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**On the Relationship between the Implementation of Formative  
Assessment Strategies and Iranian EFL Teachers' Self-Efficacy:  
Do Gender and Experience Make a Difference?\***

**Masoomeh Estaji\*\***

Assistant Professor of TEFL, Allam.h T abataba i University (Corresponding  
Author)

**Saeedeh Fassihi**

M.A., Khatam University

**Abstract**

This study sought to examine the relationship between the use of formative assessment strategies and the Iranian EFL teachers' sense of self-efficacy. Moreover, this study investigated the relationships and interactions between the EFL teachers' use of formative assessment strategies, their gender, level of experience, and sense of self-efficacy. This is a descriptive ex post facto design study which employed a three-part questionnaire, including demographic information, teachers' formative assessment strategies, and teachers' sense of self-efficacy. In order to collect data, sixty-one EFL teachers, including thirty-one female and thirty male participants who were selected through convenience sampling, completed the questionnaire. Multiple statistical strategies were employed to analyze the research questions of the study. The findings of Pearson's and Spearman Rho correlation indicated that the EFL teachers' use of formative assessment strategies was positively correlated with their sense of self-efficacy. However, the results of eta correlation coefficients revealed that there was no statistically significant relationship between the teachers' implementation of formative assessment strategies and two other variables of gender and level of experience. Finally, the results of a three-way factorial Analysis of Variance (ANOVA) evinced that there was no statistically significant interaction between the teachers' use of formative assessment strategies, teachers' sense of self-efficacy, their gender, and level of experience. Therefore, when the teachers become more aware of the ways to implement formative assessment strategies to inform instruction, their sense of self-efficacy can increase. This study has some implications in language testing, English pedagogy, and syllabus design and materials development.

**Keywords:** Assessment, formative assessment strategies, teacher self-efficacy, EFL context.

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\*\* E-mail: mestaji74@gmail.com

### **Introduction**

Assessment is an important part of every classroom and educational setting. Teachers assess their learners to see what the students have learned during the course of instruction in the classroom. According to the National Council of Teachers of Mathematics (NCTM, 2000), assessment should be more than a final exam to examine the learners achievement; rather it should be an essential part of teaching which guides the instructional designs. In fact, the EFL teachers need to evaluate the learners regularly in order to find out the students points of strengths and weaknesses in the classroom. In other words, several assessment strategies can be used in order to be aware of the students process of learning.

In particular, there are two main kinds of assessment in the educational field, known as formative and summative. These assessment forms may be considered mistakenly by the teachers since they use different assessment strategies in the classroom, whereas they are not able to clearly distinguish them. Formative assessment is also known as Assessment for Learning (AfL), whereas summative assessment is considered as Assessment of Learning (AoL). Summative assessment is concerned with the summary of what the student has learned at the exact point in time (Black & Wiliam, 1998; Doig, 2006; Wiliam & Black, 1996). On the other hand, formative assessment is required when the results of the assessment is applied to inform or guide future instructions in the classroom (Black & Wiliam, 1998). Likewise, assessment for learning is related to the systematic process of constantly collecting proof on what is being learned while instruction is continuing (Heritage & Niemi, 2006). The feedback gathered provides constructive information regarding the learners existing level in relation to the target level in which a desired learning outcome is achieved. In fact, it has been emphasized that the terms formative and summative are used to describe the multiple roles of assessment not assessments themselves (Wiliam & Black, 1996).

The instructors implementation of various formative assessment strategies in the class depends on the teachers personal opinion, belief, and ability. Further, the teachers' awareness and use of formative assessment strategies can be an important resource for promoting the teachers sense of self-efficacy. However, there is dearth of research

into the role of teachers use of formative assessment strategies in determining their self-efficacy.

Applying formative assessment strategies helps the teachers manage the instructional plans and practices. Moreover, it makes the learners aware of how they are learning the course. Therefore, this study was conducted to examine whether there is a relationship between the use of formative assessment strategies and Iranian EFL teachers self-efficacy considering the two variables of gender and level of experience. Moreover, this study examined whether there is any interaction between the use of formative assessment strategies, EFL teachers level of experience, gender, and their sense of self-efficacy.

### **Literature Review**

Successful instructors have probably used formative assessment throughout history. Socrates is known as an early practitioner who used the crucial feature of formative assessment. He asked his students many questions in order to modify his teaching practices and behaviors based on their responses. The term formative assessment is quite new, although many teachers followed the Socrates method for a long time. Benjamin Bloom was the first person who used formative assessment in the educational assessment system in order to put the basic features for mastery learning (Bloom, Hastings, & Madaus, 1971). The goal of mastery learning was to confirm that the learners do not move on to the following level until they have achieved the intended targets of the current level.

After some decades, formative assessment became more widespread and language scholars decided to insert it in standardized tests. Bloom (1977) discovered two vital features of formative learning which are providing feedback for the students and creating corrective situations for all important constituents of learning. According to Bloom (1977), teachers could use formative information in order to put the students in various cooperative groups. Moreover, the teachers could apply different teaching strategies and feedback based on the learners individual needs and ctions.

Despite avid interest in the concept and use of formative assessment, the examination of related studies in the literature revealed that formative assessment has clearly focused on its impact on the students learning and achievement, but not much on the teachers uses

and teaching efficacy. For instance, Black and Wiliam (1998b) made a major attempt in the embrace of formative assessment in 1998 when they completed a meta-analysis of more than 250 research studies on the topic. Their findings, published as *Inside the Black Box*, made a compelling case for formative assessment. Black and Wiliam (1998b) found that student gains, impacted by formative assessment strategies, were among the largest ever reported for educational interventions (p. 61). Research has also shown that the teachers, who used formative assessments to provide feedback to their learners, have had a greater influence on the learners' academic achievement. (Black, et al., 2004; Black & Wiliam, 1998b; Kirton, et al., 2007; Leahy et al., 2005).

On the other hand, the findings of Allinder (1995) study, on the teachers' use of formative assessment, revealed that the teachers, who were confident in their personal and teaching efficacy, made better use of formative assessments than those who were less confident. Moreover, in a recent study, Eufemia (2012) examined the relationship between third, fourth, and fifth grade teachers' assessment literacy, their instructional use of assessment data, and their sense of self-efficacy. She analyzed the types and frequency of formative assessments that teachers used, how these assessments were applied, and the use of data gathered to inform instruction. Additionally, the teachers' understanding of formative assessment and the impact of formative assessment on the students' learning and achievement in mathematics were investigated. The obtained results showed that the teachers frequently use formative assessments to make informed changes about classroom instruction. Likewise, the instructors perceived such changes to be effective in raising mathematics achievement. Overall, the teacher participants were comfortable with their level of assessment knowledge and had a high sense of teacher efficacy. Finally, there was a positive relationship between the teachers' use of formative assessment and their self-efficacy in terms of assessment type, assessment knowledge, and effectiveness of assessments.

All in all, studies such as *Inside the Black Box* direct the way for many educational leaders to define and apply formative assessment in classrooms throughout the world. Moreover, the information guides us to change our view toward assessment. In order to fill the gap in the

literature, this study aimed to examine the relationship between the EFL teachers' use of formative assessment strategies and their sense of self-efficacy. The interaction between the use of formative assessment strategies, EFL teachers' gender, and level of experience, and their sense of self-efficacy was also investigated. Following the purpose of the study, four research questions were formulated as follows:

1. Is there any statistically significant relationship between the use of formative assessment strategies and Iranian EFL teachers' self-efficacy?
2. Is there any statistically significant relationship between the use of formative assessment strategies and EFL teachers' gender?
3. Is there any statistically significant relationship between the use of formative assessment strategies and EFL teachers' level of experience?
4. Is there any interaction between formative assessment strategies, EFL teachers' gender, level of experience, and their sense of self-efficacy?

### **Theoretical Framework of the Study**

Various theoretical models and perspectives have been proposed on formative assessment and teacher efficacy. However, the core models, which were employed in this study, are presented in this section.

The existing conceptualization of formative assessment is rooted in the sociocultural constructivist view of learning (Heritage, 2010; Pellegrino et al., 2001; Shepard, 2000). Since the focus of this study is on the use of formative assessment strategies in the classroom, the four principal elements of formative assessments, such as identifying the gap, providing feedback, involving students, and developing learning progressions, have been considered (Heritage, 2007). Moreover, Formative Assessment for Teachers and Students (FAST), State Collaborative on Assessment and Student Standards (FAST SCASS, 2008) of the Council of Chief State School Officers (CCSSO, 2008), was employed that focuses on the following attributes (p. 4) as the critical features of effective formative assessment use.

1. Learning Progressions: The sub-goals of the final learning goal should be obviously defined. It also explains how concepts and

skills are formed in the field, and indicate the way in which the students are supposed to get the expected goals.

2. Learning Goals and Criteria for Success: Instructors should clearly explain the learning goals and criteria for success to the students. Therefore, the teachers should not only explain the instructional goals but also clarify the criteria by which the students' learning is assessed.
3. Descriptive Feedback: Teachers should provide the students evidence-based feedback which is related to the expected instructional goals and criteria for success. Descriptive feedback may be about the quality of each student's learning which offers how she can improve in this process.
4. Self- and Peer-Assessment: Both the teacher and students are involved in the process of formative assessment. Moreover, peer and self-assessment can provide chances for the students to think metacognitively about their learning. Although the teacher feedback is important, the involvement of the student in peer assessment brings more opportunities to share and receive feedback. Thinking meta-cognitively help the students have an active role in planning, monitoring and evaluating their learning progress.
5. Collaboration: Both the teacher and students should be partners in the teaching and learning process in the classroom. They should share learning outcomes and criteria for success.

Teacher self-efficacy, on the other hand, is a construct that was developed within the context of Bandura's social-cognitive theory which defined self-efficacy as the belief about one's own abilities to establish and perform a certain task (Bandura, 1997). According to Bandura's theory, self-efficacy has two components: efficacy expectation and outcome expectancy. The first one is related to the fact that one has the capability, knowledge, and skill to perform the action so as to receive the desired goals. The second one is referred to the belief that a given behavior or action will indeed lead to the expected targets. The teacher must have both high efficacy expectations and high outcome expectancy in order to be successful. If the teacher has the former and not the latter, it is improbable that the teacher will be a successful teacher even if the teacher is professionally well-qualified. According to Bandura's theory, four sources enrich the development of

high teacher self-efficacy: (a) mastery experiences, (b) vicarious experiences, (c) social persuasion, and (d) physiological and emotional states.

Mastery experiences, as the first leading factor in teacher efficacy, are situations in which the teachers exhibit their own teaching success in order to show that they are capable teachers. Enacted mastery (teaching) experiences are the most influential source of [self-] efficacy information because they provide the most authentic evidence of whether one can muster whatever it takes to succeed (Bandura, 1997, p. 80). When the instructors employ teaching activities, they use the result interpretations in order to improve their opinions regarding their ability in conducting similar tasks. The teacher's success in the activities increases their self-efficacy, while the instructor's failure in activities decreases their self-efficacy. Thus, the teachers with low self-efficacy are doubtful regarding their ability in conducting the task. Vicarious experiences, on the other hand, are concerned with observing and modeling successful teachers which may lead to the teachers' high sense of self-efficacy. As to the third prominent factor in teacher efficacy, we can refer to social persuasion, which is related to the encouraging feedback of the colleagues and superiors, improving the teacher's self-efficacy. Finally, the physiological and emotional states of the teacher influence self-efficacy judgments. For instance, the teachers' eagerness and interest may lead to the teaching success; however, stress and anxiety may result in negative judgment of the instructor's knowledge and skill. This is in part what distinguishes teacher self-efficacy, as a broader concept, from teacher confidence. Generally, the teachers' sense of self-efficacy is much more concerned with the emotional states in comparison to teacher confidence as a narrow concept.

## Method

### Participants and Research Setting

Sixty-one qualified EFL teachers out of a population of 100 English instructors were selected through convenient sampling technique. This group included 31 female and 30 male Iranian teachers whose age range was from 25 to 55. All of them had Master Degree and were teaching English at different English language institutes in Tehran. Moreover, the instructors' level of experiences varied from 1-20 years. It is worth

mentioning that the EFL teachers, who enjoyed 1 to 5 years of teaching experience, were considered as novice, while those who had more than 5 years of experience were classified as experienced.

### **Instrumentation**

This study applied two instruments in order to answer the four research questions. The questionnaire booklet included three main parts. The first part contained the demographic information regarding the participants of the study. The second part consisted of formative assessment questionnaire, while the third part represented the questionnaire on teachers' sense of self-efficacy.

#### ***Formative Assessment Questionnaire***

This questionnaire begins with the demographic part in which the teachers were supposed to provide information about their name, gender, years of experience, qualifications, type of institution, level of teaching, their learners' age, time of working, and kinds of professional developments they have had before. This questionnaire contains 59 items in which 48 statements are about the use of formative assessment strategies and 11 ones are related to different assessment methods. Moreover, it follows a 5-point Likert scale (from 1=never to 5=always) and is adapted from Qualification and Curriculum Authority (QCA) Assessment for Learning Project (Neesom, 2000). The EFL teachers were supposed to read the statements and circle the number that most closely matches their opinion on the implementation of formative assessment strategies in the classroom. The pilot testing of formative assessment questionnaire was accomplished with 30 participants in order to check the reliability of the questionnaire employed in this study.

#### ***Teachers' Sense of Self-Efficacy Questionnaire***

This questionnaire includes 24 items about the concept of teachers' sense of self-efficacy. It follows a 5-point Likert scale (from 1=never to 5=always) and is adapted from Tschannen-Moran and Hoy (2001). In this questionnaire, the teachers were supposed to read twenty-four statements concerning their sense of self-efficacy and mark the number which closely matches their idea concerning their capabilities, feelings, behaviors and abilities. The pilot testing of this questionnaire was done

on 30 participants in order to check the reliability of this instrument of the study.

### **Data Collection Procedure**

In this part, all the data collection stages are explained in details. It begins with the pilot testing of both questionnaires of the study. It continues with the full description of administrating both the formative assessment and the teachers' sense of self-efficacy questionnaires.

*Stage One. Pilot Testing:* At the outset of this study, Thirty EFL teachers were chosen in order to participate in the pilot testing of both questionnaires. Cronbach's alpha as a measure of internal consistency was employed to analyze the data. The results indicated that the Formative Assessment Strategies questionnaire enjoys a very high degree of internal consistency or reliability ( $\alpha = .90$ ). In order to measure the reliability of the Self-efficacy questionnaire, another Cronbach's alpha was calculated. The results revealed that the Self-efficacy questionnaire also enjoys a very high degree of internal consistency or reliability ( $\alpha = .91$ ).

*Stage Two. Administration of the Questionnaires:* In order to collect data, the two questionnaires of Formative Assessment Strategies and the Teacher's Sense of Self-efficacy were distributed among EFL instructors of multiple institutions in Tehran. Primarily, a consent letter and a petition were submitted to the institutions to ask for the agreement and cooperation. They were also provided with enough information as to the questionnaire topics, time required, and questionnaire instruction and direction. Among the institutions, one language institute had the most cooperation and most of the teacher respondents were the instructor of that institution. Totally, one hundred teacher respondents cooperated and filled out the questionnaires. However, 61 participants were involved in the main phase of the study.

### **Design**

According to Best and Kahn (2006), this study employs an ex post facto design to provide answers to the research questions. Best and Kahn (2006), state that ex post facto designs are used when the researcher does not have control over the selection and manipulation of the independent variables. Moreover, Best and Kahn (2006) argued that ex post facto design has two subsets which are correlational design and criterion group design (p. 27). Correlational designs are the most commonly used subset of ex post facto design. In correlational designs, a group of students may give us data on two different variables (p. 27). Therefore this study conducted the correlational design in order to estimate the relationship between the use of formative assessment strategies and EFL teachers self-efficacy considering the instructors gender and level of experience.

### **Data Analysis**

This study examines four quantitative research questions employing the Statistical Packages for the Social Sciences (SPSS, 20.0). Regarding the data analysis method used for investigating the first question, a Pearson product-moment correlation coefficient was applied in order to explore the relationship between the use of formative assessment strategies and EFL teachers self-efficacy. Furthermore, an eta correlation was conducted to examine the relationship between the use of formative assessment strategies and EFL teachers gender. To answer the third research question, one another eta correlation was accomplished to investigate the relationship between the use of formative assessment and EFL teachers level of experience. Finally, a three-way ANOVA was run so as to scrutinize the interaction between the use of formative assessment strategies, EFL teachers gender, level of experience, and their self-efficacy.

## **Results**

### **Descriptive Statistics of the Formative Assessment Questionnaire across the Groups**

The participants of the study were administered a formative assessment questionnaire. This section provides the results of descriptive statistics of the formative assessment questionnaire across the main participants of the study. The main participants of the research study include 31 female and 30 male EFL teachers with various levels of teaching

experience. Table 1 provides the results of descriptive statistics for the male and female participants in terms of their formative assessment strategies scores. In addition, table 2 presents the results of descriptive statistics of both the experienced and novice teachers in terms of their formative assessment score.

Table 1. *Descriptive Statistics of the Participants' Formative Assessment Strategy Scores*

	Gender		Statistics
Std. Error 6.10	Male	Mean	207.70
		Std. Deviation	33.46
		Minimum	155.00
		Maximum	277.00
		Formative Strategies Score	
5.76	Female	Mean	203.16
		Std. Deviation	32.11
		Minimum	144.00
		Maximum	271.00

As table 1 shows, the mean of the male participants scores is 207.70 with the standard deviation of 33.46. However, the mean score of the female participants on formative assessment strategy is 203.16 with the standard deviation of 32.11. The results show that the female respondents are apparently of lower formative assessment strategies scores than the males. On the other hand, based on the results, presented in table 2, the novice instructors mean score is 200.42 with the standard deviation of 22.10. The mean score of the experienced participants on formative assessment strategy is 209.08 with the standard deviation of 38.50.

Table 2. *Descriptive Statistics of the Participants' Formative Assessment Strategy Scores*

Experience		Statistics	Std. Error
Novice	Mean	200.42	4.33
	Std. Deviation	22.10	
	Minimum	155.00	
	Maximum	236.00	
Formative Strategies Score			
Experienced	Mean	209.08	6.50
	Std. Deviation	38.50	
	Minimum	144.00	
	Maximum	277.00	

The results show that the novice teachers are apparently of lower formative assessment strategies scores than the experienced teachers.

### The Results of Pearson's Correlation Used for Investigating the First Research Question

In order to test the null hypothesis to do with the first research question, a Pearson correlation coefficient was employed. The results in table 3 indicate that the relationship between the two variables is significantly positive ( $r = .677$ ;  $p < .05$ ).

Table 3. *Pearson Correlations for Formative Assessment Strategy and Teachers' Self-Efficacy Scores*

		Formative strategies score	self-efficacy scores
Formative strategies score	Correlation Coefficient	1.00	.67**
	Sig. (2-tailed)		.00
	N	61	61
Spearman's rho self-efficacy scores	Correlation Coefficient	.67**	1.00
	Sig. (2-tailed)	.00	
	N	61	61

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

This finding means that the null hypothesis, related to the first research question, was rejected. In other words, there is a statistically significant relationship between the use of formative assessment strategies and EFL teacher s self-efficacy, and the higher self-efficacy scores are, the higher the formative assessment strategies scores will be. The coefficient of determination, which was computed by squaring the

Pearson correlation coefficients, is .45. It demonstrates that the effect size is large, showing a 45% common variance between the self-efficacy and formative assessment strategies scores of the teachers.

Since the correlation between the two variables was so high and meaningful, it was decided to examine to what extent it was possible to predict the self-efficacy scores from the formative assessment strategies scores by means of conducting a linear regression analysis. As the data were normally distributed and the relationship between the two variables was quite linear, the assumptions of linear regression analysis were almost met. The regression analysis results indicates that the results are statistically significant;  $F(1,59) = 55.08$ ,  $p < .05$ , meaning that the regression model overall predicts the self-efficacy scores significantly well.

Afterwards, the Adjusted R Square was computed, which is .47. This means that 47% of the variance in self-efficacy scores is explained by formative assessment strategies scores, which could be considered as a large effect size according to Cohen guidelines for effect size. The identified equation to understand this relationship could be worked out through Unstandardized Coefficients (i.e. the slope of the best-fit or regression line = .29) as follows:

$$Y = 35.46 + (.29 X)$$

Where: Y → self-efficacy

X → formative assessment strategies

This equation could be used to predict the self-efficacy scores (Y) from formative assessment strategies scores (X); however, one should bear in mind that based on the analyses presented above, only 47% of the variance in the self-efficacy scores is explained by formative assessment strategies scores.

### **The Results of Eta Correlation Used for Investigating the Second Research Question**

In order to test the hypothesis to do with this research question, two statistical strategies were employed. First, the descriptive statistics of both male and female participants, in terms of their formative assessment scores, were calculated and the results showed that the females were apparently of lower formative assessment strategies scores than the male participants. Afterwards, the normality of the data

was checked employing the Kolmogorov- Smirnov and Shapiro-Wilk tests of normality which showed that the data were normally distributed. Moreover, an eta correlation was conducted to estimate the relationship between the formative assessment scores (the interval variable) and EFL teachers' gender (the categorical variable). The eta results in table 4 show (eta = .07), which is quite insignificant.

Table 4. *Directional Measures for Formative Strategies Scores across Gender*

		Value
Nominal by Interval Eta	Formative strategies score Dependent	.07
	Gender Dependent	.87

It means that the null hypothesis to do with the second research question was supported. To be precise, there is no statistically significant relationship between the use of formative assessment strategies and EFL teachers' gender.

### **The Results of Eta Correlation Used for Investigating the Third Research Question**

In order to test the hypothesis to do with this research question, like what was done for the previous research question, two statistical strategies were employed. First of all, the descriptive statistics, concerning the formative assessment scores and EFL teachers' level of experience, were performed and the results showed that the novice teachers were apparently of lower formative assessment strategies scores than the experienced teachers. Subsequently, the normality of the data was checked employing the Kolmogorov-Smirnov and Shapiro-Wilk tests of normality which showed that the data were normally distributed. Then Eta Correlation Coefficient was accomplished so as to analyze the relationship between the categorical variable (i.e. EFL teachers' level of experience) and the interval variable of this study (i.e. formative assessment strategies scores). Table 5 below reveals the eta results (eta = .13), which is insignificant.

Table 5. *Directional Measures for Formative Assessment Strategies Scores across Teachers' Level of Experience*

		Value
Nominal by Interval Eta	Formative strategies score Dependent	.13

## Experience Dependent

.906

It means that the null hypothesis to do with the third research question was supported. Specifically, there is no statistically significant relationship between the use of formative assessment strategies and EFL teachers' level of experience.

### The Results of ANOVA Used for Investigating the Fourth Research Question

This question was concerned with finding an interaction between the independent variables and their effects on the dependent variable of the study. Therefore, a three-way factorial ANOVA (Analysis of Variance) was employed. To this end, all descriptive statistics for all the levels of the independent variables, in terms of formative assessment strategies, were employed. Before running a three-way factorial ANOVA, the homogeneity of variances, as an assumption of factorial ANOVA, was checked. The results of Levene's test indicate that the difference between the variances is not significant ( $p < .05$ ). Moreover, the three-way factorial ANOVA results, in table 6, show in the ninth row that the interaction is not significant ( $p > .05$ ).

Table 6. *Tests of Between-Subjects Effects*

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	32999.12 <sup>a</sup>	10	3299.91	5.36	.00
Intercept	1102095.70	1	1102095.70	1792.75	.00
Selfgroup	15517.12	2	7758.56	12.62	.00
Experience	449.56	1	449.56	.73	.39
Gender	138.13	1	138.13	.22	.63
selfgroup * experience	323.24	2	161.62	.26	.77
selfgroup * gender	282.57	2	141.28	.23	.79
experience * gender	1578.81	1	1578.81	2.56	.11
selfgroup * experience * gender	167.73	1	167.73	.27	.60
Error	30737.42	50	614.74		
Total	2637111.00	61			
Corrected Total	63736.55	60			

a. R Squared = .518 (Adjusted R Squared = .421)

Therefore, the null hypothesis to do with the fourth research question was supported. In other words, there is no interaction between

formative assessment strategies, EFL teacher s self-efficacy, their gender, and level of experience.

### **Discussion**

Different statistical procedures were employed in order to answer the four research questions of the study. In the first stage, a summary of the findings related to the four research questions is presented. In order to test the research hypotheses of the study, a Pearson product-moment correlation coefficient, Spearman Rho, Eta Correlation Coefficients, and a factorial ANOVA (Analysis of Variance) were run. The collected data was analyzed in order to explore the relationships and interactions between the use of formative assessment strategies, gender, level of experience, and EFL teachers self-efficacy. Overall, the findings revealed that the null hypothesis related to the first research question was rejected. Therefore, there is a statistically significant positive relationship between the two variables ( $r = .67, p < .05$ ). In other words, the higher the teachers formative assessment strategies scores are, the higher the teacher s self-efficacy scores will be. This finding is consistent with the results of a study conducted by Eufemia (2012), who investigated the relationship between applying formative assessment and the teacher s self-efficacy beliefs. The results of the study revealed that the teachers use of formative assessment was positively correlated with their self-efficacy in relation to assessment type, assessment knowledge, and effectiveness of assessments.

In order to answer the second research question, an eta correlation coefficient was employed to analyze whether there is a relationship between the use of formative assessment strategies and EFL teachers gender. The findings demonstrated the eta results ( $\eta = .07$ ), which was quite insignificant; therefore, the null hypothesis to do with the second research question was supported. In other words, there is no statistically significant relationship between the use of formative assessment strategies and EFL teachers gender. This finding is partly in line with that of Brown (2004a), in which there was no statistically significant relationship between the Iranian EFL teachers conceptions of assessment, gender, and age.

Similarly, there was a study designed by Pishghadam and Shayesteh (2012), whose aim was to analyze the conceptual assessment beliefs of a group of Iranian EFL teachers, grounded on Brown s(2008)

classification (i.e. Improvement, School accountability, Student accountability, and Irrelevant). In particular, it examined each of the four assessment concepts with respect to degree, major, gender, age, and experience. The results of correlational analysis revealed that there was no statistically significant relationship between the EFL teachers assessment perceptions and their gender. On the other hand, Öz (2014) accomplished a study to investigate Turkish teachers preferences of common assessment methods in English as a foreign language (EFL) classroom and their Assessment for Learning (AFL) strategies. It also examined whether they differed in their AFL strategies according to some variables such as years of teaching experience, gender, and public vs. private school context. The findings of the current study do not support the results of this study which demonstrated differences between the male and female instructors with respect to their perceptions and strategies of AFL, particularly their preferences to use monitoring and/or scaffolding for assessing their students.

Regarding the third research question, another eta correlation was run to investigate whether there is a relationship between the use of formative assessment strategies and EFL teachers level of experience. The findings indicated the eta results ( $\eta = .13$ ) which was insignificant. The results of eta correlation demonstrated that the null hypothesis to do with the third research question was supported, which means that there is no statistically significant relationship between the use of formative assessment strategies and EFL teachers level of experience. The findings of the study corroborated that of Pishghadam and Shayesteh (2012). They investigated the conceptual assessment beliefs of Iranian EFL teachers, based on the Brown s(2008) classifications, in terms of their degree, major, gender, age, and experience. The results evinced that there was no significant relationship between the different perceptions of assessment and the teachers level of experience. In contrast, such a result is in conflict with the results of a research directed by Öz (2014), who studied Turkish teachers preferences of common assessment methods in the English as a foreign language (EFL) classroom and their Assessment for Learning (AFL) strategies. The findings of the study demonstrated that there was a significant difference among EFL teachers in terms of the years of teaching experience.

In order to answer the fourth research question, a three-way ANOVA was employed to indicate whether there is an interaction between the use of formative assessment strategies, EFL teacher self-efficacy, gender, and level of experience. The results showed that the interaction was not significant ( $p > .05$ ). In other words, the null hypothesis to do with the fourth research question was supported. It means that there is no interaction between the EFL teachers formative assessment strategies, their self-efficacy, gender, and level of experience. To the best of the researcher's knowledge, no study was found in the literature regarding the analysis of the interaction between formative assessment and some variables such as gender and level of experience.

### **Conclusions and Implications**

Various statistical procedures were applied in order to test the null hypotheses related to four research questions. Through data analysis, the researcher came to four major findings. First, the EFL teachers implementation of different formative assessment strategies was positively correlated with their sense of self-efficacy. It means that the teacher with high self-efficacy apply more formative assessment strategies in comparison to the teacher with low sense of self-efficacy. This finding contributes to the body of knowledge regarding the role of teachers formative assessment strategies use in promoting classroom instruction. As Smith (2007) claimed, through formative assessment, the teachers are provided with a lot of feedback as to the effectiveness of their instruction and student progress. In particular, such assessment techniques can be a perfect source of information and feedback for the learners and can guide the instructors to modify their teaching practices and make better decisions for their students and the learning activities required.

In addition, no statistically significant relationship was found between the EFL teachers use of formative assessment strategies and gender. It was concluded that female and male EFL teachers do not vary in their use of formative assessment strategies in the classroom. The findings also revealed that there was no correlation between the EFL teachers level of experience and their use of formative assessment strategies. It shows that the implementation of formative assessment

strategies in the classroom is not related to the EFL teachers' level of experience. Finally, the results of data analysis showed that there was no interaction between these four variables, including the EFL teachers' use of formative assessment strategies, sense of self-efficacy, gender, and level of experience.

All in all, it can be concluded that the assessment literacy of teachers, mainly in the domain of formative assessment strategies use, can have a lot of advantages for developing the EFL teacher's sense of efficacy irrespective of their gender and level of experience. According to Lukin, Bandalos, Eckhout, and Mickelson (2004), assessment literacy can have a lot of positive influences on the teachers' confidence, knowledge, and skills in the significant areas of assessment. Moreover, Bol (2004) and Bol, Ross, Nunnery, and Alberg (2002) claimed that accountability has boosted the need for teachers to plan suitable assessment for pedagogical purposes so as to become confident data generators. Therefore, there is an immediate need for the teachers to promote their assessment literacy.

Applying these formative assessment strategies may help the EFL teachers to understand the process of learning and develop their personal insight in relation to the students' learning. It seems that applying these strategies can help the teacher notice how the pedagogical approach is going, which may have a positive influence on their ability to teach as well. In fact, it is important that the teachers become well acquainted with the purpose of assessment in a more meaningful manner and use it to guide their instruction. Specifically, they must clearly distinguish between assessment for learning and assessment of learning. Likewise, teachers require to understand that the value of formative assessment tools lies in their ability to provide ongoing results to guide their instruction. Additionally, they must see how assessment for learning can have an impact on the teaching and learning in classroom and on students' success in high-stakes tests. All EFL teachers need to assess the learners in order to check their progress and level of understanding. In fact, the implementation of these formative assessment strategies, including self-revision, feedback, self and peer-assessment, and rubrics, helps the teachers promote their sense of self-efficacy.

Future research studies can examine the role of various professional development courses in promoting the teachers' implementation of formative assessment strategies by comparing the teachers' use of these strategies before and after receiving such instruction. In future investigations, it might be possible to examine the effect of teachers' use of formative assessment strategies on the learners' development of listening, speaking, reading, and writing skills. Finally, the design of the study can change focusing on mixed methods research design in order to add much more details and provide a comprehensive picture of the findings of this research.

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