Additionally, teachers who have high levels of self-efficacy devote more time and energy to their students, treat them with greater morality, assume greater responsibility, foster a positive learning atmosphere, and are more likely to recognize their needs. Additionally, they assist learners, encourage them to attempt new approaches, and provide advice, all of which improve academic performance and raise achievement levels for their students (e.g., Caprara et al., 2006; Elliott et al., 2010; Guo et al., 2010; Marzano, 2017; Shidler, 2009; Tschannen-Moran & Johnson, 2011).

Over the past few years, SE notion has received much attention in the related literature, and remarkable improvements in query on this notion and its essential role in educational settings have been seen (e.g., Alibakhshi et al., 2020; Barni et al., 2019; Caprara et al., 2006; Elliott et al., 2010; Guo et al., 2010; Marzano, 2017; Shidler, 2009; Tschannen-Moran & Johnson, 2011; Woolfolk-Hoy & Burke-Spero,

2005). Various studies have found significant correlations between SE beliefs and PD experience of pre-service teachers (McKim & Velez, 2017), professional performance of novice teachers (Ozder, 2011), pedagogical success of EFL teachers in the institutes (Ghanizadeh & Moafian, 2011), and EFL teachers' level of linguistic proficiency (Kurosh Khanshan & Yousefi, 2015). However, a number of untouched issues are still seen with regard to the role of TSE in teachers' Professional Development (PD). One of these significant problems concerns the exploration of TSE interventions and its effects on EFL teachers' PD. Despite the accredited role of teachers' PD in satisfying their latest learning needs (Lohman, 2000; Richards & Farrell, 2005), recent educational studies (e.g., Karimi, 2011; Malmir & Mohammadi, 2018) have brought into the focus the issue that PD is much more than acquiring the essential knowledge and skills for effective teaching. Thus, teachers' beliefs, attitudes, and characteristics play a considerable role in their effectiveness as educators (Ortaçtepe & Ayşe 2015). SE can be in close contact with teacher PD (Donnell & Gettinger, 2015; McKim & Velez, 2017; Ozder, 2011), and can affect the performance of teachers in the educational contexts (Bandura, 1995; Goddard, Hoy, & Hoy, 2000). It is argued that SE is a vital and critical concept, which should be incorporated in the framework of teachers' PD (Bray-Clark & Bates, 2003). Students' second language (L2) achievement can be influenced by the EFL teachers and the way they present the lessons to the classroom. Therefore, the way teachers themselves are trained and the in-service training they are involved in are significant in this regard (Taylor, 2018). In this respect, King (2003) states that teaching is a complex activity that is influenced by the many dimensions of teacher quality and teacher quality is a key predictor of student performance. Teachers' PD has been considered an important issue both in the general education and the EFL context. As Pettis (2002) implies, investigation of teachers' PD is important as with better knowledge of the concept, educators can better envisage PD directions, and enhance the quality of teacher education programs. Likewise, it has been argued that positive

changes in the teachers' professionalism could highly change the atmosphere in which ESL/EFL learners are developing their second or foreign language (Chen, 2020; Glackin, 2019; McKim & Velez, 2017). In a similar vein, Chacón (2005) implied that EFL learners' development extremely relies on teachers and their methodologies in their classes. Consequently, teachers' methodologies and their actions in the class and the way they arrange instruction is crucially related to their ideas about teacher SE beliefs and their ideologies of successful teaching (Ghaith & Shaaban, 1999). Therefore, the teachers' SE conceptions could extremely affect their teaching and; accordingly, their students' learning (Dembo & Gibson, 1985; Goddard, Hoy, & Hoy, 2000).

Several studies have been recently conducted in the Iranian EFL context regarding EFL teachers' self-efficacy. For example, the patterns of cognition, metacognition, emotion, and behavior across three groups of Iranian EFL teachers with scant, moderate, and considerable teaching experience was explored by Azizi et al. (2022). In another recent study, Farangi and Rashidi (2020) examined the relationships between Iranian EFL teachers' conceptions of assessment and their self-efficacy. Moreover, Mousavi et al. (2022) investigated the correlation among Iranian EFL teachers' self-efficacy, fluid intelligence, and burnout. Further, Momenzadeh et al. (2023) explored the probable relationships among Iranian EFL teachers' active/passive motivation, their sense of efficacy, and burnout. From the recent research in the Iranian English language teaching (ELT) context, it is evident that most of the studies in the field of TSE have been quantitative in nature and mostly correlational, and as far as the researchers of the present study reviewed the related literature, there was no mixed-methods study regarding the Iranian EFL teachers' self-efficacy and their PD in the Iranian ELT context. Therefore, the present study was conducted to fill the gap in the literature. On the other hand, since based on the Iranian Ministry of Education (2019), more than seven million Iranian students need to develop their English in such schools, studying the role of SE beliefs in the EFL teachers' PD is

of paramount significance. Such teachers' PD is assumed to be promoted in case they could enhance their own SE beliefs. In this respect, training the EFL teachers in terms of SE beliefs is likely to affect their PD and may shed light partly on the problem, which has been reported, repeatedly by local researchers as Iranian EFL teachers in general and the EFL teachers working in the Ministry of Education in particular are not highly successful from their own perspective and their students' points of view (e.g., Ghasemi & Hashemi, 2011; Kurosh Khanshan & Yousefi, 2020). In parallel with the stated issues, little has been mentioned in the ELT literature concerning the impact of training teachers in terms of SE beliefs and making them familiar with the concepts and principles of this socio-cognitive notions and their impact on the teachers' PD.

Mixed-methods research (MMR) has gained popularity in Applied Linguistics (AL) and Second Language Education (SLA) as a result of its suitability for thoroughly examining research issues (Hashemi & Babaii, 2013; Riazi & Candlin, 2014). The proliferation of MMR and its widespread use over the past ten years have increased the number of papers in AL and SLA (Amini Farsani et al., 2021). Alongside the quantitative and qualitative approaches, MMR has become a significant research approach (Creswell & Garrett, 2008), and in more recent years, it has also received affirmation and support in the field of AL and SLA (Dornyei, 2007; Hashemi, 2012). Therefore, the present study applied a mixed-methods approach to improve the quality and validity of the findings.

As a result, along with filling this gap, the following questions were addressed to promote the PD of Iranian EFL teachers working in the Ministry of Education through SE beliefs training,

RQ1. *Does perceived sense of SE belief have any significant effect on the EFL teachers' professional development?*

RQ2. *What are the perceptions of the Iranian EFL teachers on their professional development after receiving the SE training?*

RQ3. *Do the quantitative and qualitative results complement and confirm each other using mixed-methods approach?*

Theoretical Framework

Bandura (1986) regarded the construct of self-efficacy within a social cognitive theory of human behavior that deviated from the common cognitivism and embedded cognitive development within a socio-structural domain. This theory assumes that people are capable of reflecting on their own actions and regulate them and that they can shape their environments instead of just reacting passively to them. Bandura's (1986) SE notion considers most human behavior as purposive acts which are predetermined and directed by planning and forethought. Within the domain of socio-cognitive theory, such goal-oriented behaviors are assumed to be directed and supported by a meta-cognitive activity implying that individuals are both self-reflective and accomplished enough to analyze their own experiences, behaviors, and their outcome. In addition, they are able to employ self-regulation and control their own behavior, manipulate their immediate situation and make changes in the environment in case required (Wang, Hung, & Huang, 2019).

For language teachers, like teachers of other disciplines, PD shows their ability to manage the class and deal with instructional tasks effectively (Ravandpour, 2019). As Bandura (2005) argues, any social activity including teaching could be affected by SE beliefs as it enjoys a determining quality. Individuals with high sense of efficacy keep on trying and show resistance in case of hardships (Glackin, 2019). In fact, EFL teachers' belief in self-efficacy can affect their success and self-development (Moafian & Ghanizadeh, 2011). This efficacy is reflected in the teachers' ability to bring about changes in the engagement level of the students and leading them to desired outcomes (Bandura, 1977).

LITERATURE REVIEW

The relationship between EFL teachers' self-efficacy and their success was examined by Ghanizadeh and Moafian (2011). Teachers' experience and their age were also studied as important variables. To do so, 'Teachers' Sense of Efficacy Scale' was administered to 89 teachers. In addition, 779 students filled the 'Characteristics of Successful EFL Teachers

Questionnaire'. The findings indicated a significant relationship between the two constructs, and significant correlations were found between teachers' self-efficacy, their teaching experience, and age. This study used a survey design, and the perceptions of EFL learners and teachers regarding the variables of study were not explored qualitatively. Along the similar lines of inquiries, Karimi (2011) studied the potential of PD in developing instructors' perceptions towards their teaching capability (SE). His study was quantitative in nature and applied the reliable questionnaire known as "Teacher Sense of Efficacy Scale". Two EFL teachers' groups (an experimental group and a control group) were studied in a Pre-test Post-test (and delayed Post-test) Control Group Design. The results showed that the experimental group who received the treatment got significantly higher efficacy scores than the control group. However, he did not triangulate the data using interview or observation to increase the validity of his findings. In the similar lines of inquiries, Ekinçi (2012) explored the self-efficacy of education faculty and teaching certificate program learners on the teaching career and studied their correlations with some variables. The data were gathered through the run of Teachers' Self Efficacy Scale to 454 pre-service teachers participating the education faculty and the teaching certificate program. The findings of the study showed that the level of self-efficacy of the education faculty and the teaching certificate program students on the teaching profession are high, and no significant difference was found between the self-efficacy levels of the two groups. In addition, there was no significant difference between the learners' self-efficacy perceptions and gender variable. Moreover, this study was designed in line with the survey model, and the perceptions of the participants were not explored qualitatively. In the same vein, Muhammed Amanulla and Aruna (2014) undertook a study to investigate the effects of TSE on PD of higher secondary school teachers. In this regard, 350 teachers were chosen via stratified random sampling. TSE scale and questionnaire of PD of higher secondary school teachers were applied for gathering the data. The findings indicated that

significant differences were found between male and female instructors, state and non-profit school instructors, and experienced and novice teachers in the PD mean scores. Likewise, state and non-profit school instructors' TSE was significantly different. TSE of male and female instructors and more experienced and novice are not significantly different. The results also showed that no significant impact of teacher efficacy on teachers' PD was found. Finally, there was no significant difference between the groups regarding their PD. However, the perceptions of the participants were not explored qualitatively. Along the similar lines of studies, Malmir and Mohammadi (2018) investigated whether Iranian EFL instructors' reflective teaching and their self-efficacy could predict their professional success. The participants of study consisted of 28 EFL teachers who filled out the Teacher Sense of Efficacy Scale and Reflective Teaching Questionnaire. Next, 168 male and female EFL students were randomly chosen out of the teachers' students. The data analysis applying multiple regression indicated that both SE and reflective teaching can to some extent anticipate the professional success of EFL teachers. Furthermore, the findings showed that no significant difference was found between the prediction power of the two variables in anticipating teachers' success from their learners' views. The results implied that EFL teachers should develop their SE and reflective teaching to escalate their professional success. In addition, this study employed an Ex-Post Facto correlational design applying quantitative approach, and they did not apply qualitative data. In the same vein, Safari, Davaribina, and Khoshnevis (2020) examined the impact of EFL teachers' SE, job satisfaction, and reflective thinking on their PD. The participants included 212 Iranian EFL teachers from various universities, language institutes, and schools who filled out the related questionnaires. To test the hypothesized model of relationships, Structural Equation Modeling (SEM) was applied. The results revealed that there were significant internal correlations between all the latent variables along their sub-scales. In addition, the findings indicated that SE and job satisfaction positively predicted PD, with SE having more predictive

ability in comparison with job satisfaction. However, this study used a survey design, and the perceptions of EFL teachers regarding the variables of study were not explored qualitatively. Similarly, through a mixed-methods study Orakcı et al. (2023) investigated teachers' views about their self-efficacy and how they improve their self-efficacy beliefs during teaching practice. Based on the qualitative and quantitative results, it was revealed that teachers' self-efficacy levels were high, and they felt self-efficient in their teaching. The review of the related literature showed that there was no research to examine the role of SE instruction in EFL teachers' PD using a mixed-methods approach. Therefore, this study aimed to fill this gap.

METHODS

Participants

The present study applied an explanatory sequential mixed-methods design for the collection of both quantitative and qualitative data, which began with quantitative strand, and then a second qualitative strand was conducted to explain the quantitative results (Creswell, 2015). The study participants of quantitative phase included 30 experienced male (n=14) and female (n=16) Iranian EFL teachers with more than two years of teaching background (Moodie, 2018). The convenience (availability) sampling procedure was used to select the participants. It is a type of sampling in which the participants who are easily accessible are chosen to participate in the study (Ary et al., 2019). The teachers were selected based on their willingness as volunteers out of a pool of 85 EFL teachers, working as registered teachers in the Iranian Ministry of Education. They were B.A. and M.A. holders in teaching English as a foreign language (TEFL), teaching in the high schools of Zanjan province, Iran. The teachers were selected based on two criteria, namely experience and willingness. Then, five EFL students were randomly selected from the classes of each participant teachers in which the total number of students was 150, including male (n=65) and female (n=85) students, studying English in the secondary high schools of Zanjan province to complete Teachers' PD Survey. Moreover, the students were 15–18-

year-old whose proficiency level included pre-intermediate, intermediate, and upper-intermediate based on the reports of their teachers. The first language of the participants was Turkish. In addition, the participants of the qualitative phase consisted of 30 teachers who were took part in the quantitative phase, too.

Instrumentation

Quantitative Data Instruments

To collect the quantitative data, the researchers used two instruments as follows:

Teacher Sense of self-efficacy Scale: This scale was developed by Tschannen-Moran and Hoy (2001) which used to collect the data concerning sense of SE of the teachers participating in this study. The scale enjoys high reliability indices "between .81 and .90" in the Iranian context (Eslami & Fatahi, 2008, p. 2), and its construct validity has been confirmed in different studies (Akbari & Moradkhani, 2010; Eslami & Fatahi, 2008; Ghanizadeh & Moafian, 2011; Tschannen-Moran & Hoy, 2001). The participants presented their views about the 12 statements mentioned in the questionnaire through a five-level Likert scale, including nothing (1) up to a great deal (5). The questionnaire included three areas of efficacy in student engagement (items 2, 3, 4, 11), instructional strategy efficacy (items 5, 9, 10, 12), and classroom management efficacy (items 1, 6, 7, 8).

Successful Iranian EFL Teachers questionnaire: This scale was developed by Pishghadam and Moafian (2009) which applied to measure Teachers' professional development and success in which it was filled by the students. Teachers' professional development survey has been designed by Pishghadam and Moafian (2009) and the questionnaire consists of 47 items ranging from 'strongly agree' to 'strongly disagree'. The reliability index for this questionnaire was very high (Cronbach's alpha = 0.94). The confirmatory factor analysis also showed that the scale could measure twelve constructs, including teaching accountability, interpersonal relationships, attention to all, examination, physical and emotional acceptance, commitment, learning

boosters, creating a sense of competence, empathy, teaching boosters, class attendance, and dynamism.

Qualitative Data Instrument

This study applied an explanatory sequential mixed-methods design for the collection of both quantitative and qualitative data. As according to the explanatory sequential design, quantitative data needs to be further explained and supported by qualitative data, semi-structured individual interviews were also held with 30 EFL teachers. The interview sessions were administered face-to-face, and the language of the interviews was English. They were held within two months, and each session took about 30 minutes. The questions of the interview were extracted from the Teacher Sense of Self-efficacy Scale (Tschannen-Moran & Hoy, 2001) to collect the data pertained to the EFL teachers' views and perceptions on the impact of SE training on their PD. There were eight questions. Following Kuzmanić (2009), an expert judgment validity with the help of five TEFL Ph.D. holders was done to confirm the validity of the interview questions. The interviews were audio-recorded and then transcribed with the permission of the participants for further analysis.

Procedure

Quantitative Phase

At first, the EFL teachers filled out the Teacher Sense of SE Scale as the pre-survey. Then, from among the students of each teacher, five students were randomly selected (150 students totally) in order to complete *Teachers' PD Survey*. Both teachers and the students experienced a briefing session concerning the research. In the next step, the teachers were trained in the in-service training courses for their SE. The training process lasted five 90-minute sessions in a 1.5-month course in which the participants received an SE beliefs development syllabus, which was developed by the researchers based on the available accredited sources and documents. The in-service training course was taught by the researchers through a team-teaching practice. The syllabus was pertained to Teachers' Sense of SE in which concepts, such as self-efficacy beliefs of novice and experienced teachers and

their performance in the classroom (Ozder, 2011), Professional development session strategies as sources of teachers' self-efficacy (Glackin, 2019), self-efficacy and instructional practice of EFL teachers (Kurosh Khanshan & Yousefi, 2020), developing self-efficacy and professional development experiences (McKim & Velez, 2017), and teacher personality and teacher effectiveness (Kim et al., 2019) were covered. They were asked to present reflections on the notions in the classroom and then practice the concepts in their own classes with their own students and then bring the results into the training course class. At the end of the training course, the students of the trained teachers completed the teachers' PD survey again as the post-survey. This showed how the respective training had affected the teachers' PD. Likewise, the teachers completed the SE beliefs questionnaire again as the post-survey. In fact, that questionnaire was completed both prior to the training sessions of the in-service training period and after the training sessions. This showed how well the participating teachers had developed their self-efficacy beliefs. The data were collected and analyzed via SPSS software (version 25) and the results were reported and checked against the research questions of the study.

Qualitative Phase

As according to the explanatory sequential design, quantitative data needs to be further explained and supported by qualitative data, semi-structured individual interviews were also held with 30 EFL teachers. In order to hold the interviews, the researchers set the time with the interviewees in advance and then informed the teachers concerning the study purpose. After getting the consent of the teachers to take part in interview sessions, the time and the place of the interviews were arranged with them. The interview sessions were held face-to-face. The first researcher of the present study administered the interview sessions. By the permission of the participants, the interviews were audio-recorded by MP4 player, and then they were transcribed for further analysis. Then, member checking was performed to confirm the data trustworthiness. Descriptive qualitative content analysis technique (Creswell, 2012) was used to

analyze the data. The unit of analysis for coding purposes was all the responses to each of the ten questions. The transcripts were reviewed many times by two experts in the field and were coded. Based on Ary et al. (2019), for assessing dependability (reliability), inter-rater agreement method was conducted. As a result, the transcripts were coded by two experts to check the inter-rater dependability (reliability) of coding process. The results showed that most of the extracted codes by two experts agreed with each other; therefore, a significant inter-rater dependability (reliability) of coding process was found between two raters.

Design of the Study

The present study applied an explanatory sequential mixed-method design for the collection of both quantitative and qualitative data, which began with quantitative strand, and then a second qualitative strand was conducted to explain the quantitative results (Creswell, 2015). The reason of using this design was that “when the topic under study is already known, then an explanatory design is usually chosen” (Cresswell & Plano Clark, 2017, p. 82). The quantitative and qualitative results are integrated through a statistics-by-themes joint display procedure.

Table 2
Descriptive Statistics; Testing Normality of Data

	N		Skewness		Kurtosis		
	Statistic	Statistic	Std. Error	Ratio	Statistic	Std. Error	Ratio
Pre-PD	30	.010	.427	0.02	-.169	.833	-0.20
Post-PD after SE	30	-.118	.427	-0.28	-.086	.833	-0.10
Pre-SE	30	.246	.427	0.58	1.054	.833	1.27
Post-SE	30	.378	.427	0.89	1.373	.833	1.65

Note. Pre = Pre-survey, Post = Post-survey, PD = Professional Development, SE = Self-Efficacy

Answering the First Research Question

The first research question aimed at finding if EFL teachers' sense of SE had any significant effect on their PD. A paired-samples t-test was run to compare the EFL teachers' means on the pre-survey of

RESULTS

Quantitative Results

The pre-survey results were examined for normality of distribution prior to testing the hypothesis. The Kolmogorov-Smirnov test was therefore conducted. Based on Pallant (2005), the distribution is normal and a paired-samples t-test can be performed if the Kolmogorov-Smirnov result is insignificant.

Table 1
The Kolmogorov-Smirnov Test of Normality on the Data Sets

	Statistic	Df	Sig.
Pre-survey	.094	30	.200*
Post-survey	.100	30	.200*

*This is a lower bound of the true significance

The results of the Kolmogorov-Smirnov test were not significant, as indicated in Table 1. The normalcy criteria were thus satisfied. In addition, as displayed in Table 2, the ratios of skewness and kurtosis over their standard errors were lower than +/- 1.96 for pre- and post-surveys. Thus, it can be concluded that the assumption of normality was retained. Therefore, the surveys and post-survey's scores were; therefore, compared using paired-samples t-test.

PD with the post-survey administered after SE treatment. Based on the results displayed in Table 3, it was claimed that the EFL teachers had a higher mean in the post-survey ($M = 3.90$, $SD = .099$) than in the pre-survey ($M = 2.94$, $SD = .086$).

Table 3
Descriptive Statistics; Pre-survey and Post-survey of Professional Development (after Receiving Self-Efficacy Treatment)

	Mean	N	Std. Deviation	Std. Error Mean
Posttest	3.90	30	.099	.018
Pretest	2.94	30	.086	.016

The results of the paired-samples t-test ($t(29) = 306.83$, $p = .000$, $r = .999$ representing a large effect size) (Table 4) indicated that EFL teachers, after receiving SE, had a significantly higher mean on the PD post-survey than its pre-survey. Based on Plonsky and Oswald (2014), Cohen's (1988) labels for small (.2), medium (.5), and large (.8) mean difference should not

generally be applied to L2 research; therefore, L2 researchers could adopt the new field-specific benchmarks of small (.40), medium (.70), and large (1.00) in order to interpret the practical significance of L2 research effects more precisely. As a result, based on Plonsky and Oswald's (2014) benchmarks, the effect size ($r = .999$) is large.

Table 4

Paired-Samples t-test; Pre-survey and Post-survey of PD (after Receiving Self-Efficacy Instruction)

		Paired Differences			T	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
.953	.017	.003	.946	.959	306.836	29	.000**

**The result is significant at the 0.001 level (2-tailed)

Another paired-samples t-test was run to compare the EFL teachers' means on the pre-survey of SE beliefs with its posttest administered after the treatment. Based on the results

displayed in Table 5, it was claimed that the EFL teachers had a higher mean ($M = 50.98$, $SD = 2.39$) in the post-survey than in the pre-survey ($M = 36.50$, $SD = 2.98$).

Table 5

Descriptive Statistics; Pre-survey and Post-survey of Self-Efficacy Beliefs

	Mean	N	Std. Deviation	Std. Error Mean
Posttest	50.98	30	2.39	.278
Pretest	36.50	30	2.98	.324

The results of the paired-samples t-test ($t(29) = 217.32$, $p = .000$, $r = .829$ representing a large effect size) (Table 6) indicated that EFL teachers, after receiving self-efficacy instruction,

had a significantly higher mean on the SE beliefs post-survey than its pre-survey. As a result, based on Plonsky and Oswald's (2014) benchmarks, the effect size ($r = .829$) is large.

Table 6

Paired-Samples t-test; Pre-survey and Post-survey of Self-Efficacy Beliefs

		Paired Differences			T	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
45.35	2.78	.298	26	58	217.324	29	.000**

**The result is significant at the 0.001 level (2-tailed)

Qualitative Phase

Based on the purposes of the qualitative study, descriptive qualitative content analysis technique (Creswell, 2012) was used to analyze the data. Having analyzed the data, the researchers

finally came up with three themes, namely EFL teachers' SE-belief knowledge, EFL teachers' assumption of teacher PD, EFL teachers' perceptions on the interactive nature of SE beliefs and PD, which are presented in Table 7 below.

Table 7
Themes And Codes Derived out of the Interviews

Themes	Main Categories	Sub-categories	Frequency	Percentage	
EFL teachers' SE-belief knowledge	Handling the Teaching Tasks	Motivating students who show low interest in the language class	23	%76.66	
		Establishing a classroom management system with each group of the students	25	%83.33	
		Helping learners believe in their own learning and that they can do well in school work.	22	%73.33	
		Assisting families in helping their children do well in school. Implementing alternative strategies in the classroom.	24	%80.00	
	Job Obligations	Programing for specific lesson plans	25	%83.33	
		Being time-wise and punctual	26	%86.66	
		Developing good questions for students and using a variety of assessment strategies.	24	%80.00	
	Obviating the Class Challenges	Controlling disruptive behavior of the learners	27	%90.00	
		Helping the students value learning and follow classroom rules	26	%86.66	
		Providing alternative explanations and examples when students are confused or they cannot deal with the new concepts easily.	28	%93.33	
	EFL teachers' assumption of teacher PD	Teaching Responsibility	Being interested in the subject s/he teaches.	25	%83.33
			Entering the classroom well-prepared.	26	%86.66
			Emphasizing important topics and points.	23	%76.66
			Answering questions accurately and completely.	24	%80.00
Being interested in helping learners in the classroom and outside the classroom.			27	%90.00	
Being empowered to understand the content at the level of language learners.			26	%86.66	
Being open to criticisms and valuing constructive suggestions.			27	%90.00	
Rapport		Being good-natured and establishing a sincere relationship with language learners.	25	%83.33	
		Having a sense of humor and providing an attractive and lively atmosphere in the classroom.	27	%90.00	
		Being patient and enthusiastic.	26	%86.66	
		Respecting learners and understanding them well.	25	%83.33	
		Respecting different opinions.	20	%66.66	
Competency Building		Knowing his/her students well in terms of ability, talent, and weaknesses.	21	%70.00	
		Being able to motivate and persuade learners to learn the second language.	19	%63.33	
		Giving appropriate and sufficient assignments to learners based on what is taught.	23	%76.66	
		Using stronger learners to help weaker learners develop.	20	%66.66	
Commitment		Having sufficient knowledge about the subject of teaching.	23	%76.66	
		Enjoying new information and being up to date.	25	%83.33	
	Emphasizing the presence of language learners in the classroom.	26	%86.66		

EFL teachers' perceptions on the interactive nature of SE beliefs and PD	Dealing with barriers and changes in the classroom environment	Those with high sense of efficacy keep on trying and show resistance in case of hardships such as crowded classes.	26	%86.66
		Those with high sense of efficacy keep on trying to control noisy students.	25	%83.33
		Those with high sense of efficacy control the fear of weak learners.	26	%86.66
	The relationship between teachers' SE and their pedagogical success	Being efficient teachers through being more critical when students make mistakes/ errors.	24	%80.00
		Teachers' methodologies and their actions in the class and the way they arrange instruction is crucially related to their ideas about teacher efficacy.	25	%83.33
		Teachers' ideas of a successful teacher can extremely affect their teaching, and accordingly, their learners' learning.	26	%86.66
	The relationship between self-efficacy of the teacher and that of learners	EFL teachers' SE beliefs is an important variable that directly influences students' motivation.	26	%86.66
		EFL teachers' SE beliefs affects learners' persistence	25	%83.33
		EFL teachers' SE beliefs directly affects the learners' success during foreign language learning process.	25	%83.33
		Teachers with high sense of SE have high self-confidence and convey it to the learners.	23	%76.66
	The significant role of teachers' sense of efficacy in their creativity in the classroom environment	Teachers' sense of efficacy affects both the classroom environment that they create and the various instructional practices introduced in the classroom.	24	%80.00
		Teachers with a high sense of self-efficacy are confident that even the most difficult learners can improve.	25	%83.33
		Teachers with high SE beliefs are creative and make learners think creatively	26	%86.66

Answering the Second Research Question

The second research question was an attempt to investigate the perceptions of the Iranian EFL teachers on their PD after receiving the SE training. To answer this question, the teachers' views in the interviews were analyzed. As Table 6 represents, the main themes include EFL teachers' SE-belief knowledge, EFL teachers' assumption of teacher PD, and EFL teachers' perceptions on the interactive nature of SE beliefs and PD, which they are elaborated in the following part, separately.

EFL Teachers' SE-belief Knowledge

This main theme consists of three main categories, including handling the teaching tasks, job obligations, and obviating the class challenges. Most of the teachers believed that this training could be effective in handing their classes in

which they could motivate the students who were not interested in language classes through increasing their self-confidence and self-efficacy. They also noted that after this treatment, they could work on the external reasons of students' demotivation, such as the context of students' family. Mohammad in this regard noted,

#This course helped me increase the self-confidence of my students regarding their class performance in which I am able to develop the students' SE to boost their beliefs towards their competence in learning English language, and consequently, they performed better in class activities and group works. Interestingly, I could communicate with their parents and tell them how they can increase the motivation and SE of their children towards learning English language.

Some of the teachers also maintained that this course escalated their beliefs towards their abilities to do their job obligations, such as programming for specific lesson plans and developing good questions for students and using a variety of assessment strategies. Ali, one of the enthusiastic teachers even noted that “upon finishing this treatment, I became more time-wise and punctual since I found my class the best place to attend to be with my students.”

Another main category related to EFL teachers' SE-belief knowledge is obviating the class challenges. Some of the participants believed that after receiving the SE treatment, they could control the disruptive behaviors of their students and help them value English language learning by following the class activities and class rules. Morteza in this regard pointed out,

#One of the main benefits of this course is recognizing how to treat the students' misbehaviors and change them into the good ones through understanding their needs and their personal differences. In this way, most of the naughty students followed the class activities to learn more.

They also noted that they can provide alternative explanations and examples when the students are confused or they cannot deal with the new concepts, easily. Reza said, “I learned that to remove the confusion of my students at the time of presenting new concepts, I should provide more explanations or examples.”

EFL Teachers' Assumption of Teacher PD

This main theme includes four main sub-categories, namely teacher responsibility, rapport, competency building, and commitment. Some of the teachers maintained that upon receiving the treatment, they became more interested in the subjects that they were teaching, and they tried to be prepared before starting class. Nahid one of the teachers noted that, “I've learned that I should be prepared before arriving the class. Before that course, I was prepared, but I was not serious enough to be prepared completely”. Another interesting factor mentioned by some of the teachers is being open to criticisms and valuing constructive suggestions and also being good-natured and establishing a sincere relationship with

their learners upon receiving the SE treatment. Rahele pointed out,

#As a matter of fact, I personally could not tolerate any criticism, especially from my students, so I sometimes dealt with their criticisms harshly. But in this course, I came to grip that I should be resilient enough in my job and accept the constructive suggestions. I found that in this way I can establish a sincere relationship my students.

Another important concept noted by most of the teachers is rapport. The teachers believed that upon receiving the SE course, they could create a good relationship with their learners and also could have a sense of humor and provide an attractive and lively atmosphere in the classroom. Respecting learners and understanding them well and respecting different opinions are other benefits of the SE course based on the teacher's views. Abbas one of the attentive and hardworking teacher mentioned, “One of the main merits of this treatment was how to treat learners and also how to create rapport. I learned that taking things with a pinch of salt can be a remedy for boring class and could provide an interesting and lively context in the class.” Some of the teachers noted competency building was the one of the side-effects of the SE course. They asserted that this course could help them recognize their students well in terms of ability, talent, and weaknesses and also use stronger learners to help weaker learners' development. Taraneh in this respect pointed out, “In fact, personally, before the SE course, I did not use my stronger students to help the weaker ones, but after receiving this course, I recognized the importance and effectiveness of this activity.” Having the stronger sense of commitment is another significant factor expressed by the teachers. They maintained that this course could have effect on their sense of commitment, and after the SE treatment, they were interested in finding and using new information in the class. Some of them believed that upon the completion of the SE course, they emphasized more on the presence of their students in the classroom. Ahmad in this regard noted,

#Finding and using new information to complement the new subjects of teaching could enhance my students' motivation and

learning. It was the effective method, which was introduced in the SE course. In this way, my students were more interested in learning the new subjects, and I think it could develop their self-confidence to search for finding new information to develop their learning regarding the new subjects.

EFL Teachers' Perceptions on the Interactive Nature of SE Beliefs and PD

This main theme consists of four sub-categories, including dealing with barriers and changes in the classroom environment, the relationship between teachers' SE and their pedagogical success, the relationship between self-efficacy of the teacher and that of learners, and the significant role of teachers' sense of efficacy in their creativity in the classroom environment. Coping with challenges and changes in the classroom context is another main notion mentioned by the teachers. The teachers expressed that they could better deal with classroom hardships, such as crowded classes, noisy students, and the fear of weak learners after receiving SE treatment. Fateme in this regard said that, "I could manage my naughty and noisy students in crowded classes better". The teachers also believed that there is a direct relationship between teachers' SE and their pedagogical success. They mentioned the teachers with high sense of SE are efficient teachers through being more critical when students make mistakes/errors and also teachers' perceptions of a successful teacher could extremely affect their teaching, and accordingly, their students' motivation and learning. Ali pointed out, "I personally experienced that when I have a high sense of SE, I could be more successful, and having a high sense of SE is a must for an English teacher, especially for EFL high school teachers". Some of the teachers also asserted that there is a direct relationship between self-efficacy of the teacher and that of learners. They mentioned EFL teachers' SE beliefs is an important

variable that directly influences students' motivation, persistence, and success during foreign language learning process. In addition, teachers with high sense of SE have high self-confidence, and they could convey it to their learners. Sara in this respect noted,

#The teacher's SE could be a significant factor in managing the class in which those who have high level of SE could convey their SE and their self-confidence to their students. They could motivate their learners to be successful during foreign language learning process and also resistant enough to deal with the difficulties and hurdles of this process.

Some of the participants maintained that teachers' sense of efficacy has the significant role in their creativity in the classroom environment. They said teachers' sense of efficacy could affect both the classroom setting and the various instructional practices introduced in the classroom in which teachers with high SE beliefs are more creative and make learners think creatively, too. In this respect, Mahnaz pointed out, "EFL teachers' SE influence their creativity in the classroom context and also instructional materials and activities they use in the class. Consequently, they could reach the better pedagogical outcomes".

Integrating the Quantitative and Qualitative Phases

In order to answer the third research question, the quantitative and qualitative results are integrated through a statistics-by-themes joint display procedure (Table 8). In mixed-methods studies, joint displays provide a visual representation of integration of quantitative and qualitative results (Guetterman et al., 2015). Joint displays offer a framework for integration through merging, comparing, relating, and linking qualitative and quantitative data or results to help identify meta-inferences (Guetterman & Moss Breen, 2021).

Table 8
Joint Display of Quantitative and Qualitative Results

Overarching Research Theme	Quantitative Results	Qualitative Results	Mixed-methods Meta-inferences
The effects of SE treatments on the EFL teachers' PD and SE beliefs	The paired-samples t-test's results ($t(29) = 306.83, p = .000, r = .999$ representing a large effect size) indicated that EFL teachers, after receiving SE, had a significantly higher mean on the PD post-survey.	1. EFL teachers' SE-belief knowledge <i>1.1. Handling the Teaching Tasks</i> <i>1.2. Job Obligations</i> <i>1.3. Obviating the Class Challenges</i>	The survey results showed that SE treatment had a significant effect on the teachers' PD. Likewise, the interview results indicated that EFL teachers' SE-belief knowledge developed after receiving SE treatments, for example, their knowledge of handing the teaching task. In addition, SE treatments had positive effects on EFL teachers' PD assumption, for instance, developing their rapport assumption and practice. Further, SE treatments had positive impacts on EFL teachers' perceptions on the interactive nature of SE beliefs and PD. For example, the teachers expressed that they could better deal with classroom hardships, such as crowded classes, noisy students, and the fear of weak learners after receiving SE treatment.
	The paired-samples t-test's results ($t(29) = 217.32, p = .000, r = .829$ representing a large effect size) indicated that EFL teachers, after receiving self-efficacy instruction, had a significantly higher mean on the SE beliefs post-survey.	2. EFL teachers' assumption of teacher PD <i>2.1. Teaching Responsibility</i> <i>2.2. Rapport</i> <i>2.3. Competency Building</i> <i>2.4. Commitment</i>	
		3. EFL teachers' perceptions on the interactive nature of SE beliefs and PD <i>3.1. Dealing with barriers and changes in the classroom environment</i> <i>3.2. The relationship between teachers' SE and their pedagogical success</i> <i>3.3. The relationship between self-efficacy of the teacher and that of learners</i> <i>3.4. The significant role of teachers' sense of efficacy in their creativity in the classroom environment</i>	

The results of integrating quantitative and qualitative results showed that they confirmed and complemented each other, and mixed-methods meta-inferences indicated that SE treatment had a significant effect on the Iranian EFL teachers' PD and their SE beliefs.

DISCUSSION

The quantitative findings of the present study revealed that SE beliefs instruction could significantly affect EFL teachers' PD. It was found that most of the teachers taking part in the study could develop their PD principles and their SE beliefs. The results of qualitative phase indicated that EFL teachers believed the SE beliefs training enabled them to motivate

learners and provide a supportive condition for them. The high frequency of the positive notions presented by the teachers in the interview sessions toward their SE beliefs and PD upon receiving the SE treatments showed the SE training was very efficient in their professional careers and qualitative results complemented the quantitative findings in terms of the effectiveness of the SE training, and the mixed-methods meta-inferences confirmed that SE treatment had a significant effect on the Iranian EFL teachers' PD and their SE beliefs. findings showed that teacher efficacy, which is defined as a teacher's desire to use the instructional strategies they believe to be appropriate and effective as well as, perhaps more importantly,

their tenacity in trying to do so (Overbaugh & Lu, 2008), can be closely related to their knowledge and expertise in a given domain.

The present findings are in line with the results of the previous research on the relationship between EFL teachers' SE beliefs and their PD (Ekinici, 2012; Cheung, 2006; Kotaman, 2010; Penrose, 2010; Wilson, Tan, & Chin, 2004; Wolters & Daugherty, 2007) in which all of them have come to the conclusion that teachers' SE beliefs could significantly predict their success in the ESL/EFL classroom disregarding their scopes, contexts under investigation, and research methods. The justification could be that teachers who believe in what they do have the drive and spirit to perform their responsibilities more effectively and look for ways to improve as instructors. Moreover, a good number of studies in the Iranian EFL context have proved the relationship between self-efficacy and professional development (PD) among EFL practitioners (e.g., Akbari & Moradkhani, 2010; Ghanizadeh & Moafian, 2011; Izadinia, 2008). Karrabi (2005) found that English teachers' sense of SE was an effective factor in teaching grammar and experiencing in the profession whose results lend support to the findings of the present study. Likewise, Eslami and Fatahi (2008) who considered self-efficacy as an indispensable part of the teaching profession found a high correlation between EFL teachers' SE sense and their L2 proficiency. In the same vein, Izadinia's (2008) study similarly showed that EFL teachers' SE as well as their critical pedagogy awareness promoted their professional success in which their findings lend credence to the findings of the present study.

Considering the impact of SE belief on the EFL teachers' classroom success, the findings of the present study confirm those of Chacón (2005) who studied the teachers' perceived efficacy among EFL teachers in middle schools in Venezuela. The results showed that when SE beliefs could significantly affect EFL teachers' PD. The participants' sense of efficacy increased as they judged their own proficiency in each of the four skills. Moreover, the results are also in harmony with the findings of Ghanizadeh and Moafian (2011) who explored the relationship between self-efficacy of EFL teachers and their

success. Their findings indicated a significant relationship between the two constructs. Moreover, significant correlations were found between teachers' self-efficacy, their teaching experience, and age. In addition, their findings showed that experienced teachers had significantly higher levels of efficacy than their novice counterparts. However, teaching experience and age variables were not studied in the present study. Furthermore, the findings also lend support to the results of Karimi (2011) who investigated the potential of PD in developing instructors' perceptions towards their teaching capability (SE). The results of his study showed that the experimental group who received the treatments got significantly higher efficacy scores than the control group. In addition, the findings revealed that PD initiatives had significant effects on raising EFL teachers' sense of efficacy in the classroom. Additionally, the findings of the present study are in agreement with those of Malmir and Mohammadi (2018) who investigated whether Iranian EFL instructors' reflective teaching and their self-efficacy could predict their professional success. The results indicated that both SE and reflective teaching can to some extent anticipate the professional success of EFL teachers. Furthermore, the findings showed that no significant difference was found between the prediction power of the two variables in anticipating teachers' success from their learners' views. They concluded that based on Bandura (2005), high self-efficacy beliefs can alter how teachers view their job. This may imply that both of these variables (teachers' reflective teaching and self-efficacy) have a moderate ability to predict teachers' performance, and that if one of them is applied, it is not necessary to use the other. Similarly, the findings lend support to the results of Safari et al. (2020) who examined the impact of EFL teachers' SE, job satisfaction, and reflective thinking on their PD using structural equation modeling (SEM). The findings indicated that SE and job satisfaction positively predicted PD, with SE having more predictive ability in comparison with job satisfaction. Furthermore, all of the latent variable subscales, including self-efficacy, job satisfaction, reflective thinking, and professional development, were found to

have strong correlations with their own latent variables, with self-efficacy having the strongest correlation with its subscales. The results also revealed that SE more strongly predicts PD than job satisfaction and reflective thinking which lend credence to the findings of the present study. Therefore, their results indicated the significant role of SE in EFL teachers' PD. Likewise, Vaezi and Fallah (2011) found a significant and positive relationship between high self-efficacy and low stress among Iranian EFL teachers, and the results of other studies (e.g., Tytherleigh et al., 2005) showed that low stress can increase the teachers' PD. In this regard, the findings of present study lend support to their results in which the participants believed that the SE training could increase their self-confidence to perform better, and consequently they could handle their stress. On the other hand, the results are not in line with the findings of Muhammed Amanulla and Aruna (2014) who investigated the effects of TSE on PD of higher secondary school teachers whose results showed that no significant impact of teacher efficacy on teachers' PD was found.

The findings lend credence to the theoretical underpinnings of the study in which EFL teachers' self-efficacy instruction affected their success and self-development in the present study. This efficacy is reflected in the teachers' ability to bring about changes in the engagement level of the students and leading them to desired outcomes (Bandura, 1977). The findings are significant in view of Bandura's (1997) theory as it shows how EFL teachers' practice is influenced by their perceptions of their own competence as teachers in terms of the efforts, objectives, and difficulties they set for themselves and their students.

The findings showed that most of the teachers believed that this training could be effective in handing their classes in which they could motivate the students who were not interested in language classes through increasing their self-confidence and self-efficacy. The classroom setting is significantly influenced by the teacher's self-efficacy (Bandura, 1997). Teachers with high self-efficacy devote more time to learning tasks in the classroom, and they help struggling learners more and show greater appreciation for

their accomplishments. They plan educational activities that are beneficial to students, which could increase the students' self-efficacy (Ekinici, 2012). The findings also showed the participants can provide alternative explanations and examples when the students are confused or they cannot deal with the new concepts, easily. Teachers who have a high degree of self-efficacy carry out educational tasks to support the interests and academic preferences of their students (Woolfolk & Hoy, 1990).

The results also indicated that upon receiving the SE course, the participants could create a good relationship with their learners and also could have a sense of humor and provide an attractive and lively atmosphere in the classroom that led to students' engagement. Motivating students to engage in the learning process has always been a goal for teachers in all academic contexts because engagement among students is crucial to improving their learning outcomes (Carver et al., 2021). There is broad agreement among academics regarding the importance of self-efficacy in EFL instructors in which self-efficacious teachers are better to engage their students in the learning process (Martin et al., 2012; Van Uden et al., 2013, 2014; Papa, 2015).

CONCLUSION

The aim of the present mixed-methods study was investigating the role of SE instruction in English as a Foreign Language (EFL) teachers' PD. The results showed SE could help the improvement of EFL teachers' success in their own profession. The analysis of the interviews also revealed that the SE could significantly affect the performance of the EFL teachers in the Iranian high schools. The reason might lie in the fact that teachers' belief in what they do will provide them with the energy and spirit required to do their job more skillfully and to find ways to be better teachers. In addition, the results of integrating quantitative and qualitative results showed that they confirmed and complemented each other, and mixed-methods meta-inferences indicated that SE treatment had a significant effect on the Iranian EFL teachers' PD and their SE beliefs. The mixed-methods designed contributed to gain the more comprehensive picture regarding the effects of SE instructions

on the EFL teachers' PD and self-efficacy beliefs in the Iranian EFL context. Through integrating the quantitative and qualitative findings, mixed-methods meta-inferences confirmed that SE instructions led to teachers' PD development both in their perceptions and class practices. As Bandura (2005) discusses, high self-efficacy beliefs could change the perspective of the teachers toward their own profession. Holliday's (2016) study also has proved the role of experience in the development of SE and the path opened toward the professional development of pre-service EFL teachers. The results implied that EFL teachers should develop their SE to escalate their professional success. Therefore, SE beliefs should be well introduced to the EFL teachers.

The findings of this mixed-methods study can be of help to language teachers, teacher educators, curriculum developers, and policy makers. The current study could contribute to Bandura's (1986) theory, which highlights the significance of teacher's SE beliefs as an important and determining factor in teachers' PD. As for the implications for language teachers, it is suggested that EFL teachers' SE beliefs should be assessed constantly by teacher educators. Moreover, it is also recommended that there should be in-service courses and programs for EFL teachers working in high schools to sustain and enhance their perceived self-efficacy beliefs. Last but not least, the present study could be a help for EFL teachers' SE instructional practices and helping them use their learnings in their classes. As for the teacher educators, it is suggested that they consider ongoing process of teachers' PD to enhance teachers' self-efficacy through cognitive and practical means, such as holding training sessions. As far as it is concerned with curriculum developers, they could select, grade, and sequence the pedagogical materials in harmony with teachers' personal and professional factors. For policy makers, it is recommended that they establish some agendas for the development of teachers' PD and teachers' self-efficacy. Future studies can bring other personal and professional factors of teachers together and focus on EFL teachers' professional development in longitudinal modes.

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